CUYAMACA COLLEGE

2021-2022 CATALOG

We're ready for you.

Estamos listos para ti. نحن مستعدون لكم

Academic & Career Pathways on Page 58

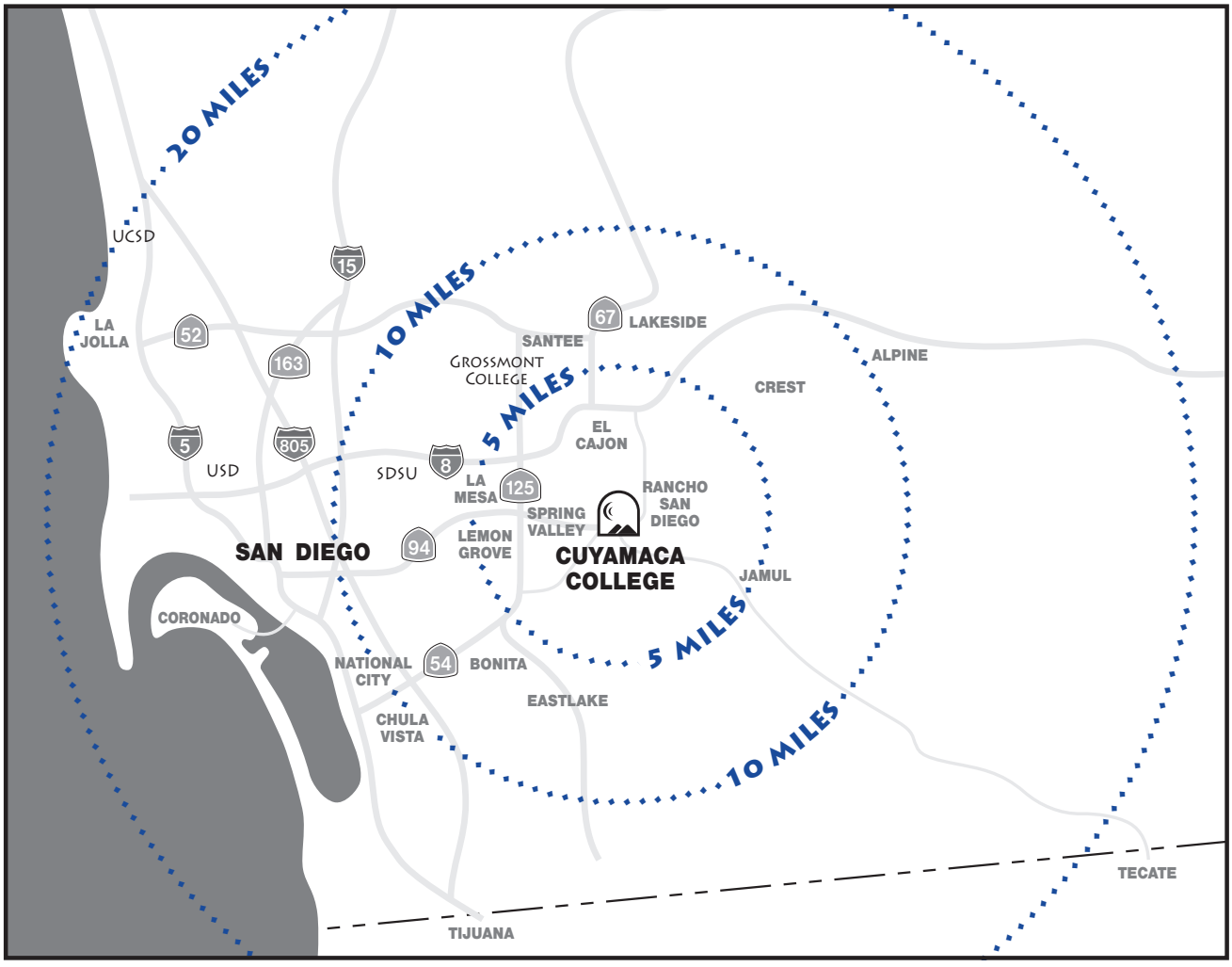
www.cuyamaca.edu

CUYAMACA
·COLLEGE·

CUYAMACA COLLEGE

900 Rancho San Diego Parkway, El Cajon, California 92019-4369
www.cuyamaca.edu
(619) 660-4000

Minutes from the city of San Diego in the community of Rancho San Diego



Directions: From the West, take 5, 805 or 125 to 94E, continue straight onto Jamacha Road. Turn left on Fury Lane and left onto Rancho San Diego Parkway. For detailed map, see inside back cover.

From the East, take 8 to 125S, connect to 94E, continue straight onto Jamacha Road. Turn left on Fury Lane and left onto Rancho San Diego Parkway.

This catalog is available in alternate formats upon request. Please call the Disabled Students Programs and Services Office at (619) 660-4239.

ACCREDITATION AND AFFILIATIONS

Cuyamaca College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 10 Commercial Blvd., Suite 204, Novato, CA 94949, (415) 506-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at: www.accjc.org. The College is approved for the education of veterans under the various United States public laws and the California veteran enactments, and is approved by the Bureau of Immigration and Naturalization for foreign student attendance under education visas. Cuyamaca College has been evaluated by the National Automotive Technicians Education Foundation in the areas of instruction, course of study, facilities and equipment, and meets the standards of quality for the training of automobile technicians at the level of Master Automobile Service Technology. The Cuyamaca Paralegal Studies program was approved by the American Bar Association in 2002.

Appropriate courses of study at Cuyamaca College are fully accepted for transfer by the University of California, the California State University system, and private four-year colleges and universities.

PRESIDENT'S MESSAGE

Dear Students,

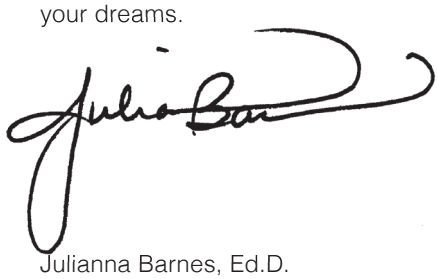
Welcome to Cuyamaca College, where we are transforming the lives of students like you who are following their dreams by earning a degree, securing a certificate, transferring to a four-year college or university, or being trained in the skills needed to find a good-paying job in a high-demand industry.

Each year, nearly 10,000 students from throughout San Diego's East County region enroll at our beautiful Rancho San Diego campus, where dedicated faculty and staff have your best interests in mind. An accredited college that works closely with our community partners, Cuyamaca is constantly evolving to meet the needs of our students.

The information in this catalog is designed to help you refine your educational goals, and it includes important details about our academic policies, online and in-class course offerings, and support services. As a leader in the growing Guided Pathways movement, which includes accelerated pathways in math, English, and ESL, we are committed to providing a clear roadmap toward completion. We encourage you to meet with an academic counselor to help plan a schedule that makes sense for you.

In addition to academic excellence, Cuyamaca College is proud of its Hispanic Serving Institution designation, offering an abundance of rich cultural activities as part of our commitment to diversity, equity, and inclusion.

On behalf of everyone who works at Cuyamaca College, I wish you nothing but success in following your dreams.



Julianna Barnes, Ed.D.
President

TABLE OF CONTENTS

FALL 2021

Registration ..... June 28 - August 15
Payment Deadline for Registration Fees ..... Refer to Class Schedule
Professional Development - Organizational Meetings ..... August 9-13
Regular Day and Evening Classes Begin ..... August 16
Program Adjustment ..... August 16 - 29
Census Day (Semester-Length Classes) ..... August 30
Holiday (Labor Day) ..... September 6*
Last Day to Apply for Fall 2021 Degree/Certificate ..... October 8
End of First 8-Week Session ..... October 9
Second 8-Week Session Begins ..... October 11
First 8-Week Session Instructor Grade Deadline ..... October 14
Last Day to Drop Semester-Length Classes ..... November 7
Holiday (Veterans Day) ..... November 11*
No Classes, Thanksgiving Week ..... November 22-27
Holiday (Thanksgiving) ..... November 25, 26, 27*
End of Second 8-Week Session ..... December 11
Final Examinations ..... December 13, 14, 15, 16, 17, 18
Last Day to Apply for P/NP ..... December 18
Close of Fall Semester ..... December 18
Winter Recess ..... December 19 - January 30
Instructor Grade Deadline ..... December 23
College and District Offices Closed ..... December 24 - January 3*

JULY

S	M	T	W	T	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

S	M	T	W	T	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	25	26
29	30	31				

SEPTEMBER

S	M	T	W	T	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		

OCTOBER

S	M	T	W	T	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

S	M	T	W	T	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

S	M	T	W	T	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	

SPRING 2022

Registration ..... November 15 - January 30
Payment Deadline for Registration Fees ..... Refer to Class Schedule
Holiday (Martin Luther King Day) ..... January 17*
Professional Development - Organizational Meetings ..... January 24 - 27
Regular Day and Evening Classes Begin ..... January 31
Program Adjustment ..... January 31 - February 13
Census Day (Semester-Length Classes) ..... February 14
Holiday (Lincoln's Birthday Observed) ..... February 18, 19*
Holiday (Washington's Birthday Observed) ..... February 21*
Last Day to Apply for P/NP Semester-Length Classes ..... March 4
Last Day to Apply for Spring 2022 Degree/Certificate ..... March 11
End of First 8-Week Session ..... March 26
Spring Recess ..... March 28- April 2
First 8-Week Session Instructor Grade Deadline ..... March 31
Spring Holiday ..... April 1 - 2*
Second 8-Week Session Begins ..... April 4
Last Day to Drop Semester-Length Classes ..... May 1
End of Second 8-Week Session ..... May 28
Holiday (Memorial Day) ..... May 30*
Final Examinations ..... May 31, June 1, 2, 3, 4, 6
Close of Spring Semester ..... June 6
Cuyamaca Commencement ..... June 8
Grossmont Commencement ..... June 9
Instructor Grade Deadline ..... June 9

JANUARY

S	M	T	W	T	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

S	M	T	W	T	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					

MARCH

S	M	T	W	T	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		

APRIL

S	M	T	W	T	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

S	M	T	W	T	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

S	M	T	W	T	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		

*College and District Offices closed.

See voter information on page 12.

Dates listed are subject to change. Please see www.cuyamaca.edu/academics/class-schedules-catalog-and-webadvisor/academic-calendar/index.php for the most current calendar.

CUYAMACA COLLEGE ADMINISTRATION

Julianna Barnes, Ed.D. ..... President
Nicole Salgado ..... Interim Vice President, Administrative Services
Alicia Muñoz ..... Interim Vice President, Instruction
Jessica Robinson, Ed.D. ..... Vice President, Student Services
Brianna Hays ..... Senior Dean, Institutional Effectiveness, Success & Equity
Christianne Penunuri ..... Director, College & Community Relations
Lauren Halsted, Ed.D. ..... Interim Dean, Arts, Humanities & Social Sciences
(Art, American Sign Language, Communication, English, English as a Second Language, Ethnic Studies, History, Social and Behavioral Sciences, Humanities, Philosophy and Religious Studies, Performing Arts, World Languages)
Cuauhtémoc Carboni, Ph.D. ..... Dean, Athletics, Kinesiology & Health Education
(Kinesiology/Fitness Center, Health Education)
Larry McLemore ..... Dean, Career Education
(Automotive Technology, Business and Professional Studies, Center for Water Studies, Child Development, CADD Technology & Surveying, CIS & Graphic Design, Environmental Health & Safety Management, Ornamental Horticulture)
Nicole Jones ..... Dean, Counseling Services
Jodi Reed ..... Interim Dean, Learning & Technology Resources
Kim Dudzik ..... Interim Dean, Math, Science & Engineering
(Mathematical Sciences, Science/Engineering)
Lauren Vaknin, Ed.D. ..... Dean, Student Affairs
Jesús Miranda ..... Dean, Student Equity & Engagement
Agustín Orozco ..... Associate Dean, Student Services and Special Programs
Gregory Vega ..... Director, Admissions & Records
Francisco Gonzalez ..... Director, Campus Facilities, Operations & Maintenance
Ray Reyes ..... Director, Financial Aid
John Escobedo, Ph.D. ..... Director, Title V Activities
Michael Gilchrist ..... Manager, Campus Bookstore

GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT ADMINISTRATION

Lynn Ceresino Neault, Ed.D. ..... Chancellor
Sahar Abushaban ..... Interim Vice Chancellor, Business Services
Tim Corcoran ..... Vice Chancellor, Human Resources
Todd McDonald ..... Associate Vice Chancellor, Business Services
Craig Leedham, Ph.D. ..... Associate Vice Chancellor, Human Resources
Kerry Kilber Rebman ..... Interim Associate Vice Chancellor, Technology
Nahid Razi ..... Sr. Director, Purchasing, Contracts & Ancillary Services
Ken Emmons ..... Sr. Director, Districtwide Facilities
Jennifer Fujimoto ..... Sr. Director, Fiscal Services
Nicole Conklin ..... Director, Public Safety
Anne Krueger ..... Director, Communications & Public Information
Cynthia K. Nagura ..... Director, Community & Workforce Partnerships
Jerry Williamson ..... Director, Computer Services
TBA ..... Director, Enterprise Systems
Alyssa Brown, Ed.D. ..... Director, Human Resources
Anaid Northcraft ..... Interim Director, Human Resources
Kristine Ogden ..... Director, Payroll
Steve Abat ..... Director, Technical Services
Sally Cox ..... Chief Executive Officer, Foundation for Grossmont & Cuyamaca Colleges
Dana Rivers ..... Director of Development, Foundation for Grossmont & Cuyamaca Colleges
Gabriela Alvarez ..... Administrative Director to the Chancellor and Governing Board Operations

CODE OF ETHICS

Cuyamaca College, as a public community college, and in the fulfillment of its mission, embraces a code of conduct for students, faculty, classified staff, and administrators. We recognize the value and dignity of each individual within the framework of the campus community.

We strive in all our affairs to:

- respect the opinions, values, and traditions of others,
- be responsible for our behavior,
- be honest, open and trustworthy,
- be fair and equitable in our treatment of others, and
- promote democratic principles, good citizenship, and the standards of academic freedom.

College History and Vision

HISTORY OF THE COLLEGE

In 2007, "The Cuyamaca Way" became Cuyamaca College's official motto, a tribute to the institution's prevailing sense of community. Thirteen key words that the campus community decided best describe that "Cuyamaca Way" were inscribed in curving concrete bands stretching across the newly paved quad. The words, "beautiful, collaborative, dedicated, innovative, integrity, teamwork, vision, welcoming, student-centered, community, excellence, passionate, and friendly," became etched in stone.

The declaration of Cuyamaca's distinct attributes hearkens back to a time some 40 years prior, when District trustees first selected the name "Cuyamaca College" in envisioning an institution that exemplifies the "community" in the words "community college."

THE HISTORY OF THE CAMPUS

The Cuyamaca College campus is located in the East San Diego County community of Rancho San Diego, nestled in a suburb just outside the city of El Cajon on a verdant 165-acre site that was at one time a part of the Old Monte Vista Ranch. Along with its sister campus, Grossmont College, it is part of the Grossmont-Cuyamaca Community College District.

The name for the college reflects the region's history and heritage. A very old word linked to the land's Native American past, "Cuyamaca" has been interpreted in various ways, including "above rain," "beyond rain" and "place where the rain comes from heavens."

The campus site was acquired by the Board of Trustees in September 1972 and the college officially opened in fall 1978, with 1,947 students and nine associate-degree programs. Its first president was Dr. Wallace F. Cohen. Today, Cuyamaca provides around 188 degrees and certificates, including those in academic and career pathways, to its 8,810 students.

KEY EVENTS

Thirty-eight students made up Cuyamaca College's first graduating class in May 1979. The early '80s saw the construction of facilities housing two highly regarded programs – Automotive Technology and Ornamental Horticulture – and the naming of Dr. Samuel Ciccati as the college's second president.

The following years marked the expansion in earnest of Rancho San Diego and by fall 1988, Cuyamaca's enrollment had reached 3,600 students, The decade of the '80s came to a close with the opening of the Learning Resource Center, a 30,000-square-foot, glass-covered building with a distinctive architecture that has established it as an often-photographed campus icon.

The '90s were highlighted by the opening of the privately-funded Heritage of the Americas Museum, as well as the dedication of a new 20.3-acre physical education facility with a fitness center, gym, tennis and volleyball courts, soccer and ball fields, and an Olympic track. Dr. Sherrill Amador began her tenure as college president in 1994 and a year later, Rancho San Diego Parkway opened as the college's new main entrance, providing better access to the campus. The decade of the '90s ended with the opening of the Water Conservation Garden – a must-visit for all home gardening and landscaping enthusiasts – operated through a Joint Powers Agreement between the college and area water-district agencies.

With the opening of a one-stop Student Services Center, the 21st century got off to a busy start for the college, which also celebrated the unveiling of the Child Development Center. The whimsical facility serves as both a childcare facility for the campus and community, and a learning lab for students in Cuyamaca's Child Development Studies program.

Dr. Geraldine M. Perri took over the reins as college president in 2002, the same year that East County residents approved Prop. R, a $207 million construction bond measure to finance upgrades and new building construction at the District's two colleges.

During a period of rapid enrollment growth, Prop. R transformed the campus into a high-tech learning magnet, bringing older facilities like the automotive technology center into the digital age and adding several state-of-the-art buildings: the Science and Technology Center (now the Science and Mathematics Building), the Student Center, the Business and Technology buildings, and the jewel of the campus, a $45 million Communication Arts Center. There, a well-appointed performing arts theater built to professional acoustical standards has become a major community asset as a high-demand site for community performances, assemblies, business forums and even, worship services.

Prop. R's major construction at Cuyamaca College drew to a close in 2011 with the expansion of the LRC. Other campus highlights during those years included music instructor Pat Setzer's selection as one of four community college instructors statewide to win the 2010 Hayward Award for Excellence in Education, and in 2011, the appointment of Dr. Mark J. Zacovic to the post of college president.

In November 2012, East County voters once again showed their support for the college district with the passage of Prop. V, a $398 million bond measure that paves the way for Cuyamaca and Grossmont colleges to address continuing facility, infrastructure and technology needs.

Also in 2012, Cuyamaca was selected as one of three community colleges in the state to be given the inaugural Energy and Sustainability Award from the California Community College Board of Governors. The college was recognized for its sustainable landscaping initiatives, including a conference that has attracted hundreds of industry professionals annually since 2008.

In 2013, an Intergenerational Garden was established adjacent to the Child Development Center, where senior volunteers affectionately nicknamed "Garden Grannies" helped children plant and harvest vegetables consumed by the center's young wards. This was also the year that the college was first ranked among the nation's "best of the best" veteran-friendly schools by U.S. Veterans Magazine. The college was the only community college in San Diego County to earn the distinction.

Cuyamaca was a repeat winner of the coveted award in 2014. Another highlight that year was a $350,000 clean energy grant from the state to lead a regional effort to train students in the booming clean-energy field.

In October 2015, Dr. Julianna Barnes, who previously served Cuyamaca College as vice president of student services, returned to take the helm as president.

Under her leadership, the college has completely transformed its approach to placement and teaching math, English, and ESL. Today, all students are placed in math and English based upon high school transcripts and GPA, not a placement exam. If students require extra support in college-level math and English, it is provided. Cuymaca College was the first community college in California to embrace this approach and support faculty in this effort.

In January 2019, the college opened the premier water and wastewater training facilities in California. The Center for Water Studies includes classrooms, a water quality analysis laboratory, and state-of-the-art field operations skills yard with above ground water distribution systems and underground wastewater collection system. The program was established in collaboration with the industry and will train the next generation of water professionals.

Cuyamaca College continues its development as a dynamic learning mecca, a unique campus with a strong allegiance to sustainability reflective of its natural beauty. Yesterday, today and tomorrow, the college remains unwavering in its mission to meet the comprehensive educational and workforce training needs of residents in East County and beyond.

COLLEGE VISION, MISSION AND VALUES

Cuyamaca College
Vision Statement:
Equity, Excellence, and Social Justice Through Education

Cuyamaca College
Mission Statement:
Cuyamaca College advances equity and social justice through student-centered and innovative approaches to education. We strive to create unique and meaningful learning experiences that build upon the strengths and socio-cultural experiences of our diverse student population and the communities we serve by providing programs that lead to certificates, degrees, transfer, career opportunities, and ultimately social and economic mobility.

Cuyamaca College Values:

- Student-centered
- Equity
- Student Success
- Innovation
- Excellence
- Social Justice
- Community

EDUCATIONAL OBJECTIVES

In order to maximize the opportunity for the development of individuals' personal, social and intellectual qualities, the college provides:

An ***instructional*** program:

- ***Transfer*** courses equivalent to the lower division curriculum of universities and colleges for students who plan to continue their education at a baccalaureate institution.
- ***Career and technical education*** courses to provide technical skills and knowledge for beginning employment, retraining and advancement, respond to local business and industry workforce development and workforce training directions.
- ***General education*** courses to broaden knowledge, skills, attitudes and values, to develop analytical ability and critical thinking, and to foster interest in lifelong learning in the educational, scientific and cultural fields essential for effective participation in a diverse and complex society.
- ***Developmental*** courses to assist inadequately prepared students to succeed in college course work.

A ***student services*** program:

- ***Academic, vocational and personal support*** services to provide students with sufficient opportunity to achieve educational success.
- ***Co-curricular activities*** to provide opportunities for personal development and social responsibility.

Learning program and services:

- Information literacy program designed to help students to find answers to questions, whether posed in the classroom or based on personal interests.
- Library collections where students have equitable access to current research information.
- Research guidance to support guided pathways initiatives.

A ***workforce development*** program:

- ***Education and training*** that contributes to continuous workforce improvement of regional business and industry and is in many cases grant funded.

EDUCATIONAL PHILOSOPHY

The Grossmont-Cuyamaca Community College District Governing Board believes that a community college should provide experiences that will greatly broaden students' educational opportunities and strengthen society's democratic institutions. Cuyamaca College is committed to provide an education through which students may create rewarding lives, productive for themselves and for society, based on an understanding of the relationship between the past, and the challenges of the present and the future.

Cuyamaca College accepts and is committed to the following premises:

- The democratic way of life allows each individual the personal freedom and initiative consistent with his/her responsibilities to other persons.
- The college recognizes the value of our diverse and individual needs, interests, and experiences, vary greatly.
- The maximum development of the personal, social, and intellectual qualities of each individual must be encouraged.
- The development and fulfillment of the individual and the development of the community are increasingly interdependent.

An educational environment dedicated to these philosophic premises will produce individuals prepared for life and citizenship in a complex, diverse society and global economy.

All segments of the Grossmont-Cuyamaca Community College District contribute to and participate in the development and success of our students.

INSTITUTIONAL LEARNING OUTCOMES

The Institutional Learning Outcomes (ILOs) are a promise to the communities that Cuyamaca College graduates and those transferring to a four-year college or university, will be able to demonstrate the knowledge, skills, and abilities contained within all of the ILOs, based on general education and discipline-specific courses. Cuyamaca College students who earn a certificate, or have taken courses for personal educational development, will be expected to demonstrate the knowledge, skills, and abilities specified within one or more of the ILOs.

Upon reviewing results of prior years' graduating student surveys, the Student Learning Outcome and Assessment Committee (SLOAC) recommended revisions to the College's ILOs in Spring 2019. The revisions were approved by the Academic Senate in April 2019 and Cuyamaca College Council in May 2019.

1. **Communication Competency:** Students will communicate information, arguments, and opinions effectively to different audiences through various modalities, including listening, speaking, and writing.
2. **Critical Thinking Competency:** Students will analyze and evaluate qualitative and quantitative information, and synthesize findings to make decisions within various contexts.
3. **Cultural Competency:** Students will interact effectively with others, taking into account their diverse backgrounds, and work well in cross-cultural situations.
4. **Professional Responsibility:** Students will practice ethical and civil conduct in professional environments, as well as resolve conflict and build alliances.

GROSSMONT-CUYAMACA COMMUNITY COLLEGE DISTRICT VISION, MISSION, AND VALUE STATEMENTS

Vision: Transforming lives through learning.

Mission: Provide outstanding diverse learning opportunities that prepare students to meet community needs, promote global responsibility, and foster opportunities for all.

The Grossmont-Cuyamaca Community College District fulfills its mission by providing:

- Outstanding undergraduate education for students seeking certificates, associate degrees, and university transfer;
- Excellent career and technical education programs that prepare students for workforce entry and advancement;
- Engaging educational services that meet learners' needs in basic skills and English language proficiency;
- Comprehensive student development and personal support services that contribute to student learning and achievement;
- Partnerships and programs that promote the social and economic development of the region; and
- Community education for personal, professional, and lifelong learning

Values: Cultivate a student-centered culture of excellence, trust, stewardship, and service.

ACADEMIC FREEDOM

(BOARD POLICY 4030)

The Grossmont-Cuyamaca College District Governing Board shall promote public understanding and support of academic freedom for the implementation of the educational philosophy of Grossmont-Cuyamaca Community College District Academic freedom is fundamental for the protection of the rights of the instructor in teaching, and of the student to freedom in learning. It carries with it duties correlative with rights.

1. Instructors are entitled to freedom in the classroom in discussing their subject, but they should be careful not to introduce into their teaching material that has no relation to their subject. The intent is not to discourage what is "controversial." Controversy is at the heart of the free academic inquiry that this entire policy is designed to foster. Instructors should avoid persistently intruding material that has no relation to their subject.
2. Instructors are citizens, members of a learned profession, and may be viewed by those outside of the District as representatives of the District. When they speak or write as citizens outside of their roles with the District, they should be free from institutional censorship or discipline,

but their special position in the community imposes special obligations. As scholars and instructors, they should remember that the public might judge their profession and Grossmont-Cuyamaca Community College District by their utterances. Hence 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 District.

3. As colleagues, faculty members have obligations that derive from the code of ethics (adopted by both the Grossmont College Academic Senate [11/16/92] and the Cuyamaca College Academic Senate [4/6/95]) Faculty members do not discriminate against or harass colleagues and students. They respect and defend the free inquiry of associates. In the exchange of criticism and ideas, faculty members show due respect for the opinions of others. Such exchanges shall focus upon the substance and content rather than personal characteristics of individuals. Uncivil, intemperate, or abusive language and behavior is contrary to a productive and safe working and educational environment. This does not contravene academic freedom and free exchange of ideas and opinions, but requires accuracy, appropriate restraint, and respect for the professional expression of others.
4. Instructors are entitled to full freedom in academic research and publication, subject to the adequate performance of their other academic duties, but research and publication for pecuniary return should be based upon an understanding consistent with the collectively bargained agreement between the District and the exclusive bargaining representatives.

General Information

AIR FORCE RESERVE OFFICER TRAINING CORPS

The Air Force Reserve Officer Training Corps (AFROTC) is a three to four year program designed to equip students with leadership skills and commission officers for tomorrow's Air Force. Required coursework includes lectures, a leadership laboratory practical component, panel discussions, dialogues, problem solving, and physical training. All coursework is completed on site at or near SDSU, with the exception of a four-week summer Field Training encampment conducted on a military base between the second and third year.

Scholarships are available for qualified cadets, and may be applied towards tuition, lab fees, and other required items. In addition, scholarship students receive a non-taxable book allowance and monthly stipend. All third and fourth year students receive a monthly stipend regardless of scholarship status. Upon successful completion of the AFROTC program and all requirements for a Bachelor's Degree, cadets are commissioned as Second Lieutenants and serve a minimum of four years in the Active Duty Air Force.

Cuyamaca College does not have a Reserve Officer Training Corps (ROTC) program on campus; however, through an agreement with San Diego State University, students may participate in Air Force ROTC through the SDSU College of Extended Studies. Credits earned in these classes may be transferred as electives to meet the degree requirements of Cuyamaca College.

There is no advance application needed to participate in the Freshmen or Sophomore level course; however, an orientation program, held just prior to the start of the semester, is recommended. Interested students should visit www.afrotc.com for further information and may call the AFROTC Detachment 075 Unit Admissions Officer at (619) 594-5545 with any questions.

CAMPUS SAFETY

Law Enforcement Services at the District are provided by the San Diego County Sheriff's Department. If necessary, the District also has access to Sheriff's Department specialized units that investigate crimes such as illegal drug sales, auto theft or gang-related crime.

In addition, a team of Campus and Parking Services (CAPS) specialists provides services such as automobile assistance, lost & found, and safety escorts. CAPS also enforces parking regulations on campus.

The Public Safety Office is located at the Cuyamaca One-Stop, A-100 building.

PUBLIC SAFETY CONTACT INFORMATION

Call 911 in an emergency

- Life-threatening situation
- Medical emergency
- Missing persons
- Crime in progress
- Fire
- Major disturbance

Call (619) 644-7800 to contact law enforcement for a nonemergency

- Crime report
- Suspected suspicious activity

Call (619) 644-7654 for Campus and Parking Services

- Automobile assistance
- Parking
- Lost & found
- Safety escort

Additional public safety information is available at: www.gcccd.edu/public-safety

PARKING & TRAFFIC REGULATIONS

All vehicles must display a valid college parking permit while parked on campus property. The responsibility of finding a legal parking space, as well as knowing where and when a parking permit is valid, rests with the vehicle operator and/or owner. The purchase of a parking permit does not guarantee a space to park. For the safety of the college community, all California Vehicles Codes are enforced. All community members (students, staff, faculty, and visitors) are primarily responsible for their own safety and property.

For further information, contact the Campus and Parking Services at (619) 644-7654.

Displaying Parking Permit on Campus

The parking permit must be displayed so that the color and expiration date is clearly visible. The parking permits are only valid when properly displayed affixed to the front windshield inside the lower corner on drivers or passengers side.

Student Parking Permits

Student parking permits are purchased through WebAdvisor at www.cuyamaca.edu. It will link you to Credentials, Inc., to purchase your parking permit. You may pay by credit card online or if you choose to pay by cash or check you may bring in your printed order form to the College Cashier's office and we will process your payment so that your parking permit can be mailed.

Refunds for Parking Permits—You must physically return your parking permit to the College Cashier's office, within the refund deadline of your class/es to receive a refund. If you paid by credit card, we will process your transaction and you will receive a credit to your card from Credentials, Inc. If you paid by cash or check, we will refund your money to you after cancelling your parking permit through Credentials, Inc.

Faculty & Staff Parking Permits

Permits are available at the CAPS offices.

Cuyamaca: Building A-100
Grossmont: Building 57

Call Boxes and Locations

Minor emergencies and requests for motorist assistance can be reported to District Public Safety at (619) 644-7654 or by using one of the Call Boxes located inside all campus elevators. Life threatening emergencies should utilize 911.

Pay Stations

Daily permits for students and visitors may be purchased from the pay stations located in Parking Lots 2, 4 and 5.

Please use one dollar bills only, or any major credit/debit card. No refund or change is given. Pay stations permits are only valid in student parking lots.

Disabled Parking Permits

All vehicles utilizing disabled parking spaces must display a state issued identification placard, i.e. DMV issued placard, DP or DV plates. Applications for placards/plates are available at the Department of Motor Vehicles. Disabled Placards are also valid in parking meters and student lots. A disabled placard must also be accompanied by a valid GCCCD parking permit.

Special Events Parking

Please contact CAPS for parking details. Parking requests for special events or large groups are available through previous arrangements. For detailed information contact Campus and Parking Services at district.parking@gcccd.edu. Please allow 48 hours minimum advance notice for special events parking.

Replacement for Lost or Stolen Permits

There are no refunds or replacement of lost or stolen parking permits.

Motorcycle Parking

Motorcycles, scooters, segways, and mopeds must be parked in designated motorcycle areas; with a motorcycle permit displayed. Motorcycles parked in auto parking spaces are subject to citation.

Alternative Transportation Options

Bicycle racks are available throughout campus.

The college Metropolitan Transit System (MTS) pass is a great way to avoid parking hassles, car expenses, and to have access to unlimited rides throughout the semester. Semester MTS passes are available at the Cashier's Office, A-300 building, window. For more information please visit the MTS website at www.sdmts.com.

Motorist Assistance

The Campus Safety goal is to provide safe, orderly, and fair parking to the college community. We strive to make parking on either campus as convenient as possible, while promoting safe movement of vehicles and providing for pedestrian safety. All persons having a valid parking permit are eligible to receive the following complimentary services: unlocking vehicle and battery jump start.

Campus and Parking Services also provides safety escort services, available to all community members.

PARKING CITATION

Fines

Parking citation fines are to be paid within 21 days of issue date or 14 days of delinquent notice. Failure to pay fines on time results in a delinquency fee.

Payments

Fees resulting from citations are payable at the College Cashier Office or online at: https://www.paymycite.com/gcccd

Citation status changes will not be processed until the full payment of all applicable fees.

Unpaid citations are subject to a $75.00 delinquent fee. Payment failure will eventually result in a DMV hold on the vehicle's registration.

Appeal Forms

You may obtain a "Citation Appeal Form" at https://www.paymycite.com/gcccd. Complete the form online within 21 calendar days of the citation's issued date. You will receive a response to your request by mail within 1-2 weeks.

ADDITIONAL SERVICES

ATM Location

Cuyamaca College: Student Center, I-Building, 2nd floor.

Lost & Found

Lost and Found items should be returned to CAPS. To check if an item has been turned in, call (619) 644-7654 or stop by CAPS.

HERITAGE OF THE AMERICAS MUSEUM

Cuyamaca College is the home of the Heritage of the Americas Museum, a cultural and educational center featuring the prehistoric and historic art, culture and natural history of the Americas. Fossils as old as 450 million years are exhibited in the Natural History wing. Artifacts representing ancient cultures of the Americas are presented in the Archaeology and Anthropology wings, and the Art wing displays the art of the world from ancient Chinese jade, including a rare burial suit from the Han Dynasty, to modern painting and sculpture.

The museum also serves as an adjunct to the instructional programs of Cuyamaca and Grossmont Colleges in a variety of academic disciplines. There is a research library of more than a thousand books related to the museum's collections. Students and faculty find the museum to be a valuable research facility and a fascinating place to visit. Admission is free to students. The museum is open Tuesday through Friday, 10 a.m. to 4 p.m. and Saturday Noon to 4 p.m. (closed Sunday and Monday).

NO SMOKING POLICY

In accordance with Board Policy 3570, Cuyamaca College is a smoke-free/tobacco-free facility. Violation of this policy will result in appropriate disciplinary penalties for both students and employees. Any District public safety official may warn or cite any person who is in violation of this policy.In Accordance with AP 3570, "Smoking" means engaging in an act that generates smoke or vapor, such as possessing a lighted pipe; a lighted hookah pipe; operating an electronic cigarette or other electronic nicotine delivery system; a lighted cigar; a lighted cigarette of any kind; or lighting or igniting a pipe, a hookah pipe, a cigar, or a cigarette of any kind.

ONLINE COURSES

Cuyamaca College offers a variety of courses entirely online and hybrid (partially online). Some online courses require on-campus orientations and/or exams. Online courses require that students have dependable access to the Internet through their own Internet Service Provider or through one of the college's computer labs.

If you are self-motivated, self-disciplined, have good basic computer skills, and are able to read and follow instructions carefully, online courses may be a good option for you. To learn more about whether online learning is for you, please visit our online success website at: www.cuyamaca.edu/academics/online-learning.php.

NONDISCRIMINATION NOTICE

The Grossmont-Cuyamaca Community College District (GCCCD) is committed to providing learning and working environments that ensure and promote diversity, equity, and inclusion. People of diverse backgrounds, perspectives, socioeconomic levels, cultures, and abilities are valued, welcomed, and included in all aspects of our organization. GCCCD strives to provide an educational environment that fosters cultural awareness, mutual understanding, and respect that ultimately also benefits the global community.

No person shall be unlawfully subjected to discrimination or denied full and equal access to District programs or activities on the basis of ethnic group identification, race or ethnicity, color, national origin, religion, age, gender, gender identity, gender expression, physical or mental disability, medical condition, pregnancy, genetic information, ancestry, sexual orientation, marital status, or military and veteran status, or because he or she is perceived to have one or more of the foregoing characteristics, or based on association with a person or group with one or more of these actual or perceived characteristics. District programs and activities include, but are not limited to any that are administered or funded directly by or that receive any financial assistance from the California Community Colleges Chancellor's Office.

The Chancellor shall establish administrative procedures that ensure all members of the college community can present complaints regarding alleged violations of this policy and have complaints heard in accordance with the Title 5 regulations and those of other agencies that administer state and federal laws regarding nondiscrimination.

No District funds shall be used for membership or for any participation involving financial payment or contribution on behalf of the District or any individual employed by or associated with the District, to any private organization whose membership practices are discriminatory on the basis of groups mentioned above. (Board Policy 3410)

Inquiries regarding the equal opportunity policies, the filing of grievances or for requesting a copy of the college's grievance procedures may be directed to:

- **Dr. Lauren Vaknin**
  Dean, Student Affairs
  Cuyamaca College
  900 Rancho San Diego Parkway
  El Cajon, CA 92019
  619-660-4295
- **Dr. Jessica Robinson, MSW**
  Vice President, Student Services
  Cuyamaca College
  900 Rancho San Diego Parkway
  El Cajon, CA 92019
  619-660-4301
- **Tim Corcoran**
  Vice Chancellor, Human Resources
  Title IX Coordinator
  8800 Grossmont College Drive
  El Cajon, CA 92020
  (619) 644-7572

Cuyamaca College recognizes its obligation to provide overall program accessibility for those with physical and mental disabilities. Contact the Disabled Students Programs and Services department at 619-660-4239 (TTY 619-660-4386), room A-113, to obtain information on programs and services, activities and facilities on campus and for a geographical accessibility map.

Inquiries regarding federal laws and regulations concerning nondiscrimination in education or the college's compliance with those provisions may also be directed to:

Office for Civil Rights
U.S. Department of Education
221 Main Street, Suite 1020
San Francisco, CA 94105

REVISION OF REGULATIONS

Any regulation adopted by the Grossmont-Cuyamaca Community College District Governing Board has the same force as a printed regulation in the catalog and supersedes any ruling on the same subject which may appear in the catalog or official bulletin of the college.

SEXUAL ASSAULT

For sexual assault emergencies, contact 911.

If you are a victim of sexual assault (rape, sexual violence or stalking), please contact the Office of Student Affairs at 619-660-4295 or visit the Student Affairs Office (Student Center, I-121). Student Affairs will provide students with the resources and support needed during this time. In addition, students will be provided guidance on reporting options.

Additional resources can be found at: www.cuyamaca.edu/consumer-information.php

For all emergencies, please contact 911.

Any sexual assault or physical abuse, including, but not limited to, rape, as defined by California law, whether committed by an employee, student, or member of the public, occurring on Grossmont-Cuyamaca Community College District property, in connection with all the academic, educational, extracurricular, athletic, and other programs of

the District, whether those programs take place in the District's facilities or at another location, or on an off-campus site or facility maintained by the District, or on grounds or facilities maintained by a student organization, is a violation of District policies and regulations, and is subject to all applicable punishment, including criminal procedures and employee orstudent discipline procedures (AP 3540).

STUDENT EQUITY PLAN

The Grossmont-Cuyamaca Community College District recognizes that California's economic and social future depends upon the success of all its citizens, particularly those enrolled in institutions of higher education. Therefore, the College has developed a Student Equity Plan.

The intent of the Student Equity Plan is to move our District toward achieving student equity by ensuring that the composition of students who enroll are retained, transfer or achieve their occupational goals mirrors the diversity of the population of the District's service area. The Student Equity Plan is subject to on-going coordination, evaluation and revision. It guarantees that student equity and student success are explicit and integral parts of the District's priorities.

STUDY ABROAD PROGRAMS

Study Abroad programs enable students to immerse themselves in a foreign language environment. During these programs, students are housed in apartments or with host families, which not only allows the students to become more proficient in a foreign language, but also gives them the opportunity to experience a different culture.

SUMMER SESSION

The College offers a summer session that includes courses and programs also available in the regular academic year. College and legal regulations including residency, fees, veterans and withdrawal procedures apply.

TUTORING

Everyone needs a little help sometimes. Tutoring is free and students may begin using services at any point in the semester. Learning Assistants -- most of whom are current or former Cuyamaca students, themselves – help students adapt to college, learn course skills and content, refine general study skills and strategies, and become more confident, independent learners.

Tutoring is offered in a variety of formats through the Academic Resource Center (ARC), the STEM Achievement Center, and the Writing Center depending on the course and student need. For more information, please visit the website at: www.cuyamaca.edu/tutoring, email cuyamaca.tutoring@gcccd.edu or leave voicemail at (619) 660-4525.

VOTER REGISTRATION

Register to Vote at www.sos.ca.gov/elections/voter-registration/

For information on early voting dates, please access the Registrar of Voters website at www.sdvote.com/.

Please note that the dates, times, and location for early voting and conditional voter registration may be confirmed on the website of the Secretary of State's website (www.sos.ca.gov/elections) or at the San Diego Registrar of Voters election office (https://www.sdvote.com/).

Admission Information

ADDRESS CHANGE

A change of address and email address should be immediately reported to the Admissions and Records Office. You may change your address information online in *WebAdvisor* (www.cuyamaca.edu) or in the Admissions and Records Office.

For students receiving financial aid, please go to the Admissions and Records Office to change your address.

ADMISSION PROCEDURES

To enroll at Cuyamaca College students should observe the following admission procedures:

1. **Apply Online:** Before you can register for classes, you must fill out an application to the college. This can be done online and it is free! Please visit www.cuyamaca.edu to access the online application.
2. **Create WebAdvisor Account:** Once your application is processed, please login to WebAdvisor to set up your student account. Your username will be your "firstname. lastname" (lowercase only) and your initial password will be your six digit date of birth. (MMDDYY e.g. 06/02/1999 would be 060299). If you are having difficulty, please visit: www.cuyamaca.edu/admissions/
3. **Submit Official Transcripts to Admissions and Records:** If you have attended another college, please have your official transcripts sent to the Admissions and Records office to clear prerequisites, and to award prior credit for degrees and certificates, this includes all AP, or IB credit. Official transcripts and scores must still be in the sealed official envelope when submitted.
4. **Complete the Online Orientation:** Complete the online orientation on WebAdvisor. You may access the online orientation by signing into WebAdvisor, clicking on Students and under Orientation/ Placement/Advise; click Step One - Online Orientation.
5. **Determine Math and English Placement:** To determine placement for Math and English courses please take the questionnaire on WebAdvisor in the student Menu under "Orientation/ Placement/Advise" (click on Step Two: Placement Questionnaire). For questions regarding your placement, please visit a counselor for clarification on which courses to take.
6. **Attend an Advising Session:** Once you have completed the assessment test the next step is to complete an advising session. To complete online advising please login to WebAdvisor and click on "Students" and Under Orientation/Placement/Advise, click Step Three - Online Advising.
7. **Register for Classes:** You will receive an e-mail indicating your registration date and time; in April for Summer, June for Fall and November for Spring. The college year is divided into three sessions: fall and spring semesters and a summer session. You may then register for classes online using WebAdvisor. WebAdvisor online tutorials are available to assist you.
8. **Pay Fees:** Once you have registered for classes you must now pay your tuition and fees. You can pay your fees via WedAdvisor or on campus at the Cashier office.

ADMISSION REQUIREMENTS

High school graduates or equivalent, or students who are over 18 years of age and have the ability to benefit from the instruction offered, may attend Cuyamaca College.

Students who are 17 or younger before the start of the semester are required to show proof of high school graduation to the Admissions and Records Office.

While it may be advisable for a student to qualify for a high school diploma through a local adult school, non-graduates over 18 years of age may be admitted directly to Cuyamaca College.

Transfers from accredited colleges and universities are eligible for admission to Cuyamaca College.

Dual Enrollment: High school students in the 9th, 10th, 11th or 12th grade, who are at least 14 years of age, may attend upon approval of a high school counselor and parent or guardian of the student. Courses attempted and units earned will be recorded on a college permanent record. High school students are not eligible to receive Title IV Federal Financial Aid, and if classified as a non-resident of California, will be responsible to pay nonresident tuition. For more information on Dual Enrollment, visit www.cuyamaca.edu/admissions/high-school-students.php

PLACEMENT, ORIENTATION AND NEW STUDENT ADVISING

As vital components of the Student Success and Support Program, Placement, Orientation and New Student Advising are expected of all new students.

The Counseling Department and Placement Center will utilize various means of evaluation to place students into the appropriate Math, English, and English as a Second Language (ESL) level. Prior to taking the Math and English placement questionnaire on WebAdvisor, students are encouraged to meet with a counselor for proper Math and English placement guidance and possible assessment test clearance. Students may obtain clearance from the Math and English placement if they have:

- taken an English and Math class at a college and received a grade of "Pass" or a minimum grade of "C", or
- earned an Associate Degree or higher, or
- completed an acceptable external examination (see External Exams Credit)

The Counseling Department and Placement Center are located in A-200 in the Student Services One Stop Center. For questions regarding Math and English placement, visit the Placement page of the Cuyamaca website at www.cuyamaca.edu/placement. Accommodations are available to students with disabilities who plan on taking the Math and English placement.

Orientation and New Student Advising sessions provide important information to students about the programs and services available at the college as well as strategies for student success. New Student Advising sessions offer an opportunity for the new student to develop an Educational Plan, an important tool to assist students attain goals efficiently. New students must complete the Placement, Orientation and New Student Advising Program for timely registration.

New, returning, or transfer students may be exempt from the process of Placement, Orientation, and New Student Advising, For a list of exemptions, see page 39 under Student Success and Support Program.

ENROLLMENT PRIORITIES

Changes to course registration policies throughout the California community colleges will help students get the courses they need to meet their educational goals. With this new registration system, students who are making progress toward their goals will be rewarded for their efforts. Enrollment priorities in the Grossmont-Cuyamaca Community College District are listed below:

Students will be placed in "groups" based on the criteria below. All new students are required to complete an orientation, assessment, and develop a student education plan in order to be eligible for priority enrollment.

- Group 1: Active duty military and Veterans, current and former foster youth up to age 24, Verified Homeless Youth who are under the age of 25, CalWORKs, EOPS and DSPS students, a student who is a Tribal TANF recipient.
- Group 2: Eligible student athletes and those enrolled in the Freshman Year Academy or First Year Experience.
- Group 3: Continuing students with 45-90 GCCCD degree-applicable units.
- Group 4: First-time to college students who have completed an orientation, assessment, and developed a student education plan.
- Group 5: Continuing students with 12 or more units but not more than 44.5 GCCCD degree-applicable units.
- Group 6: Continuing students with 0-11.5 GCCCD units.
- Group 7: New applicants who have applied but not gone through the matriculation process.
- Group 8: Open enrollment - includes students with 90 or more GCCCD degree-applicable units.

Students placed on academic or progress probation or any combination thereof, or students who have earned 90 or more degree-applicable semester units in the GCCCD, lose their enrollment priority. Foster youth or former foster youth are exempt from losing enrollment priority due to failure to meet academic standards or for exceeding 90 units. The District will notify students in jeopardy of losing their enrollment priority due to probation or unit limits.

LOSS OF ENROLLMENT PRIORITY (APPLIES TO ALL STUDENTS INCLUDING VETERANS, CALWORKs, DSPS, AND EOPS)

Students shall lose their enrollment priority based upon any of the following:

- Student has exceeded the 90 degree-applicable units at Grossmont and/or Cuyamaca College.
- Student has two consecutive enrolled semesters of any type (progress or academic) probation (Summer is not included).
- New student has not completed orientation, assessment and created a student education plan.

As per state regulations, Foster Youth are exempt from losing their enrollment priority status.

PETITION OF LOSS OF ENROLLMENT PRIORITY STATUS

Students may petition the loss of their enrollment priority based on one of the following criteria:

- Students who have experienced extenuating circumstances (verified cases of accident, illnesses or other circumstances beyond the student's control that affected their academic performance in the previous semester) and can provide documentation of such circumstances.
- Students who have made significant academic improvement where they meet the minimum grade point average and/or progress standard to be removed from academic or progress probation.
- Students who have exceeded 90 units of degree-applicable coursework at GCCCD and are enrolled in a high unit major.
- Students with disabilities who applied for, but did not receive reasonable accommodations in a timely manner.
- Students who have other specific situations that warrant considerations (e.g., last term at GCCCD and needs a specific course to graduate or transfer).

ENROLLMENT VERIFICATION

Each student who has an academic record on file at Cuyamaca College and who is not in arrears to the district with regards to fees, tuition, loans or other charges may request verification of enrollment (commonly used to verify enrollment for insurance purposes, scholarships, student worker eligibility, etc.) from the Admissions and Records Office. Verification of enrollment may be obtained at $3 per copy (processed within 5 working days). Exception: This charge will not be assessed for student loan deferments. An emergency or rush verification of enrollment will be provided for $5 per copy (processed within two business days). Please note processing time does not include shipping.

Cuyamaca has authorized the National Student Clearinghouse to act as its agent for verification of student enrollment status. Students can obtain an official Enrollment Verification Certificate at any time via the Clearinghouse website at: www.enrollmentverify.org for a $2.50 charge per certificate.

FEES

Cuyamaca College is part of the California Community College system and requires enrollment, student center construction and health services fees for all students, payable at the time of registration. Students are dropped from classes for non-payment of fees. The California College Promise Grant provides methods to assist low income students pay these fees. Eligibility requirements are available in the Financial Aid Office.

Students may purchase daily or semester parking permits. If a student elects to purchase a multi-car parking permit, the permit may be used on any number of vehicles, but entitles the student to the use of a single parking space per permit. See "Parking & Traffic Regulations" for more information.

Students are required to purchase their own textbooks and supplies and may be required to pay for equipment which is lost or broken after it has been issued.

All students are encouraged to support the student activity program through the purchase of a Student Benefit Card.

REGISTRATION FEES

Registration fees are expected at the time of registration. You will be held to all fees incurred. Students are dropped from classes for non-payment of fees. Registration is NOT complete until fees have been paid. Failure to pay will result in a hold on your records. Refund deadlines vary by class; refer to the Academic Calendar in the class schedule and www.cuyamaca.edu/admissions/deadlines/index.php. It is the student's responsibility to drop any classes that they do not plan to attend.

Students attending both Cuyamaca and Grossmont Colleges pay parking fees and health fees on one campus only. Enrollment and health fees for these students are calculated on a district basis.

Enrollment Fee (Mandatory) (fees are subject to change)	$46 per unit
Parking Permits:	
Auto Parking Permit - Fall & Spring	$40
Auto Parking Permit - Summer	$18
Motorcycle Parking Permit - Fall & Spring	$20
Motorcycle Parking Permit - Summer	$10
One Day Permit	$2
* Student Benefit Sticker - Fall & Spring	$12
* Student Benefit Sticker - Summer	$6
** Health Fee (Mandatory) - Fall & Spring	$20
** Health Fee (Mandatory) - Summer & Intersession	$17
# Student Center Construction Fee (Mandatory)	$1 per unit to a maximum of $5
Student Representation Fee. (Optional)	$2
Nonresident Students - above fees plus	$307 per unit
International Students - above fees plus	$307 per unit

#Student Center Construction Fee is not applicable for summer session.

***Student Benefit Sticker:** A Student Benefit Sticker may be purchased for $12. This sticker entitles students to free admission to all college-sponsored athletic events, 10% off all supplies from the College Bookstore (excluding textbooks), as well as special college and community discounts. The Student Benefit Sticker also helps the Associated Student Government of Cuyamaca College (ASGCC) to support various activities and programs on campus. The Student Benefit Sticker can be picked up in room I-121 starting the first day of the semester. For additional information, please call (619) 660-4612.

****Health Fee:** The mandatory health fee supports the Health and Wellness Center and provides for insurance coverage should a student be injured during a supervised, on-campus or college-related activity. Students who depend exclusively upon prayer for healing according to the teaching of a bona fide religious sect, denomination or organization may petition for an exemption from the health fee by submitting a written request to the Dean, Student Affairs. Requests for exemption will be reviewed by the Vice President of Student Services and the Dean for Student Affairs. For additional information, please contact the Vice President of Student Services at (619) 660-4301.

Grossmont-Cuyamaca Promise Program: FREE college for first year students! Go to MyCollegePromise.net to find out how!

Zero Textbook Cost sections, designated as "  " in the PDF version of the class schedule, do not require students to purchase a textbook. These sections may have recommended (but not required) books, or may use free, openly licensed teaching and learning resources, such as Open Educational Resources (OER). ZTC sections may have a fee for items such as lab supplies, calculator, test forms, etc. but no conventional textbook fees.

Open Educational Resources (OER) are teaching, learning, and research resources that reside in the public domain or have been released under an open license. OER are legally available and free of cost to students. Class sections using OER with no textbook costs are designated as "  " in the class schedule.

Title 38 Beneficiaries (VA Education Benefits) Fees and Expenses Hold

Hold Preventing Drop for Non-Payment Cuyamaca College will not impose any penalty, including the assessment of late fees, the denial of access to classes, libraries, or other institutional facilities, or the requirement that a covered individual borrow additional funds, on any covered individual because of the individual's inability to meet his or her financial obligations to the institution due to the delayed disbursement of a payment to be provided by the Secretary under chapter 31 or 33 of this title.

Covered individual is any individual who is entitled to CH 31 or CH 33 VA Educational benefits. A covered individual must complete the following to not have any of the above penalties imposed:

1. Submit a certificate of eligibility for entitlement to the Veterans Services Office no later than the first day of a term.
2. Submit a completed Veterans Services Worksheet to the Veterans Services Office.
3. Provide all additional information needed to Veterans Services Office to certify covered individual's enrollment certification to the Department of Veterans Affairs.

HIGH SCHOOL COURSES FOR COLLEGE CREDIT

High School students may earn college credit through the "Tech Prep" program. Tech Prep is an important school-to-work transition strategy, helping high school students make the connection between school, college and employment. To receive credit, high school students must enroll in an approved Career Technical Education (CTE) College Credit/Tech Prep course at a participating high school. Students must complete the course with a "B" or better. After the end of the semester, students must submit the CTE college credit form to the Cuyamaca College Admissions and Records Office. Credit will be earned via successful credit by examination and appropriately noted on the college transcript. High schools that participate in the Grossmont-Cuyamaca Community College District Tech Prep Program are:

Central
Chaparral
El Cajon Valley
El Capitan
Granite Hills
Grossmont
Helix
Monte Vista
Mt. Miguel
Mountain Empire
Patrick Henry
Santana
Steele Canyon
Valhalla
West Hills

For more information, visit www.gcccd.edu/ctecollegecredit/.

INSTRUCTIONAL MATERIALS

Students may be required to purchase instructional and other materials required for a credit or non-credit course, provided that such materials are of continuing value to a student outside of the classroom setting, and provided that such materials are not solely or exclusively available from the district.

INTERNATIONAL STUDENT PROGRAM

ADMISSION

1. Applications for admission must be received by the following deadlines:
   - Fall semester – June 1
   - Spring semester – November 1

   All application materials must be received by the above deadlines.
2. TOEFL scores must be submitted in order to be considered for admission. The minimum score is 450 paper based or 45 internet-based. The TOEFL test must be completed by the application deadline.
3. New students must enroll in the appropriate level English class.

FULL-TIME STATUS

An international student must maintain a minimum of 12 units with a 2.0 grade point average each fall and spring semester at Cuyamaca College.

FINANCIAL RESOURCES

1. Each international student must submit a complete financial statement. The financial statement must indicate the ability of the student to finance the year's education to the satisfaction of the Admissions and Records Office (approximately $27,300 per year).
2. An international student attending Cuyamaca College must pay international student tuition and other fees as required by the Governing Board.
3. Financial aid is not available for international students.
4. An international student may not work off-campus while attending college unless approval is granted by the Department of Homeland Security and the International Student Specialist in Admissions and Records. In some instances an international student may, after completing at least two semesters, work on campus for 20 hours per week.

HEALTH

Cuyamaca College **strongly** recommends that international students obtain a health and accident insurance policy. The Health and Wellness Center has information on where to acquire such a policy.

HOUSING

Cuyamaca College does not have on-campus housing; however, we do work with a home family agency. Information is available in the Admissions and Records Office. The college assumes no responsibility for providing or supervising such housing facilities.

GRADING STANDARDS

International students are subject to all Cuyamaca College grading, probation and disqualification standards.

NOTIFICATION OF ADMISSION

Students will be notified of their acceptance to Cuyamaca College as soon as their application materials are received and approved. Students need to be available for preregistration orientation and educational counseling approximately four weeks prior to the start of each semester.

REFUND SCHEDULE

The refund schedule for international student tuition, nonresident tuition, enrollment, student center construction and health services fees is as follows:

- Full semester courses:

  100% refund through first two weeks of instruction

  0% refund after second week of instruction
- 8 week courses:

  100% refund through first week of instruction

  0% refund after first week of instruction
- Other short-term classes:

  Contact the Admissions and Records Office or go to www.cuyamaca.edu/admissions/deadlines/ and click on "Short-term Class deadlines"

NONRESIDENT TUITION REFUND

Refunds after the refund deadline will be made for the following reasons only:

1. *Erroneous determination of nonresident status*. If a student is erroneously determined to be a nonresident and, consequently, a tuition fee is paid, such fee is refundable in full, provided acceptable proof of state residence is presented within the period for which the fee was paid.
2. *Compulsory military service*.

RESIDENCY INFORMATION

Each person enrolled or applying for admission to any California community college will provide such information and evidence of residence as deemed necessary by the District Governing Board to determine residence classification. Falsification of residency information may result in admission to the college being denied. Guidelines for determining residency are outlined in the California Administrative and Education Codes. The determination of a person's classification will be made in accordance with the provisions of these policies and the residence determination date for the semester or session for which the person proposes to attend. The following is a summary of residency guidelines and is by no means complete. Changes may have been made in the statutes and regulations since the time this catalog was published. For more information, contact the Residency Specialist in the Admissions and Records Office.

I. RESIDENCE CLASSIFICATION

A. A "resident" is a person who has been both physically present, and has established intent to make California his/her residence for more than one year immediately preceding the residence determination date (Section 54020 of Title 5 of the California Administrative Code). The "residence determination date" is the day immediately preceding the first day of instruction of the semester or session to which the person seeks admission.

B. A "nonresident" is a person who has not been both physically present and established intent to make California his/her residence for more than one year immediately preceding the residence determination date. Persons so classified, unless they qualify under one or more of the exceptions later specified, will be required to pay a tuition fee as established by the Grossmont-Cuyamaca Community College District Governing Board.

II. DETERMINATION OF RESIDENCE

A. Residence. To determine a person's place of residence, the following rules are observed:

1. Every person has, in law, a residence.
2. Every person who is married or 18 years of age, or older, and not precluded from doing so, may establish residence.

3. There can only be one residence.
4. Residence is the place where one remains when not called elsewhere for labor or other special or temporary purposes, and to which one returns in seasons of repose.
5. A residence cannot be lost until another is gained.
6. Residence can be changed only by the union of act and intent.
7. An individual may establish their residence. A person's residence shall not be derived from that of their spouse.

B. Adults. Persons 18 years of age or older may establish residence in accordance with Section A.

C. Minors. Persons under 18 years of age may establish residence in accordance with the following:
1. A married minor may establish their own residence.
2. If the parents are permanently separated, the residence of the minor is the residence of the parent with whom the minor lives.
3. If both parents are deceased, and there is no court-appointed guardian, the minor may establish their own residence.
4. The residence of an unmarried minor who has a parent living cannot be changed by their own act, by the appointment of a legal guardian, or by relinquishment of a parent's right of control, unless the minor qualifies for the two-year care and control or the self-support exception.
5. A person who is a minor, and resides with either the father or mother (or both), may be classified as a resident of California if the parent (or parents) with whom the minor lives has established residence in California for more than one year prior to the residence determination date.

III. FACTORS TO BE CONSIDERED IN DETERMINING RESIDENCE

A. Residence is established only by the union of both physical presence and intent. No one factor is decisive, however, the college may look for certain objective manifestations of subjective intent on the part of one asserting that residence status has been established, or has been maintained in spite of an absence from California.

The following factors may be used to demonstrate evidence of maintaining physical presence:
1. Carrying on of a business or employment in California.
2. Maintaining active savings and checking accounts in California banks.
3. Ownership of residential property or continuous occupancy of rented or leased property in California.
4. Active resident membership in service or social clubs.

The following factors may be used to demonstrate intent to reside in California:
1. Filing California personal income taxes as a resident.
2. Registering to vote and voting in California elections.
3. Possession of a California Driver's License or California Identification Card from the Department of Motor Vehicles.
4. Possession of California resident vehicle license plates.
5. Petitioning for a divorce or lawsuit as a resident of California.
6. Carrying on of a business or employment in California.
7. Possession of a California resident hunting or fishing license.
8. Licensing from California for professional practice.
9. California address on federal income tax forms and W-2 forms.
10. Maintaining a California address as the home of record on military records and on the Leave and Earnings Statement (LES) while in the armed forces.

B. Factors that are inconsistent with a claim for California residence include, but are not limited to, the following:
1. Filing California State income taxes as a nonresident or filing income taxes as a resident in another state.
2. Maintaining a driver's license in another state.
3. Maintaining vehicle registration in another state.
4. Maintaining voter registration and voting in another state.
5. Attending an out-of-state institution as a resident of that state.
6. Petitioning for a divorce or lawsuit as a resident in another state.

C. The Cuyamaca College admissions/residency questionnaire shall contain a variety of questions directed at establishing the residency classification of a person.

D. *Exceptions.*
1. Persons who have attended a California high school for at least three years and have graduated from a California high school, or have attained the equivalent status, are exempt from paying nonresident tuition. This exemption applies to persons who would usually be classified as nonresidents, including undocumented immigrants. Nonimmigrant aliens, including persons on F and B visas, are not eligible for this exemption.
2. A minor who remains in California after resident parents establish residence elsewhere (within one year immediately prior to the residence determination date), may retain resident status until the minor has attained the age of majority and has resided in California long enough to establish residence, so long as, once enrolled, continuous full-time attendance is maintained. Nothing in this section will require attendance during summer intersession or any session beyond the normal academic year.
3. A minor who has been entirely self-supporting and actually present in California for more than one year immediately preceding the residence determination date, with the intention of acquiring a residence therein, shall be entitled to resident classification until he/she has resided in California the minimum time necessary to become a resident. Certain requirements must be met.
4. A student who currently resides in California and is 19 years of age or under at the time of enrollment, who is currently a dependent or ward of the state though California's child welfare system, or was served by California's child welfare system and is no longer being served either due to emancipation or aging out of the system, may be entitled to resident classification until he or she has resided in the state the minimum time necessary to become a resident.
5. A minor shall be entitled to resident classification if, immediately prior to enrolling at a California community college, the minor has lived with and been under the continuous direct care and control of any adult or adults, other than a parent, for a period of not less than two years, provided that the adult or adults having such control have been domiciled in California for more than one year immediately prior to the residence determination date. This exception shall continue until the student has attained the age of majority and has resided in California the minimum time necessary to become a resident so long as continuous full-time attendance is maintained.
6. An unmarried minor alien will be entitled to resident classification if the minor and the minor's parents have not been precluded by the Immigration and Nationality Act from establishing domicile in the United States, provided that the parents have established residence in California for more than one year prior to the residence determination date for the semester or session for which the minor proposes to attend. An exception is made to minors, for establishing residency, if the minor is a U.S. citizen and his/her parents are undocumented aliens.
7. A person who is an adult alien will be entitled to resident classification if he/she is not precluded by the Immigration and Nationality Act from establishing domicile in the United States, provided that he/she has established residence in California for more than one year prior to the residence determination date for the semester or session for which he/she proposes to attend.

8. A person classified as a nonresident shall not obtain resident classification, as a result of maintaining continuous attendance at an institution, without meeting the other requirements of obtaining such classification.
9. An undergraduate student who is a dependent (natural or adopted child, stepchild or spouse) of a member of the armed forces of the United States stationed in California on active duty, is exempt from paying nonresident tuition for the duration of his/her enrollment at a California community college. Graduate dependents are exempt from paying nonresident tuition for one year from the date of his/her arrival in California. If the member of the armed forces, whose undergraduate dependent is in attendance at Cuyamaca College (1) is transferred, on military orders, to a place outside of California, or (2) retires from active duty, the dependent shall not lose his or her exemption status for the one year duration it takes to establish residency. After one year has elapsed, the dependent is subject to reclassification according to the policies stated in this section.
10. An undergraduate student who is a member of the armed forces of the United States stationed in California on active duty, except a member assigned for educational purposes to state-supported institutions of higher education, shall be exempt from paying nonresident tuition for the duration of his/her enrollment at a California community college. Graduate active military students are exempt from paying nonresident tuition for one year from the date of his/her arrival in California. After one year has elapsed, the student is subject to reclassification according to the policies stated in this section.
11. An undergraduate student who was a member of the armed forces stationed in California on active duty for more than one year immediately prior to being discharged, shall be exempt from paying nonresident tuition for up to one year for the time he/she lives in California after being discharged. This one year waiver after the discharge date allows the time necessary to establish residence. After one year has elapsed, the student is subject to reclassification according to the policies stated in this section.
12. A person who is an apprentice, as defined in Section 3077 of the Labor Code, will be entitled to resident classification.
13. A person holding a valid credential authorizing service in the public schools of California and who is employed by a school district in a full-time position requiring certification qualifications for the college year in which the person enrolls, shall be entitled to resident classification if such person meets any of the following requirements:
    a. Holding of a provisional public school credential and enrollment in courses necessary to obtain another type of credential authorizing service in the public schools.
    b. Holding a public school credential issued pursuant to Section 44250 and enrollment in courses necessary to fulfill credential requirements.
    c. Enrollment in courses necessary to fulfill the requirements for a fifth year of education prescribed by subdivision (b) of Section 44259.
14. A person who is a full-time employee of a California community college, California State university or college, the University of California, or the California Maritime Academy; or the child or spouse of that person, may be entitled to resident classification until he/she has resided in California the minimum time necessary to become a resident.
15. For purposes of the nonresident tuition fee, a community college district shall disregard the time during which a person living in the district resided outside of California if:
    a. The change of residence to a place outside of California was due to a job transfer and was made at the request of the person's employer or the employer of the person's spouse or, in the case of a person who resided with and was a dependent of the person's parents, the change of residence was made at the request of an employer of either of the person's parents.
    b. Such absence from California was for a period of not more than four years.
    c. At the time of application for admission to a college maintained by the district, the person would qualify as a resident if the period of the person's absence from California was disregarded.

    A nonresident tuition fee shall not be charged to a person who meets each of the conditions specified in subdivisions a. to c., inclusive.

IV. REVIEW AND APPEAL OF CLASSIFICATION

Any person, following a final decision on residence classification by the college, may make a written appeal to the Chancellor of the District or designee within 30 calendar days of notification of final decision by the campus regarding classification. The Chancellor, on the basis of the Statement of Legal Residence, pertinent information contained in the file of the Administrator over Admissions and Records, and information contained in the person's appeal, will make the determination and notify the person by United States mail, postage prepaid.

V. RECLASSIFICATION AND FINANCIAL INDEPENDENCE

Students must complete reclassification forms, which are available in the Admissions and Records Office, for a change in classification from nonresident to resident status. Students will be requested to provide appropriate documentation to prove California residence, for more than one year prior to the residence determination date, for the semester or session which the student is claiming resident status. Education Code Section 68044 requires that the financial independence of a nonresident student seeking reclassification as a resident be included in the factors to be considered in the determination of residence.

VI. NONRESIDENT TUITION

A person classified as a nonresident will be required to pay nonresident tuition, in addition to other fees required by the college. Nonresident tuition must be paid at the time of registration.

VII. INTERNATIONAL STUDENT TUITION

A nonresident person who is a citizen and resident of a foreign country will be required to pay international student tuition, in addition to other fees required by the college. International student tuition must be paid at the time of registration.

TRANSCRIPTS

Each student who has an academic record on file at Cuyamaca College may request official transcripts from the Admissions and Records Office. The official transcript includes course work from both Cuyamaca and Grossmont College. Cuyamaca has retained Credentials Inc. to accept transcript orders over the Internet. Students may request official transcripts through WebAdvisor or by the TranscriptsPlus link provided on our Cuyamaca Admissions web page. Two official transcripts of records are provided without charge; additional copies may be obtained at $3 per copy (processed within 5 business days). An emergency or rush transcript will be provided for $5 per copy (processed within 2 business days). Processing time does not include shipping. Please note there is an additional service charge of $2.30 per transcript and all fees must be paid by credit card.

TRANSFER CREDIT

EVALUATION OF U.S. TRANSCRIPTS

Courses taken at a regionally accredited college or university and designated as appropriate for general education, Associate Degree, baccalaureate or graduate credit by that institution will be accepted by Cuyamaca College for credit. In support of general education reciprocity, courses used to meet general education requirements at another California community college will be applied towards general education Areas A-D at Cuyamaca College. English and Mathematics competency levels are governed by California Education Code Title 5, section 55063. The extent to which courses taken at other colleges satisfy specific certificate and degree requirements is determined by a review of comparability to courses in the Cuyamaca College curriculum.

Courses completed at institutions without regional accreditation are not generally accepted.

EVALUATION OF FOREIGN TRANSCRIPTS

Transcripts (educational credentials) issued in foreign countries from non-American system institutions and those in languages other than English require special handling. Each foreign transcript must be translated into English and submitted to an approved agency.

Cuyamaca College accepts the evaluations of foreign transcripts from only those agencies that are current members of NACES (National Association of Credential Evaluations Services). For a current list of agencies visit: www.naces.org.

Students will need to contact the evaluation credential company they select for their particular foreign transcript evaluation procedure and costs associated with a request. Once completed, have the detailed evaluation report mailed directly to the Admissions Office, Cuyamaca College, 900 Rancho San Diego Parkway, El Cajon, CA 92019.

CUYAMACA COLLEGE PROCEDURE FOR THE EVALUATION OF FOREIGN TRANSCRIPTS

1. Students must submit to Admissions and Records a detailed evaluation report from a NACES member agency with subject breakdowns and grades. The official evaluation credential report must be received by Cuyamaca College in a sealed envelope. Unofficial credential evaluation reports will not be accepted.
2. The official report will be reviewed by the Cuyamaca College Evaluations Office regarding the possible clearing of general education for graduation.
3. English and Communication courses on any evaluation report will be awarded elective credit only.
4. Courses will only be used to satisfy major requirements with the approval of the department on a “Modification of Major” form.
5. International coursework is not considered transferable. Check with transfer institution.
6. In some instances, additional documentation such as the course syllabus or detailed course description may be needed before an evaluation of foreign coursework can be completed.
7. Official transcripts from foreign institutions are not required by Cuyamaca College.
8. Foreign coursework is not used to clear prerequisites. See specific department for exceptions.

VETERANS SERVICES

Upon filing an application for admission to Cuyamaca College, a veteran should immediately contact the Veterans Certifying Official in the Veterans Center (I-113). Military form DD-214 must be presented to the Veterans Office in order to take advantage of veteran's benefits.

Veterans must request official transcripts of all previous college work, including military transcripts of service (AART, CGIT, CCAF or JST), be sent to the Admissions and Records Office. All transcripts must be received and evaluated before enrollment will be submitted to Veterans Affairs for educational benefits. An official transcript is one that has been sent directly to Cuyamaca College from the issuing institution or one that is hand carried in a sealed envelope. Students not taking advantage of the GI Bill® benefits who wish to receive credit should also submit official transcripts.

Credit may be granted for military service schools as recommended in the publication *A Guide to Evaluation of Educational Experiences in the Armed Forces,* published by the American Council on Education (ACE). Military credit will be counted toward graduation as general education for military courses substantially similar to coursework offered by Cuyamaca College, or elective credit, unless specifically accepted by a department for use within a student’s major. A maximum of 20 units of military credit (including up to 3 units of Exercise Science) will be allowed. Students should meet with the veterans’ counselor to request an Evaluation of Military Credit.

Veterans who have completed at least one year of honorable active service will receive up to 3 units of credit for Exercise Science activity that will meet the graduation requirement at Cuyamaca College.

Students planning to transfer should consult the catalog of the four-year institution for granting of military credit; award varies. Those planning to transfer to a CSU may be able to satisfy Area E, Lifelong Learning, on CSU GE Breadth. To receive this credit for military service, a DD-214 and appropriate military transcripts must be submitted to the Admissions & Records office.

A veteran may not repeat a course and receive veterans’ benefits where a “D” or “F” grade was received unless the course is required for graduation or a grade of “C” is required for the degree.

Veterans should pay special attention to add/drop deadlines and consult the campus Veterans Center when any change in enrollment is made.

If any veteran or dependent receiving VA educational benefits has been on academic or lack of progress probation for two consecutive semesters, Cuyamaca College will not certify the student’s enrollment to the VA for payment of benefits until the cumulative GPA at the GCCCD has improved to a 2.0.

Any veteran who petitions for readmission to the college following disqualification must meet with the veterans’ counselor and have the counselor make a recommendation on the petition prior to being considered for readmission.

Veterans should be aware that short-term classes and other flexible schedules may affect benefits. Before registering, check with the veterans’ counselor or the Veterans Certifying Official in the Veterans Center in I-113 about the implications of taking short-term courses.

CALIFORNIA COLLEGE FEE WAIVER (CALVET)

The children and spouses of U.S. veterans with service-connected disabilities or veterans who have died in service or from service-connected disabilities may be eligible for waiver of College fees. The student must submit the VA letter of eligibility to the Financial Aid Office.

SERVICEMEMBERS OPPORTUNITY PROGRAM (SOC)

As a Servicemember Opportunity College, Cuyamaca College provides academic assistance to active-duty personnel which includes program planning and guidance in understanding educational options, acceptance of traditional and nontraditional learning experiences, tutoring, or similar learning opportunities.

"GI Bill®'' is a registered trademark of the U.S. Department of Veterans Affairs (VA).

Services for Students

ASSOCIATED STUDENT GOVERNMENT OF CUYAMACA COLLEGE (ASGCC)

Cuyamaca College supports the organization of students known as the Associated Student Government of Cuyamaca College (ASGCC). The association promotes the following objectives:

- To serve as an active student voice in the operation of the college, including both shared governance and the management of student activities.
- To provide an opportunity for leadership experience and training for students.
- To enhance, wherever possible, the general excellence of the college, uniting the interests of all persons–students, faculty, administration, staff and the local community.

ASSOCIATED STUDENT GOVERNMENT (ASG) SHARED GOVERNANCE

Since virtually all major decisions made at Cuyamaca College affect students in some way, student input to the various decision-making bodies is relevant, necessary and welcomed. ASGCC has adopted a constitution which established an organized student voice at Cuyamaca College. This voice is facilitated by the ASGCC and is a critical constituency among the college governance structure.

Associated Student Government meetings are held weekly; dates and times are posted on the ASGCC bulletin board. For more information, please call (619) 660-4612. All members of the college community are welcome to attend. Additional information regarding student government is available in the ASGCC Office and the Student Affairs Office.

ASSOCIATED STUDENT GOVERNMENT SERVICES AND ACTIVITIES

With the support of the student body, the ASGCC plans, organizes, promotes, sponsors and finances a comprehensive program of activities and services for all Cuyamaca College students. The activities program is organized to achieve the following objectives:

- To provide opportunities for the development of the social and cultural interests of the entire college community.
- To afford avenues for the enrichment of each individual's life through sharing and enjoying a group spirit of mutual responsibility, leadership and creativity.
- To promote college spirit and community awareness. The variety of departments, clubs and facilities permits a student to experience a broad spectrum of interest, including but not limited to, music, art, drama, sports, ecology, community service and business.

STUDENT AFFAIRS OFFICE

The Dean of Student Affairs acts in an advisory role to the Associated Student Government of Cuyamaca College. Opportunities are provided for students to organize, meet, and work together to extend their academic learning process through campus involvement and participation. By providing this educational culture, the Student Affairs Office helps foster the intellectual, social, and emotional growth of the campus community.

Facilitating student complaints and grievances in compliance with District policies and helping students learn about college policies and procedures is a major component of this office.

In addition, overseeing ASGCC and Student Trustee elections and the yearly commencement ceremonies are some of the primary responsibilities of this office.

Students interested in obtaining club charters and ASGCC candidate petitions should come to the Student Affairs Office which is located in I-120.

STUDENT BENEFIT "COYOTE" STICKER

A Student Benefit "Coyote" Sticker may be purchased for $12. This card entitles a student to free admission to all college-sponsored athletic events, 10% off all supplies from the college bookstore (not including textbooks), as well as special college and community discounts.

The Student Benefit "Coyote" Sticker not only benefits students, it also helps the ASGCC to support various activities and programs on campus.

For additional information, please contact the Associated Student Government Office at (619) 660-4612.

HONOR SOCIETY/PHI THETA KAPPA

Phi Theta Kappa (PTK) is an honors organization reflecting the hallmarks of scholarship, leadership, service and fellowship. The programs of the Society are designed to give the members opportunities for personal growth in all areas, encouraging the more balanced individual. The organization was created in 1918. Cuyamaca College has an honor society chapter. The requirements for admission as a provisional member are:

- Academic excellence as defined by a GPA of 3.5 or better,
- Must have completed a minimum of twelve semester units at Cuyamaca College that qualify for an Associate Degree program, and
- Each prospective student must pay a non-refundable administration processing fee of $100 at the time of filing application and profile forms for provisional membership admission.

Students must apply for membership.

COLLEGE STUDENT ORGANIZATIONS/ CLUBS

Cuyamaca College offers a wide spectrum of special interest and program-related clubs for student participation.

Information on how to organize a new club or join an existing one is available in the Student Affairs Office. College clubs include Art, Automotive, Phi Theta Kappa, Engineering and many others from which to choose.

An Inter-Club Council, consisting of representatives from each college club on campus, exists to coordinate events and activities and share ideas.

In accordance with Sections 76035, 32050 and 32051 of the Education Code of the State of California, the Governing Board of the Grossmont-Cuyamaca Community College District has ruled that secret fraternities, sororities or clubs may not be formed. Moreover, Section 32051 of the Education Code forbids the practice of hazing by organizations or individuals either on or off the Cuyamaca College campus.

CULTURAL ACTIVITIES

As part of the educational offering, Cuyamaca College presents a year-long series of cultural events. Among the presentations are lectures by persons of note in the political and science disciplines, artists in the fields of music and dance, art festivals, film series, and other events that add variety to the intellectual and cultural life of the college community. These include both day and evening programs which are open to students and the general public.

A selected day each month serves as "College Hour," when college-wide and specialized activities are held as enriching experiences outside of classroom academic life.

BOOKSTORE

Barnes & Noble Bookstores, Inc., the world's largest bookseller, manages the Cuyamaca College Bookstore. The bookstore carries all required textbooks and supplies, as well as Cuyamaca College emblematic giftware and clothing. A portion of the revenues generated by the bookstore is paid to the Grossmont-Cuyamaca Community College District and reallocated for the improvement and expansion of college programs.

BORDERLESS SPACES

Borderless Spaces is a program for undocumented students as a result of the 2013 California Dream Act legislation. The program is designed to assist undocumented students with counseling, assistance with financial aid, peer advocacy, book loans, specialized workshops and cohort building events and orientations. The program is located within the EOPS office in the Student Services One-Stop Center, Bldg A-300. You may contact us at (619) 660-4204 or visit our website at www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php

CALWORKS S.T.E.P.S.

The CalWORKs (California Work Opportunities and Responsibility to Kids) S.T.E.P.S. (Success Through Education Produces Self-Sufficiency) Program helps students who receive family cash assistance fulfill their Welfare-to-Work program requirements and provides additional support services. Eligible students receive assistance with arranging subsidized child care, obtaining necessary textbooks and supplies, and providing on-campus, paid work study. The CalWORKs counselors work with each student to develop an education plan that leads to self-sufficiency. In addition to providing counseling services, counselors help students access campus and community resources.

If you are a current Welfare-to-Work participant, or believe that you may be eligible for family cash aid, contact the CalWORKs S.T.E.P.S. office in the Student Services One-Stop Center at 619-660-4340. Let us be your liaison with the County CalWORKs Welfare-to-Work staff.

CAREER CENTER

The Career Center provides services to all students, staff, faculty and community members. The Center assists in the areas of career and employment development through career exploration, career assessment, goal setting, labor market information. Information regarding various careers is available through the Center's printed and electronic resources, workshops, career fairs, and individual appointments. Career assessment tests are available to help students explore their interests, skills, work values, and personality type as an aid in making career decisions. The Center offers computerized occupational information on local, state, and national trends, salaries, and skills for various jobs. The Career Center assists students with employment skills such as developing resumes, interviewing, and job search skills. Jobs are posted on the Center's online job board, College Central Network. A computer lab with internet access is available for career research, job search, and resume/cover letter writing. The Career Center is located in office I -223.

CHILD DEVELOPMENT CENTER

The Child Development Center serves children of students, faculty, staff, and community families. The program philosophy reflects a caring community of learners, centered on a partnership of families, children, and teaching staff, with respect and value for each participant. The Center is an integral component of the Child Development Program and serves as the campus laboratory school, providing mentoring and support for our Child Development students as they prepare to become early childhood educators. Under the supervision and direction of Child Development faculty and Center staff, students from many academic programs complete observations and assignments in the lab setting. The Center coordinates programs with different agencies to provide model educational experiences for both children and Child Development students, such as the Intergenerational Garden. The Center is open year round, following the college schedule for closures. Hours of operation are Monday through Friday, 7:30 a.m. to 5:30 p.m. The Center accepts children from 18 months to 5 years old (pre-kindergarten). For more information, call (619) 660-4660.

COOPERATING AGENCIES FOSTER YOUTH EDUCATIONAL SUPPORT (CAFYES)

CAFYES is a program housed within EOPS department. The mission of this program is to provide additional services and support to eligible current or former foster youth under the age of 26. The services provided are: priority registration, academic/career/personal counseling, book and supply grants, tutoring, independent living and financial literacy skills support, frequent in-person contact, transportation assistance, unmet need grants, referrals to health services, mental health services, housing assistance, and other related services. The CAFYES program is in the EOPS Office located in the Student Services One-Stop Center, Bldg A-300. Contact CAFYES at (619) 660-4689. Eligibility requirements and more information can be found at www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php.

COOPERATIVE AGENCIES RESOURCES FOR EDUCATION (CARE)

CARE is a state-funded program designed to recruit and assist single parent students who are EOPS eligible. CARE eligibility requires that the student or their dependent child be a current recipient of CalWORKs/TANF, and the student must have one child under the age of 14.

CARE provides support services and possible grant funds. The CARE counselor works with each student to promote academic success and assist students in attaining their career and vocational goals. For more information contact the CARE program in the EOPS office located in the One-Stop Center, Build A-300, or call (619) 660-4293. Visit us at our website at www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/care/index.php

COUNSELING

The Cuyamaca College Counseling Department is committed to promoting equity and success using student-centered approaches that empower students to make informed decisions affecting educational, career and personal goals. All departments offer counseling online.

ACADEMIC COUNSELING

Planning is an important step in achieving academic success.All students are encouraged to meet with a Counselor to develop a comprehensive educational plan.

CAREER COUNSELING

The Counseling Department, in conjunction with the Career Center, specializes in assisting students in choosing a college, a particular major and/or career goal.

TRANSFER PLANNING & ADVISING

The Counseling Department, in conjunction with the Transfer Center, provides the most current information to assist in the smooth transition to four-year colleges and universities.

PERSONAL COUNSELING

The Counseling Center is staffed with Counselors who offer individual counseling for students who are dealing with personal and interpersonal challenges that impinge upon their academic success.

COUNSELING COURSES

Cuyamaca College offers a number of counseling courses (taught by Counselors) to benefit students. For a complete listing of courses, see the Course Description section of the catalog.

CUYAMACA SCHOLARS

Cuyamaca College is resolved to facilitate the successful navigation of formerly incarcerated students through the admissions, registration, financial aid and other processes at the college. In order to obtain the resources and support services needed to achieve academic and career goals, interested students should first contact the counseling office at (619) 660-4429. In addition, through the San Diego and Imperial Counties Community College Association's regional effort towards restorative justice, Cuyamaca College provides a dual enrollment program for Juvenile Court and Community Schools (JCCS).

DISABLED STUDENTS PROGRAMS AND SERVICES (DSPS)

Disabled Students Programs & Services (DSPS) provides support services to students with disabilities to enhance their opportunities to experience educational success.

Students who have a disability and require special services and/or equipment in order to access educational opportunities and achieve academic success are asked to contact DSPS, where qualified staff members are available to assist with such needs. Academic and disability-related counseling is available along with the following services: application and registration assistance, campus mobility assistance, test proctoring, special equipment, High Tech Lab use, interpreters for the deaf, readers for the blind, note-taking services, learning disability assessment, speech-language assessment and intervention, additional tutoring hours, TTY (619) 660-4386 and referrals to other colleges and outside agencies such as the Department of Rehabilitation, the Access Center and the San Diego Regional Center. Services through DSPS are authorized based on the documentation of disability available to our office and the functional effects of the student's disability upon his/her educational pursuit.

Cuyamaca College recognizes that a disability may prevent a student from demonstrating required math, reading, and/or writing competencies or from completing course requirements necessary for an AA or AS degree in the same manner as nondisabled students. The college also recognizes the need to accommodate students with documented disabilities to the greatest extent possible without compromising the student's course of study and the integrity of the student's degree. Contact DSPS for further information at (619) 660-4239.

Questions regarding accessibility, Sections 504 and 508, Americans with Disabilities Act, Title 5 regulations, and VTEA funding should be addressed with DSPS personnel.

Note: Affiliation with DSPS is not mandatory in order to receive accommodations. For further information, contact the college ADA-504 Coordinator.

DISTRICT PUBLIC SAFETY

The District provides for public safety, police services to the college community and their property on college grounds, facilities, and parking lots through the contract with the San Diego Sheriff's Department.

Sheriff's deputies assigned to the two campuses of the district are sworn officers in compliance with the California Education Code and the California Penal Code. They have the same full law enforcement powers and responsibilities as local police and sheriff's deputies in your home community.

The San Diego Sheriff's Department has established Memorandums of Understanding (MOUs) with local law enforcement agencies in whose jurisdictions the two colleges are located. The San Diego Sheriff's Department has primary operational responsibility for law enforcement and investigative services on college district property, with the assurance that local law enforcement agencies can be called for assistance and mutual aid as appropriate. Copies of these agreements are available to the public at the San Diego Sheriff's headquarters at 9621 Ridgehaven Court, San Diego, CA 92123.

EMERGENCY CALL BOXES AND LOCATIONS

Emergencies and requests for motorist assistance can be reported to the District Police at (619) 644-7654 or by using one of the Call Boxes located in each parking lot and inside all campus elevators.

PUBLIC SAFETY CONTACT INFORMATION

Call 911 in an emergency

- Life-threatening situation
- Medical emergency
- Missing persons
- Crime in progress
- Fire
- Major disturbance

Call (619) 644-7800 to contact law enforcement for a nonemergency

- Crime report
- Suspected suspicious activity

DISTRICT PROPERTY

District property may not be removed from the campus without prior written authorization from the Division Dean or area supervisor. Unauthorized removal of district property from the campus is a violation of the law and violators may face prosecution.

CRIME PREVENTION

It is the goal of the Sheriff's Department to inform students and staff in a timely manner of any criminal activity or security problem that may pose a reasonable threat to their safety. Information will be provided to students, faculty and staff through several district notification systems (District phones, classroom emergency phones, District Mass Notification system, and District email).

Individuals who need to be on campus other than during regular scheduled work hours must secure authorization from the department chairperson or supervisor prior to their arrival. Campus and Parking Services (CAPS) should also be notified of their presence. Many campus rooms and areas are protected by intrusion alarms, so before entering these areas, CAPS should be contacted. It is the responsibility of those using rooms, offices or other areas to lock access doors, turn off lights and close all windows. Facilities Services staff and CAPS specialists will check many campus areas during off-hours, but the primary responsibility for security lies with the user.

CRIME STATISTICS

The Clery Act requires that institutions disclose statistics for offenses committed in certain geographic locations associated with the institution. A crime should be included in the annual security report only if it occurred in one of the following locations: on campus, in or on a non-campus building or property, or on public property within or immediately adjacent to and accessible from the campus. All crimes, including hate crimes, must be disclosed by geographic location.

The daily crime log is available at the Campus and Parking Service office at (619) 644-7654.

On Campus: Any building or property owned or controlled by an institution within the same reasonably contiguous geographic area and used by the institution in direct support of, or in a manner related to, the institution's educational purposes.

On Public Property: All public property, including thoroughfares, streets, sidewalks, and parking facilities, that is within the campus, or immediately adjacent to and accessible from the campus.

Non-campus Building or Property: The District does not own or control any site off campus.

SMOKE FREE CAMPUS

In accordance with Board Policy 3570, Cuyamaca College is a smoke-free/tobacco-free facility. Violation of this policy will result in appropriate disciplinary penalties for both students and employees. Any District public safety official may warn or cite any person who is in violation of this policy.

PETS ON DISTRICT PROPERTY

Unless animals are involved in the instructional process, all District property is closed to dogs and other pets, with the exception of guide dogs for the visually impaired and disabled.

POLICE SERVICES COMPLAINT PROCEDURE

The Sheriff's Department realizes it must be responsive to all persons in the community. If you are not satisfied with the performance of any members of the Department, we need to know the specifics. The District and the Sheriff's Department pledge to respond swiftly, thoroughly, and fairly to all reports of unsatisfactory service. To file a written complaint, go to the District Public Safety Office at either campus. Besides completing a written report, you are also encouraged to personally discuss the situation with a Sheriff's Supervisor at (619) 644-7654 or x7654.

LOST & FOUND

Lost and Found items should be returned to CAPS. To check if an item has been turned in, call (619) 644-7654 or stop by CAPS.

EXTENDED OPPORTUNITY PROGRAMS AND SERVICES (EOPS)

The EOPS Program at Cuyamaca College is designed to recruit, inform and assist students who have been identified as economically and educationally disadvantaged. Eligible students are assisted by qualified counselors who provide the necessary academic and personal support services to enable them to succeed at Cuyamaca College. Services may include, but are not limited to, personal and academic counseling, transfer advising, peer advising and advocacy, financial assistance in the form of book grants, orientations, seminars, and courses for student success.

The EOPS office is located in the Student Services One-Stop Center, Bldg A-300. You may contact us at (619) 660-4204 or visit our website at www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php.

UNLIMITED POTENTIAL! (UP!) PROGRAM

The UP! Program, sponsored by EOPS and Financial Aid, is designed to assist students who have been in foster care or guardianships, as well as students who are homeless. Students may receive EOPS and/or CARE services as well as counseling case management, personalized financial aid assistance, resource referrals, mentoring, life skills workshops, and cohort building events and orientations.

The program is located within the EOPS office in the Student Services One-Stop Center, Bldg A-300. You may contact us at (619) 660-4204 or visit our website at www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/unlimited-potential-up-program.php

FINANCIAL AID

PURPOSE OF FINANCIAL AID

The purpose of financial aid is to help students who might not otherwise be able to attend school. Although the primary responsibility for meeting college costs rests with the student and/or his or her family, it is recognized that many families have limited resources and are unable to meet the cost of post-secondary education. For this reason, financial aid programs have been established to provide assistance to students with documented financial need. Financial need exists when the cost of education exceeds the resources available to a student. The cost of education includes fees, books and supplies, room and board, personal expenses and transportation. Student earnings from employment, as well as savings, veterans benefits, social security, TANF/CalWORKs and/or expected contributions from parents' income and assets, are some examples of the resources considered available to a student for the cost of education.

Financial need is determined by the information provided by applicants on the Free Application for Federal Student Aid (FAFSA). Cuyamaca College will attempt to meet the need by offering assistance through the financial aid programs available.

GAINFUL EMPLOYMENT

Federal regulations require higher education institutions to disclose information regarding the success of its students in certificate programs that lead to employment. The information includes graduation rates, estimated education costs, median debt of students who completed programs, and other information designed to help students make better-informed choices about colleges and universities they select. Please visit the GCCCD Gainful Employment web page at www.gcccd.edu/research-planning/career-and-tech-ed.html for detailed information.

GROSSMONT-CUYAMACA PROMISE PROGRAM

FREE college for first year students! Go to MyCollegePromise.net to find out how!

FINANCIAL AID PROGRAMS

GRANTS

CALIFORNIA COLLEGE PROMISE GRANT (FORMERLY THE BOARD OF GOVERNOR'S FEE WAIVER)

The promise grant is a state program that waives the enrollment fee for students who are residents of California (or are eligible under AB540 or AB 1899) and have financial need. Students will be considered for a promise grant as part of the financial aid application process and may apply by completing a financial aid application (FAFSA or California Dream Act application). **Please note that refunds are not retroactive to a prior semester.**

MINIMUM REQUIREMENTS FOR MAXIMUM SUCCESS.

Once you've qualified for the fee waiver, it's important to ensure that you're meeting the academic and progress standards in order to avoid losing the fee waiver.

ACADEMIC – SUSTAIN A GPA OF 2.0 OR HIGHER

If your cumulative GPA falls below 2.0 for two consecutive primary terms (fall/spring semesters, or fall/winter/spring quarters), you may lose your fee waiver eligibility.

PROGRESS – COMPLETE AT LEAST 50% OF YOUR COURSEWORK

If the cumulative number of courses you successfully complete falls below 50% in two consecutive primary terms (fall/spring semesters or fall/winter/spring quarters), you may lose your fee waiver.

COMBINATION OF ACADEMIC AND PROGRESS STANDARDS

Any combination of two consecutive terms of cumulative GPA below 2.0, and/or cumulative course completion less than 50% may result in loss of fee waiver eligibility.

HOW TO REGAIN ELIGIBILITY.

If you lose eligibility for the fee waiver, there are a few ways that you can have it reinstated:

- Improve your GPA or Course Completion measures to meet the academic and progress standards.
- Successful appeal regarding extenuating circumstances.
- Not attending your school district for two consecutive primary terms.

The appeals process for extenuating circumstances includes:

- Verified accidents, illness or other circumstances beyond your control
- Changes in economic situation
- Evidence of inability to obtain essential support services
- Special consideration factors for CalWORKs, EOPS, DSPS.
- Disability accommodations not received in a timely manner.

Students appeal through the Admissions & Records Office.

Please note that foster youth and former foster youth (age 24 years and younger) are not subject to loss of the fee waiver under these regulations.

Bureau of Indian Education: The BIE's mission "is to provide quality education opportunities from early childhood through life in accordance with a tribe's needs for cultural and economic well-being, in keeping with the wide diversity of Indian tribes and Alaska Native villages as distinct cultural and governmental entities." The Bureau of Indian Education has established links to various scholarships to be used by qualified Native Americans students. The American Indian scholarships can be found on the BIE website www.bie.edu. Individual grants and scholarships are awarded based on the specific requirements outlined by each nation, tribe, and Alaskan Village. The educational department of each nation, tribe, or Alaskan Village can assist students in applying for grant and scholarship. To receive financial assistance most nations, tribes, and Alaskan Villages require that their students complete the FAFSA as well as any other forms required by individual financial aid departments. In addition, each nation, tribe, and Alaskan Villages will determine blood requirements to be considered for new membership in the individual nations, tribes, or Alaskan Villages.

Cal Grants: There are three types of Cal Grants, administered by the California Student Aid Commission (CSAC). These grants are for California residents and other qualified non-residents who will be attending a California college or university. To apply for Cal Grant A, B and C, submit a FAFSA or California Dream Act application and a GPA Verification form postmarked by March 2, prior to the academic year. For more information on Cal Grants visit www.csac.ca.gov. For GPA verification, once a student has completed 16 degree applicable units, the Cuyamaca College Admissions and Records Office will automatically send the GPA to CSAC.

Cal Grant Community College Deadline: Community college students who miss the March 2 priority deadline may continue to apply for a limited number of special community college Cal Grants (A or B) until September 2. Students must list a California community college on their FAFSA or California Dream Act application and submit the FAFSA and a GPA Verification form postmarked by September 2. For GPA verification, once a student has completed 16 degree applicable units, the Cuyamaca College Admissions and Records Office will automatically send the GPA to CSAC.

Cal Grant A: Cal Grant A provides assistance to students from low and middle income families who will be attending tuition-charging institutions after leaving Cuyamaca College. Cal Grant A pays tuition charges at public California colleges or universities and up to $9,084 of tuition charges at private non-profit California colleges or universities.

Cal Grant B: Cal Grant B provides access costs for low income students up to $1,672 per year for up to four years and pays tuition charges at public California colleges or universities and up to $9,708 of tuition charges at private California colleges or universities for the second through fourth year.

Cal Grant C: Cal Grant C is for vocational students from low and middle income families. The maximum award is $1094 at Cuyamaca College. To qualify, the student must be enrolled in an approved vocational course of study from four months to two years in length. Cal Grant C's are awarded for the length of the vocational course.

Student Success Completion Grant: A state financial aid program available for Cal Grant B and C recipients attending a California Community College to encourage accelerated completion of the student's educational goal. Approximate yearly amount can be up to $4,000. This program is funded by the State of California and administered by the State Chancellor's Office.

Chafee Grant: The California Chafee Grant program is available for current or former foster youth to use for career and technical training or college courses. The maximum grant amount is $5,000 per year. Students must be enrolled in six or more units each semester to be eligible. For questions regarding eligibility, please contact the Financial Aid Office at 619-660-4291 or the EOPS Office at 619-660-4293 or go to chafee.csac.ca.gov/.

Child Development Grant: The Child Development Grant program is administered by the California Student Aid Commission (CSAC). The program is designed for students who are attending a California Community College or four-year institution and pursuing a Child Development permit to teach or

supervise in licensed children's centers. You can receive up to $1,000 each academic year and you must sign a service commitment agreement to provide one full year of service in a licensed children's center for every year you receive the grant.

Federal Work Study (FWS): FWS is a federally-funded program which gives students the opportunity to earn part or all of their financial need by working on campus while in school. Jobs available include teacher's aide, clerk, groundsperson, custodian and lab assistant. The student's wage will be based on the current student hourly wage schedule at time of employment, level of service, education, training and experience.

Federal Pell Grant: The Federal Pell Grant is available for undergraduate study until students receive their first bachelor's degree to a maximum of six years of full time study. Federal Pell Grants range from $650 to $6,495 per academic year depending upon the "Expected Family Contribution" (as determined by the federal government), the cost of attendance and the student's enrollment status. Amounts subject to change based on the Federal Pell Grant Payment Schedule. Undergraduate students who have submitted a valid Student Aid Report (SAR) may qualify for the Federal Pell Grant.

Federal Supplemental Educational Opportunity Grant (FSEOG): FSEOG is a federal grant program for undergraduate students who have "exceptional need" and who have not received a bachelor's degree. First priority will be given to students enrolled full-time with an Expected Family Contribution (EFC) of 900 or below. Generally, the maximum FSEOG award at Cuyamaca College will be $400 per academic year.

SCHOLARSHIPS

Scholarships are an untapped fund that is available throughout the year. Learn how to effectively search and apply for scholarships. Learn how you are the key to your own success when searching and applying for scholarships. Apply for Cuyamaca College scholarships online using the Cuyamaca College AcademicWorks scholarship application on our scholarship website. For additional scholarship information, contact the Cuyamaca College Scholarship Specialist and setup an appointment at (619) 660-4537 or go to www.cuyamaca.edu/financial-aid/index.php.

LOANS

William D. Ford Direct Loan: The Direct Loan is a low-interest loan made to the student by the federal government to help the student pay for his or her education. The interest rate is fixed. Grade level one students may borrow a base amount of $3500 (subsidized and/or unsubsidized) per academic year. Grade level two students may borrow a base amount of $4500 (subsidized and/or unsubsidized) per academic year. Additional unsubsidized amounts may also be available. Total borrowing for dependent students may not exceed $31,000 for all undergraduate study. To apply for a Direct Loan, a student must first apply for federal financial aid via the FAFSA.

Subsidized Direct Loan: These loans are available to students who demonstrate financial need. Students who are eligible to apply for a subsidized Direct Loan based upon need qualify to have the federal government pay the interest on their loan while they are in school.

Unsubsidized Direct Loan: These loans are available to students who do not qualify for need-based financial aid. Students are responsible for monthly interest payments (or capitalization of interest) from the date the loan is disbursed.

Emergency Book Loan Fund: The Emergency Book Loan program provides 30-day interest free loans to enable students experiencing a temporary shortage of funds to purchase their books. Students must be enrolled in a minimum of six units and are required to have a co-signer who is at least 21 years of age whose full-time employment can be verified. Depending on the student's enrollment status, loans can range from $75 to $150. These monies are made available through donations from the Associated Students of Cuyamaca College, Grossmont-Cuyamaca Community College District Foundation, Grossmont-Cuyamaca Alumni Association, Cuyamaca College Faculty and the Spring Valley Rotary Club.

OTHER SOURCES OF FUNDS

Other assistance programs are available for students through government agencies such as the County Department of Social Services, Social Security Administration and Veterans Administration. When a student applies for assistance through the Financial Aid Office, documentation of the money received from these programs is required.

Please check with the Career and Student Employment Center regarding job announcements. The Center is located in A-221 in the Student Services One-Stop Center.

WITHDRAWALS AND REPAYMENT OF FINANCIAL AID FUNDS

Students receiving federal financial aid who *withdraw from all of their classes during the first 60% of a term* may be required to repay a portion of the federal grants that they have received. This is because a student must "earn" his/her financial aid. Financial aid is "earned" for each day you are enrolled in the semester.

For example, if a semester starts on August 21 and you withdraw from all of your classes on October 23, you will have "earned" 63 days worth of financial aid eligibility. The amount you have to repay will depend on the number of days you were enrolled compared to the number of days in the semester. For example, if there are 121 days in the semester, you would have only earned 52% of the aid you received (63 days/121 days in the term = 52%). If you had received a $1,500 Pell Grant award for the semester, you would have only earned $780 of the Pell Grant ($1,500 x 52% = $780). Because you have received $720 more financial aid than you "earned" ($1,500 - $780 = $720), you will be required to repay half of the amount you did not earn. The amount you would be required to pay back in this case would be no more than $360.

Please note: If you fail all of your classes in a term, you will have only earned 50% of the Pell and/or SEOG that you received and you will be billed for the amount you did not earn. This rule applies even if you were enrolled in classes for the whole term.

If you are required to repay funds to the federal government, you will be billed and have 45 days to repay the funds in full or to set up a repayment schedule. You will be ineligible for any further financial aid at any college in the United States until you have repaid the funds in full or you have set up a repayment schedule and make repayments according to the repayment schedule.

BUDGETS

Cuyamaca College has a diverse student population which means that people have different economic lifestyles and obligations. The budgets used by the Financial Aid Office are expressions of average costs for the student population; they are intended to provide sufficient funds for most students in most circumstances. These budgets are not and cannot be intended to meet each person's full financial responsibilities. For a student who comes to Cuyamaca College relatively free of past obligations, these budgets should provide a sufficient economic base for a student to survive financially and attend school.

Since one purpose of the budget is to fairly distribute the available dollars among all eligible students, it is impossible to take into account all of the situations in which people find themselves or all of the consumer choices they make. People make their own budget decisions about what is most important to them. They may choose to share a low-rent apartment in order to have a car, or they may choose to live alone within biking distance of the campus. The choices are there for each individual.

The following budgets* for the 2021-2022 academic year are based on full-time (12 semester units or more) enrollment at Cuyamaca College:

Housing Status	Living with Parent(s)	Living away from Parent(s)
Fees*	$ 1,342	$ 1,342
Books and Supplies	1,750	1,750
Food and Housing	6,900	14,800
Personal Expenses	3,000	3,300
Transportation	1,200	1,200
TOTAL	$14,192	$22,392

*Amounts subject to change. Contact the Financial Aid Office or go to www.cuyamaca.edu/financial-aid/index.php for current budget amounts.

For disabled students, additional allowances may be made for documented special costs that are educationally related but not covered by other assisting agencies. For the current academic year budget, please check with the Financial Aid Office.

Contact the Financial Aid Office, located in the Student Services One-Stop Center, for further information regarding eligibility, programs available, applications or other information.

HEALTH & WELLNESS CENTER

To promote the health and well-being of students, the Health & Wellness Center is maintained by a registered nurse who evaluates, educates and cares for the health needs of Cuyamaca College students and staff. Services are available on a confidential basis and include: health screenings (body composition analysis and blood pressure); tuberculosis clearance risk assessment and testing; basic first-aid and illness/injury assessments; and referrals to community health resources. The Health &

Wellness Center is also a health education resource providing up-to-date information on topics related to stress management, nutrition, exercise, sexual assault prevention, substance abuse, birth control, communicable disease control and prevention, and more. Students are encouraged to visit the Health & Wellness Center website (www.cuyamaca.edu/student-support/health-and-wellness-center/index.php) to explore the resources available. Short-term personal counseling is also available, which offers students the opportunity to improve their well-being by discussing, processing, and working through challenges in their life with trained counselors. For personal counseling appointments, email cuyamacahealthandwellness@gmail.com, eSARS (https://web4.gcccd.edu/Cuyamaca/eAdvising/Health/Login.aspx) on the personal counseling website, or call (619) 660-4200. Students can submit a question to a personal counselor or a nurse via eAdvising (web4.gcccd.edu/Cuyamaca/eAdvising/Health/Login.aspx) located on the Health Services and Personal Counseling websites (www.cuyamaca.edu/student-support/health-and-wellness-center/mental-health-counseling.php). The mandatory health fee which supports these services also provides for insurance coverage should a student be injured during a supervised, on-campus or school-related activity. Insurance forms are available at the Health and Wellness Center. Students that depend exclusively upon prayer for healing according to the teaching of a bona fide religious sect, denomination or organization may petition for an exemption from the health fee by submitting a written request to the Student Affairs Office. Please contact the Health Center at (619) 660-4200.

HIGH SCHOOL AND COMMUNITY RELATIONS (OUTREACH)

The overall mission of High School and Community Relations is to facilitate equitable access and student success by providing community members, prospective students, and current students with useful information regarding college pathways and informing them of the college's programs and services, while encouraging, guiding, and empowering students to pursue higher education. High School and Community Relations, also known as Outreach, is a primary point of access to the institution. Outreach provides comprehensive contact information and general descriptions for many aspects of the institution. The Outreach Department meets the introductory informational needs of the campus community: students, faculty members, staff, prospective students and their family members, and general visitors.

Specific services provided by the Outreach staff include distribution of printed information about the college and its programs, visits to schools for career fairs, college nights, peer advising, interactive presentations, and conducting enrollment workshops at local high schools. Tours of the college campus are also provided.

Outreach invites all prospective students and interested members of the community to take advantage of the programs and services offered. Please contact the High School and Community Relations (Outreach) office, located in A-104 or call (619) 660-4264, cuyamaca.outreach@gcccd.edu.

INSTITUTIONAL EFFECTIVENESS, SUCCESS, AND EQUITY (IESE)

The Institutional Effectiveness, Success, and Equity (IESE) office aims to advance student success and equity by integrating, aligning, and sustaining improvement efforts across the College. IESE provides coordination, support, and collaborative leadership for the college's planning, assessment, evaluation, and equity efforts to advance the College's mission. We approach this work with a social justice lens to advance equity and excellence. The IESE unit includes the institutional effectiveness, equity, strategic planning, assessment, engagement and validation, and institutional research functions. For additional information, please contact Brianna Hays, Senior Dean of Institutional Effectiveness, Success and Equity at brianna.hays@gcccd.edu.

INTERCOLLEGIATE ATHLETICS

The mission of the Cuyamaca College Athletics Department is to provide all student athletes quality intercollegiate sports that will complement the college's instructional programs, enhance student life on campus, and foster community interest and support.

The Cuyamaca College Coyotes' basketball, cross country, golf, soccer, track & field and volleyball teams compete in the Pacific Coast Conference, which consists of the following colleges: Grossmont, Imperial Valley, Mira Costa, Palomar, San Diego City, San Diego Mesa, San Diego Miramar, and Southwestern.

Cuyamaca College has won conference championships in women's tennis, men's and women's soccer, men's and women's cross country, and men's and women's track and field. State championships have been awarded to men's and women's cross country and many track and field individual events. Cuyamaca coaches have had numerous coaching excellence awards in soccer, cross country, and track and field.

Student athletes must be continuously and actively enrolled in 12 or more units during the sport season. 24 units must be completed for eligibility between the first and second season of competition. Athletes follow an educational plan and maintain a minimum 2.0 GPA. Authority for eligibility must be verified by the Dean of Athletics. Academic achievement and high level athletic performance is strongly connected for Cuyamaca sports participation. Advancing student athletes to four-year universities is a primary goal of the Athletics Department.

LEARNING AND TECHNOLOGY RESOURCES - LTR

LIBRARY

Cuyamaca Library is committed to connecting students with the world of ideas and information.

To this end, the Library fosters student success by leading information literacy efforts.

We excel in:

- teaching information literacy skills for student academic development;
- ensuring equitable access to scholarly and diverse resources of information;
- integrating librarians, programs, and services into the academic curriculum;
- creating comfortable and safe spaces conducive to study, research, and interaction.

Cuyamaca Library has a positive reputation. Students recognize the Library for its attention to service and commitment to instruction. Students consider Cuyamaca Library essential to their success.

TECHNOLOGY

Computer Access: Cuyamaca College has computer labs available for student use in the following locations:

- Tech Mall, E-121
- Stem Center, H-Building

Computer Help Desk: The Help Desk is your best resource for troubleshooting technical difficulties. These problems include but are not limited to: Incorrect username and/or forgotten password. Unable to log in to your student e-mail, the campus network or campus Wi-Fi, the library database, or Canvas.

Phone: (619) 660-4395

Email: c-helpdesk@gcccd.edu

Web: www.cuyamaca.edu/helpdesk

Wi-Fi is also available for currently enrolled students who choose to bring their own devices (Cuyamaca Wireless). If you need technical assistance with accessing the Wi-Fi using your student account, our on-site technical staff is available to assist you in the Tech Mall (E-121).

PATHWAY ACADEMY: A GUIDE TO STUDENT SUCCESS

Pathway Academy provides students with a clear guided pathway to reach their academic goals during their first and second years of college. Pathways aspires to provide students with the proper academic and support services to ensure a positive first time college experience at Cuyamaca College. Pathway Academy helps students develop the self-directed learning process to foster a sense of confidence, independence, and personal success. In order to create this impactful college experience, Pathway Academy provides students with the following services, access to accelerated courses in Math, English, and ESL; peer mentoring;

priority registration; personalized course management; workshops in financial aid; a Summer bridge Program; parent orientations; University field trips; career exploration, and much more! Whether you are seeking to earn an associate's degree, a career and technical education certificate, or transferring to a four-year university, Pathway Academy is the fast lane to your educational success! Please visit our webpage for more information: www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/pathway-academy/index.php

STUDENT PICTURE I.D. CARD

A Student Picture I.D. Card is required for access to library check-out services and may be required for some laboratory classes. After you have completed the registration process (new students must wait 24 hours), please come to one of the two Student Picture I.D. Offices for this FREE card. You must present a valid government issued identification card. The offices are located in the Tech Mall (Room E-121, Business & Technology Building) and in Admissions & Records, at the One Stop, Room A-300. Every Cuyamaca College student is allowed one Student Picture I.D. Card while attending Cuyamaca College. Phone: (619) 660-4649.

TRANSFER CENTER

The Transfer Center assists students with the process of transferring to four-year colleges and universities by providing the most current information available to ensure a smooth transition. This is achieved by providing quality programs and services that support student success through a Transfer Center. The community college is the crucial link between the K-12 system and four-year academic institutions, and the Transfer Center is the focus for that smooth transition. It promotes coordination with student services units and instruction within the college, and attempts to strengthen ties with the external agencies that affect student transfer.

Students have access to a current catalog collection of California public and private universities, and articulation agreements. In addition, the Center has a computer lab which allows students to access the various university web pages. Some of the top web locations for students are: www2.calstate.edu/apply; www.universityofcalifornia.edu; and www.assist.org/. Our website, www.cuyamaca.edu/student-support/transfer-center/index.php, provides the student with comprehensive transfer information to assist in the transfer process.

The Transfer Center hosts representatives from four-year universities to assist students in planning for transfer, provides online counseling, provides annual Transfer Fairs, Application Workshops for transfer to the UC and CSU, and other Transfer Related Workshops, and holds a Transfer Achievement Celebration to honor those students who will be going on for a Bachelors degree. For additional information call (619) 660-4439 or email cuyamaca.transfer@gcccd.edu.

TUTORING

We Make Good Students Better! Tutoring services are free to students, and students may begin using services at any point in the semester. Learning Assistants -- most of whom are current or former Cuyamaca students, themselves – help students adapt to college, learn course skills and content, refine general study skills and strategies, and become more confident, independent learners. Please, visit our website for more information and current hours at www.cuyamaca.edu/tutoring, email at Cuyamaca.tutoring@gcccd.edu, or leave voicemail at (619) 660-4525.

ACADEMIC RESOURCE CENTER

The ARC is located on the first floor of the Library building in room C-102. Tutoring is available to support student learning in a wide variety of academic and career education programs. Individual, group and online tutoring sessions are available by appointment. (Lab tutoring hours are also available when scheduling permits). Please visit our website for more information and current hours at www.cuyamaca.edu/tutoring, email Cuyamaca.tutoring@gcccd.edu, or leave a voicemail at (619) 660-4525.

STEM ACHIEVEMENT CENTER

The STEM Achievement Center is located in the H building, and provides individual and group tutoring services in the Sciences, Engineering, and Mathematics. Students have access to graphing calculators and textbooks check-out during tutoring hours. The STEM Achievement Center hosts a 36 station computer lab and Wi-fi for student to use. Please, visit our website for more information and current hours at www.cuyamaca.edu/tutoring, or email Cuyamaca.tutoring@gcccd.edu, or leave a voicemail at (619) 660-4525.

WRITING CENTER

The Writing Center, located in B-167, provides support for students in any course who would like assistance with reading, writing, or ESL skills. Individual, group and online tutoring sessions are available by appointment. The Writing Center's computer lab with wireless Internet access provides a supportive environment in which students may work on course-related assignments. Please visit our website for more information and current hours at www.cuyamaca.edu/tutoring, email Cuyamaca.tutoring@gcccd.edu, or leave a voicemail at (619) 660-4525.

UMOJA

Umoja: a Kiswahili word meaning Unity

The Umoja Community is a statewide organization that exist to assist African American, and other historically underrepresented students with their academic achievement in community college. It seeks to engage, connect, support, and encourage students through academic and personal growth courses.

UMOJA PROGRAM BENEFITS:

- Career, Academic and Personal Counseling
- Mentoring
- Math Support
- Accelerated classes
- Deeper understanding of African American literature and themes
- Opportunities to attend Umoja sponsored conferences and events
- Cultural Field Trips
- University visits
- Access to Umoja Community scholarships
- Increased self-confidence
- Lifelong friendships
- Community Service Opportunities

VERIFIED HOMELESS YOUTH

CUYAMACA CARES

In keeping with AB 801, AB 1747, AB 1995, Cuyamaca College has established the Cuyamaca Cares program to assist students in transition. As part of this program, verified homeless youth students enrolled at Cuyamaca College or Grossmont College may be eligible for the following:

- Priority enrollment (Group 1)
- California College Promise Grant fee waiver, which waives the $46/unit enrollment fee
- Use of Shower Facilities

  Due to the pandemic, the shower facilities are closed
- Food Pantries

  Please visit the Cuyamaca Cares web page for information on food pantries: www.cuyamaca.edu/student-support/cuyamaca-cares/index.php

For more information, students can contact:

- Pam Fleming, Financial Aid Homeless Youth Liaison

  Financial Aid Office (619) 660-4291

  Pam.Fleming@gcccd.edu
- Kaylin Rosal, Cuyamaca Cares Coordinator

  Cuyamaca.Cares@gcccd.edu

Academic Policies and Procedures

ACADEMIC HONESTY/ DISHONESTY POLICIES

Academic honesty is required of all students. Plagiarism–to take and pass off as one's own work the work or ideas of another–is a form of academic dishonesty. Penalties may be assigned for any form of academic dishonesty. Questions or clarification as to how to include the ideas and statements of others or how to avoid other forms of academic dishonesty should be discussed with your instructor to avoid unintentional academic dishonesty.

Your instructors are eager to help you succeed in your studies at Cuyamaca College. But success means more than just receiving a passing grade in a course. Success means that you have mastered the course content so that you may use that knowledge in the future, either to be successful on a job or to continue with your education.

Your success depends on a combination of the skills and knowledge of your instructors and your own hard work. You will reach your future goals only if you gain new knowledge from every course you take. That knowledge becomes yours, and can be used by you only if it is gained through your own personal efforts. Receiving a grade in a course without acquiring the knowledge that goes with it diminishes your chances for future success.

While in college, you are also shaping the principles which will guide you throughout the rest of your life. Ethical behavior and integrity are a vital part of those principles. A reputation for honesty says more about you, and is more highly prized, than simply your academic skills.

For that reason, academic honesty is taken very seriously by the Cuyamaca College faculty. The following guidelines have been prepared so that you will understand what is expected of you in maintaining academic honesty.

1. Academic dishonesty is normally dealt with as an academic action by the instructor, reflected in the student's grade in the particular course rather than through college disciplinary procedures.
2. No specific departmental, divisional or institutional procedures are established for academic dishonesty other than the normal process for review and appeal of an instructor's grading procedures.
3. Other disciplinary procedures (e.g., dismissal, removal, etc.) will be used only if the student disrupts the class or is otherwise abusive or threatening or violates any other college policy.
4. Academic dishonesty is defined as the act of obtaining or attempting to obtain credit for work by the use of any dishonest, deceptive or fraudulent means. Examples of academic dishonesty would include but not be limited to the following:
   a. Copying either in part or in whole from another's test or examination;
   b. Discussion of answers or ideas relating to the answers on an examination or test when such discussion is prohibited by the instructor;
   c. Obtaining copies of an exam without the permission of the instructor;
   d. Using notes, "cheat sheets," or otherwise utilizing information or devices not considered appropriate under the prescribed test conditions;
   e. Altering a grade or interfering with the grading procedures in any course;
   f. Allowing someone other than the officially enrolled student to represent the same;
   g. Plagiarism, which is defined as the act of taking the ideas, words or specific substantive material of another and offering them as one's own without giving credit to the source.

Options may be taken by the faculty member to the extent that the faculty member considers the cheating or plagiarism to manifest the student's lack of academic performance in the course. One or more of the following actions are available to the faculty member who suspects a student has been cheating or plagiarizing:

1. Review – no action.
2. An oral reprimand with emphasis on counseling toward prevention of further occurrences.
3. A requirement that work be repeated.
4. A reduction of the grade earned on the specific work in question, including the possibility of a failing grade or no credit for the work.
5. A reduction of the course grade as a result of item 4 above including the possibility of a failing grade for the course, if a failing grade for the work produces such a result.
6. Referral to the office of the Dean of Student Affairs for further administrative action, such as suspension or expulsion.

COMPUTER SOFTWARE COPYRIGHTS

Computer software is protected by the Federal Copyright Act of 1976. The following guidelines apply to the use of college-acquired software:

1. No copies of software may be made except in the following cases:
   a. Normally an archive copy of software is allowed for protection against accidental loss or damage. Archive copies of software should be securely stored and not used except to be recopied if the operational copy becomes damaged.
   b. Some software, when site licensed by the producer, may permit unlimited copies for use within the college. Such copies must be made only by the person or persons authorized to make copies by the terms of the site license. In this case, duplicates shall be clearly labeled as Cuyamaca College copies of licensed software.
   c. Some software, in particular programming languages, allow code to be copied and incorporated within user-written software. Such use is generally permitted as long as the software is for personal use and not sold, rented or leased. If distribution or commercial use is intended for software so produced, clearance must be secured from the copyright owner for the use of the incorporated code, and with the college for use of the equipment during production.
2. The intended or unintended piracy, damage, alteration or removal of any college-acquired software may be treated as an act of theft or malicious destruction. Cuyamaca College may elect not to extend computer services to persons who have been identified as engaging in these acts.
3. The user is responsible for complying with whatever terms or conditions are specified in the license agreement or copyright statement which accompanies individual software acquisition.

ACADEMIC RENEWAL

When previously recorded Cuyamaca College work is not reflective of a student's present level of demonstrated ability, this policy will allow alleviation of substandard work. Academic renewal cannot be used to set aside course work which has been used to meet degree, certificate or certification requirements.

When courses are alleviated, grades in courses remain on the student's record but are not used in the computation of the GPA. Academic renewal does not provide an exception to the course repetition policy.

CRITERIA

Substandard coursework completed in the Grossmont-Cuyamaca Community College District may be alleviated subject to all of the following criteria:

1. The student has requested the action formally and has presented evidence that coursework is substandard and not representative of present scholastic ability and level of performance.
2. At least one year has elapsed and the student has completed, at any accredited post-secondary institution, at least 15 units of coursework with at least a 2.0 GPA. All courses taken subsequent to the course(s) or semester to be alleviated will be used in computing the GPA. Units completed with P/NP will not count towards the fulfillment of this requirement.
3. The student may select Option I or Option II. The student may not apply for both.

Option I: A maximum of any 24 units of substandard coursework (grades D or F only) may be alleviated. This option may be approved twice subject to a total of 24 units.

Option II: Two complete semesters in which the semester GPA is below 2.0 may be alleviated. Courses taken at Cuyamaca College and Grossmont College during the same semester shall be combined and counted as one semester.

PROCEDURE

1. The student must formally request a review of substandard work to be alleviated.
2. All transcripts from previously attended colleges must be on file in the Admissions & Records Office.
3. The Petitions Committee shall review all requests for academic renewal. The committee will determine if all criteria have been met. Determination by the committee shall be final.
4. In the event of admission to Cuyamaca College as a transfer student from other colleges where course work has been alleviated, such alleviated course work will be counted toward the maximum of alleviated work allowed.
5. When such action is taken, the student's permanent academic record shall be annotated so that it is readily evident to

all users of the record that no work taken during the alleviated semester(s), even if satisfactory, apply toward degree requirements. However, all work will remain legible on the record insuring a true and complete academic history.

ACCESS TO EDUCATIONAL PROGRAMS

It is the policy of the Grossmont-Cuyamaca Community College District Governing Board that, unless specifically exempted by statute, every course, course section or class reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to Cuyamaca College and who meets such prerequisites as may be established pursuant to Title 5 of the California Code of Regulations, Sections 55200-55202 and 58102-58108.

ADDING COURSES

During the official add period for each class, a student may add courses by following the procedure as outlined in the class schedule. Visit the website www.cuyamaca.edu.

Students may only enroll in 18 units per semester or 8 units in summer session.

Students may enroll in more than 18 units per semester or 8 units in summer session with an overload petition. Overload petitions can be submitted prior to the start of the semester if the class is still open and with approval from a counselor. Overload petitions must be submitted with an add code and approval by a counselor.

ATTENDANCE REQUIREMENTS

Instructors are obligated at the beginning of the semester to announce their policy regarding excessive absences. When absences exceed twice the number of hours that a class meets in one week for full semester-length classes, the instructor may institute an excessive absence drop. For short-term classes, the number of acceptable absences is proportionately shorter. Failure to attend the first class meeting may result in the student being dropped from the class.

It is the student's responsibility to officially withdraw from any classes not attended and to discuss anticipated absences with the instructor. Make-up work for absences is the responsibility of the student and must be completed to the satisfaction of the instructor.

AUDITING COURSES

Based on GCCCD Board policy, Cuyamaca College permits auditing of courses as follows:

1. Audit enrollment will not be permitted until students have completed the allowable number of repeat courses. Courses are determined through agreement between the department and the appropriate administrator. Priority class enrollments are given to students desiring to take the course for credit. No student will be permitted to enroll for audit purposes until the day following census.
2. A nonrefundable audit fee of $15 per unit plus any required student or instructional materials fee (e.g., health fee, materials fee) shall be payable at the time of enrollment as an auditor. **Fees are not refundable.**
3. Students enrolled in classes to receive credit for 10 or more semester credit units shall not be charged a fee to audit three or fewer units per semester. If the student drops below the 10-unit level, the $15 per unit audit fee will be assessed.
4. Audit enrollment will be based on "seats available" and will not be used to count toward minimum enrollment requirements. If a class closes after an auditor has been admitted, the auditor may be asked to leave to make room for the credit students. Instructor discretion is strongly recommended. Audit enrollments which allow faculty to be eligible for a large class bonus will not be counted.
5. No student auditing a course shall be permitted to change his or her enrollment in that course to receive credit for that course.
6. Permission to audit a class is done at the discretion of the instructor and with the instructor's signed permission.
7. No credit will be received for auditing a course. The college will not maintain any attendance or academic records for MIS reporting.

Courses that may be audited will be listed in the course schedule.

CANCELLATION OF COURSES

Cuyamaca College reserves the right to cancel any course for which there is insufficient enrollment.

CATALOG RIGHTS

For purposes of graduation from Cuyamaca College, a student who maintains continuous attendance in the Grossmont-Cuyamaca Community College District may elect to meet the requirements in effect at the time they began their studies in the Grossmont-Cuyamaca Community College District, or any catalog year thereafter. Catalog rights will start upon enrollment in the Grossmont-Cuyamaca Community College District and are maintained by continuous enrollment.

CONTINUOUS ENROLLMENT

Students may maintain their continuing student status for catalog rights purposes provided that they receive an official grade on their permanent record in the Grossmont-Cuyamaca Community College District. Students must attend at least one semester during an academic year without missing two consecutive semesters. Summer sessions are not included in determining continuous enrollment status.

COURSES TAKEN OUT OF SEQUENCE

In all cases, a student enrolled in a course must have met course prerequisites.

Satisfactory completion of courses (i.e., English, mathematics, world languages, etc.) implies competency in the prerequisite courses; therefore, the college does not grant credit toward graduation for courses taken out of sequence.

DROPPING COURSES

A student desiring to drop courses or an entire program must use *WebAdvisor*. The student must initiate this withdrawal prior to the established deadline. Drops during the adjustment period do not appear on the transcript. Drops initiated after the adjustment period will result in a transcript entry of "W," which will be taken into consideration in determining lack-of-progress probation and disqualification. Students must clear all obligations to the college prior to withdrawal.

Late withdrawal from a class after the drop deadline may be authorized in the event of extenuating circumstances. Extenuating circumstances are verified cases of accidents, illnesses, or other circumstances beyond the control of the student. The student must file a petition in the Admissions and Records Office with documentation for review by the Petitions Committee. Late withdrawal results in a "W" on your transcript and no refund of enrollment fees as per Title 5 section 55024 and 58508.

Military withdrawals shall be authorized when a student who is a member of an active or reserve United States military service receives orders compelling a withdrawal from courses. Military withdrawals shall not be counted in progress alert and probation or disqualification calculations.

It is the student's responsibility to officially drop courses they are no longer attending. If a course is not officially dropped, the student may receive an "F" for the course.

Once a substandard grade or withdrawal is recorded on your transcript it becomes a part of the student's permanent record.

EMERGENCY ABSENCES OF SHORT DURATION

Emergency absences may be requested through the instructor. Instructors may be requested to provide make-up assignments for all work. Emergency absences will not be granted at the end of the semester when finals would be missed or course requirements not fulfilled.

EXAMINATIONS

FINAL EXAMINATIONS

Students may not be excused from final examinations. Instructors should not give final examinations at other than the regularly scheduled time. Instructors shall notify their Division Dean in writing if an early examination

is being given to a student. This notification should include the title of the course, the reason why the early examination is authorized, and the name of the student. In the event that severe illness or other emergency prevents the student from taking a final examination during the regularly scheduled time, the instructor may allow the student to make up the final examination according to provisions of the incomplete grade policy.

CREDIT BY EXAMINATION

Credit may be granted, subject to approval of the appropriate Department Chair, to any student who satisfactorily passes an examination approved and conducted by the appropriate department. Such credit requires that:

1. The student be registered at Cuyamaca College and be in good standing.
2. The course be listed in the Cuyamaca College catalog and identified below as one for which Credit by Examination may be granted.
3. The unit value may not be greater than that listed for the course in the catalog.
4. Units earned in this manner do not count toward the 12 units required in residency.
5. Students have not enrolled in, or completed, the same course or an advanced course at any college in the area in which Credit by Examination is requested.
6. Petitions for Credit by Examination must be submitted by the end of the second week of classes for a semester or by the end of the first week of classes for a summer session.

CREDIT BY EXAMINATION PROCEDURE

1. Obtain and complete a petition for Credit by Examination from the Admissions and Records Office.
2. Make sure all college transcripts are on file.
3. Obtain approval for taking an examination from the designated instructor. This approval should be obtained before the student registers for classes.
4. Take an examination on the established date.
5. Instructor forwards to the Admissions and Records Office certification that the examination was passed satisfactorily.
6. The student's academic transcript will be annotated for Credit by Examination credit.

Courses for which Credit by Examination may be given: ART 120, 124; ASTR 110; AUTO 120, 122, 130, 140, 141, 152, 160, 170; CADD 115; GD 110; MUS 118, 232, 233.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT

Cuyamaca College accords to students all rights under the Family Educational Rights and Privacy Act. No one outside the institution shall have access to nor will the institution disclose any information from the students' education records without the written consent of students except to persons or organizations providing student financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with a judicial order, and to persons in an emergency in order to protect the health or safety of students or other persons. At Cuyamaca College, only those employees acting in the students' educational interests are allowed access to student education records within the limitations of their need to know.

Cuyamaca student data is also submitted to the National Student Clearinghouse so that research may be conducted which informs studies regarding transfer rates, college performance and other college success indicators. The information shared is maintained with the strictest of confidence; individual names or data are not disclosed. If students wish to restrict their data from being shared with the National Student Clearinghouse, they may complete a form at Admissions and Records which will restrict the release of their student data.

The Act provides students with the right to inspect and review information contained in their education records, to challenge the contents of their education records, to have a hearing if the outcome of the challenge is unsatisfactory, and to submit explanatory statements for inclusion in their files if the decision of the hearing panel is unacceptable. The Dean of Counseling and Enrollment Services has been designated by the institution to coordinate the inspection and review procedures for student education records.

WHAT IS DIRECTORY INFORMATION?

Directory information is information contained in an education record of a student that would not generally be considered harmful or an invasion of privacy if disclosed. The Grossmont-Cuyamaca Community College District has defined directory information to include:

- Name, address, phone number, email address, dates of attendance and enrollment status (full-time, part-time)
- Student participation in officially recognized activities and sports including weight, height and high school of graduation of athletic team members
- Degrees and awards received by students, including honors, scholarship awards, athletic awards, Vice President's and President's recognition

If you wish to opt-out of directory information, please visit the Admissions and Records Office to submit your request.

GRADE NOTIFICATION

Final grades are available approximately two weeks after the end of each term. Students may receive grades in the following ways:

- **VIA THE INTERNET** - Grades are available by logging on to *WebAdvisor* at www.cuyamaca.edu. Select the View/Print Grades option for the requested semester and year.
- **IN PERSON** - Grades for the previous semester are available to students who present a photo I.D. at the Admissions and Records Office.

GRADES–FINAL

In the absence of mistake, fraud, incompetency or bad faith, the determination of the student's grades by the instructor shall be final once they have been filed in the Admissions and Records Office. Questions regarding final grades should be directed to the dean of the department.

GRADING SYSTEM

Grades are earned in each course and recorded on a semester basis on the student's permanent record. A copy of the permanent record is the transcript. Grades should be interpreted as follows:

A+
A Excellent
A-
B+
B Good
B-
C+
C Satisfactory
D Passing, less than satisfactory
F Failing
W Withdrawal (issued to students who withdraw before the final drop deadline). Students who are enrolled after the final drop date must receive a letter grade (A-F).
EW Excused Withdrawal: The "EW" symbol may be used as described in, and in accordance with Title 5, section 55024. (1) "Excused Withdrawal" (EW) occurs when a student is permitted to withdraw from a course(s) due to specific events beyond the control of the student affecting his or her ability to complete a course(s) and may include a job transfer outside the geographical region, an illness in the family where the student is the primary caregiver, when the student who is incarcerated in a California state prison or county jail is released from custody or involuntarily transferred before the end of the term, when the student is the subject of an immigration action, or other extenuating circumstances as described in (a)(2), making course completion impracticable. In the case of an incarcerated student, an excused withdrawal cannot be applied if the failure to complete the course(s) was the result of a student's behavioral violation or if the student requested and was granted a mid-semester transfer. Upon verification of these conditions and consistent with the district's required documentation substantiating the condition, an excused withdrawal symbol may be assigned at any time after the period established by the governing board during which no notation is made for withdrawals. The withdrawal symbol so assigned shall be an "EW." (2) Excused withdrawal shall not be counted in progress probation and dismissal calculations. (3) Excused withdrawal shall not be counted toward the permitted number of withdrawals or counted as an enrollment attempt. (4)

In no case may an excused withdrawal result in a student being assigned an "FW" grade.

MW Military Withdrawal awarded to active or reserve military personnel upon receipt of military orders compelling a withdrawal from courses.

P Pass formerly CR (Credit), (C or higher) units are not calculated in GPA.

NP No Pass formerly NC (No Credit), (less than a C) units are not calculated in GPA. Pass or No Pass may be assigned only if the course is indicated as pass/no pass or if the student has elected this option.

I Incomplete - Incomplete academic work for unforeseeable, emergency and justifiable reasons at the end of the term, may result in an "I" symbol being entered in the student's record. An incomplete grade may be given only after the student has contacted the instructor; awarding of an "I" is at the discretion of the instructor.

The "I" may be made up no later than one semester following the end of the term in which it was assigned. The "I" symbol shall not be used in calculating units attempted nor for grade points. A student may petition for extension of the time limit for removal of the incomplete. The petition must include evidence of approval from the instructor.

Both the instructor and the student must complete and sign the Incomplete Grade Contract form. Procedural details are printed on the back of that form.

IP In progress - The IP symbol indicates that work is "in progress," but that assignment of a grade must wait its completion. The IP symbol shall remain on the student's permanent record in order to satisfy enrollment documentation. The appropriate grade and unit credit shall be assigned and will appear on the student's permanent record for the term in which the course is completed. The IP shall not be used in calculating grade point averages.

RD Report Delayed - The RD symbol may be assigned by the Admissions and Records Office only. It is to be used when there is a delay in reporting the grade of a student due to circumstances beyond the control of the student. It is a temporary notation to be replaced by a permanent symbol as soon as possible. "RD" is not used in calculating GPA.

P, NP, W, EW, MW, I, IP and RD grades are not used in computation of grade point average but the W, NP and I are used for purposes of progress alert and disqualification status.

GRADE POINT AVERAGE

Academic achievement is reported in terms of grade point average (GPA). This is derived from the following weighting system:

A+ 4.0 grade points per unit earned
A 4.0 grade points per unit earned
A- 3.7 grade points per unit earned
B+ 3.3 grade points per unit earned
B 3.0 grade points per unit earned
B- 2.7 grade points per unit earned
C+ 2.3 grade points per unit earned
C 2.0 grade points per unit earned
D 1.0 grade points per unit earned
F 0.0 grade points per unit attempted

Grade point average is computed by dividing total units attempted into total grade points earned. Decisions on probation and disqualification, scholarship, eligibility for graduation, and transfer are all influenced or determined by grade point average; hence, students should pay constant attention to their own grade point standing.

COMMENCEMENT CEREMONY

The Cuyamaca College Commencement ceremony is held every May or June for students who graduated in the Fall of the previous year, and candidates for Spring and Summer graduation. Summer graduates must meet with a counselor to facilitate participation in the Commencement ceremony.

Information regarding the Commencement ceremony is available in the Student Affairs Office. Students wishing to apply to receive a degree or certificate must file a Petition for Graduation in the Admissions and Records Office. Deadlines are printed in the catalog and class schedule.

GRADUATION WITH HONORS

Students who have earned a 3.5 or better GPA in all degree-applicable college work attempted graduate with honors.

Official transcripts from all colleges attended must be on file in the Admissions and Records Office. However, if no course work on a transcript from another college is used to meet any degree requirement, students may exclude that entire transcript from being used to compute their overall GPA for graduation. Students electing this option need to make this request at the time they file an Evaluation for Graduation Request form in the Admissions and Records Office. An official transcript must be on file prior to request for exclusion. This option only applies to the GPA used to determine graduation with honors from Cuyamaca College. It will not affect transfer GPA and other colleges and universities may not calculate GPA for honors status the same way.

HONORS

Students carrying 12 or more units at Cuyamaca College in which letter grades are earned ("Pass" grades not included), who maintain a 4.0 GPA during any semester, are placed on the President's List. Students who maintain a 3.5 to 3.9 GPA during any semester are placed on the Vice President's List.

Students carrying less than 12 units at either Cuyamaca College or Grossmont College, but carrying 12 or more units in which letter grades are earned ("Pass" grades not included) at Cuyamaca and Grossmont Colleges, who maintain a 4.0 GPA during any semester, are placed on the District President's List. Students who maintain a 3.5 to 3.9 GPA during any semester are placed on the District Vice President's List.

Part-time students are eligible for the Vice President's List if they (1) complete 12 units at Cuyamaca College in one academic year (July 1 through June 30) with a GPA of 3.5 or better ("Pass" grades not included) and (2) were enrolled in fewer than 12 units per semester.

MINIMUM LOAD REQUIREMENTS

Cuyamaca College does not specify a minimum load except when the student desires to meet certain requirements such as:

1. Certification to the Department of Health, Education and Welfare that the student is attending full-time. Requirement: 12 or more units a semester, but a student should average 30 units a year.
2. Veteran Affairs certification for Chapters 30, 31, 32, 33, 35 and 1606.

Fall or Spring Semester

Full-time	12 units
Three-quarter time	9-11½ units
One-half time	6-8½ units
One-quarter time	3-5½ units

Summer Session

Calculated on an individual class basis. Contact the Veterans Specialist in the Admissions and Records Office for detailed information.

3. International students with an "F-1" visa issued by Cuyamaca College. Requirement: 12 or more units a semester.
4. Enrollment verifications for insurance benefits that a student is attending full-time. Requirement: 12 or more units a semester or 6 or more units for summer session.
5. Athletics - Eligibility to participate in Pacific Coast Conference intercollegiate athletics. Requirement: 12 or more units in courses for which NEW units of credit may be earned. Students should see Pacific Coast Conference and Cuyamaca College regulations for additional requirements.
6. Student Government - Eligibility to participate in student government as an office holder or in intercollegiate activities other than athletics. Requirement: 6 or more units during the semester of participation.
7. Financial Aid – Enrollment status for financial aid purposes are as follows:

Full-time:	12 or more units
¾ time:	9 – 11.5 units
½ time:	6 – 8.5 units
Less than ½ time:	0.5 – 5.5 units

This applies to the fall and spring semesters and the summer session.

PASS/NO PASS GRADING OPTION

The Pass/No Pass (P/NP) grading option is offered so that students may explore subject areas of interest outside those of their known abilities or assumed competence without competing for grades with students who are majoring in that subject. Cuyamaca College encourages this kind of exploration.

In any course offered at Cuyamaca College, a student may elect to be graded on a "P/

NP" basis providing the course is not part of a Degree or Certificate of Achievement. In all cases, a student enrolled in a course must have met course prerequisites.

A maximum of 12 credit units earned at Cuyamaca College with "P" grades may be counted toward satisfaction of General Education and elective curriculum requirements for graduation. Grades received from other accredited institutions, as well as credits authorized for military courses and Advanced Placement examinations, may be applied as "P," when appropriate, toward graduation.

Some courses in the curriculum are offered exclusively on a "P/NP" basis. Credit units earned in these courses are exempt from the 12 unit restrictions. In all other courses that are not part of a Degree or Certificate of Achievement, the election to be graded on a "P/NP" basis is at the option of the student. Students electing to be graded on a "P/NP" basis shall establish that option in writing by the end of the fifth week of the semester. (Short-term classes will be allowed a proportionate amount of time.) Once the "P/NP" deadline has passed, the decision is irrevocable.

A "P" grade shall represent at least a satisfactory ("C" grade) level of performance but shall not be counted as units attempted in computing GPA.

A "NP" grade indicates unsatisfactory completion of course requirements but will not be counted as units attempted in computing GPA. "NP" grades will be taken into consideration in the determination of lack-of-progress probation and disqualification status.

Students intending to transfer to four-year colleges or universities should check the specific policies of those institutions pertaining to transferability of "P" grades.

PRE-COLLEGIATE BASIC SKILLS COURSES

Remedial coursework consists of pre-collegiate basic skills courses. The need for such coursework shall be determined using appropriate assessment instruments, methods, or procedures. Units earned in pre-collegiate basic skills courses may not be applied toward a degree or certificate. No student shall be required to enroll in remedial English or mathematics coursework that lengthens their time to complete a degree unless placement research that includes consideration of high school grade point average and coursework, shows that those students are highly unlikely to have success in transfer-level coursework in English and Mathematics.

Students may not receive credit for more than 30 units of remedial course work. This limit shall not apply to the following students:

- Students enrolled in one or more courses of English as a Second Language.
- Students identified by a college in the District as having a learning disability.

Students may be granted a waiver to the limitation upon petition to a college in the District. Waivers will be granted only when the student shows significant and measurable progress toward the development of skills necessary for college-level courses. Such waivers will be given only for a specified period of time or for a specified number of units.

PREREQUISITES, COREQUISITES, RECOMMENDED PREPARATIONS, AND LIMITATIONS ON ENROLLMENT

Prerequisites, Corequisites and Recommended Preparations are listed in the Course Descriptions section of the catalog under each course listing.

A *prerequisite* is a condition of enrollment that a student is required to meet in order to demonstrate current readiness for enrollment in a course or educational program.

A *corequisite* is a condition of enrollment consisting of a course that a student is required to simultaneously take in order to enroll in another course.

An *advisory or recommended preparation* is a condition of enrollment that a student is advised, but not required, to meet before or in conjunction with enrollment in a course or educational program.

Limitations on enrollment are conditions for enrollment in Honors courses or courses which include public performance or intercollegiate competition.

All courses shall be open for enrollment to any student who has been admitted to the college, except that students may be required to meet necessary and valid prerequisites. In addition, the District may also limit enrollment in a course based on health and safety considerations, facility limitations, or legal requirements imposed by statute or regulations.

GROUNDS FOR CHALLENGE ARE:

1. Student can demonstrate that the prerequisite has not been established following the District's policy or in accordance with Title 5.
2. Student can demonstrate that the course is discriminatory or applied in a discriminatory manner.
3. Student can demonstrate knowledge or skill needed to succeed in the course without the prerequisite.
4. Student can demonstrate that attainment of his/her educational goal will be unduly delayed because the prerequisite has not been made reasonably available (impacted programs).
5. Student can demonstrate that no threat is posed to self or others in a course which has a prerequisite established to protect health and safety.

Students should plan their schedules early and see a counselor for assistance.

CHALLENGE PROCEDURE

Students who believe that they have sufficient grounds may challenge a prerequisite, corequisite, or limitation on enrollment. A student can view the challenge procedure online. Students who challenge a prerequisite or corequisite after the start of the semester should speak with the Placment Center. Contact the Placement Center for additional information.

For more information about prerequisite clearance and challenges, please visit www.cuyamaca.edu/student-support/counseling-center/prerequisite-form.php

PROBATION, DISMISSAL AND READMISSION

Cuyamaca College believes that students who can benefit from higher education should be allowed admission free of probationary status. Grades earned at other schools prior to admission to Cuyamaca College shall not be considered in determining probationary status.

PROBATION

1. *Academic Probation:* Any student who has attempted a minimum of 12 semester units at Grossmont-Cuyamaca Community College District (GCCCD) and whose cumulative grade point average falls below a 2.0 in courses receiving letter grades ("W" courses excluded) shall be placed on academic probation. The student will be notified of the significance of probation and the services available.
2. *Lack-of-Progress Probation:* Any student who has enrolled in a total of at least 12 semester units at GCCCD shall be placed on lack-of-progress probation when the student's cumulative units indicate 50 percent or more units of "W," "I" or "NP." The student will be notified of the significance of probation and the services available.
3. *Removal from Probation:*
   a. Any student on academic probation shall be removed from probation when the cumulative GPA at GCCCD has improved to 2.0.
   b. Any student on lack-of-progress probation shall be removed from probation when the cumulative units of "W," "I" or "NP" recorded at GCCCD are less than 50 percent of the total units attempted.

DISMISSAL

Any student dismissed from a college within the Grossmont-Cuyamaca Community College District may not attend any college within the District during the next consecutive semester. The student may, however, attend the summer session.

1. *Academic Dismissal:* Any student on academic probation whose semester GPA falls below 2.0 shall be academically dismissed. Any student on academic probation whose semester GPA equals or exceeds 2.0, but whose cumulative GPA for all units attempted remains below 2.0, shall be continued on probation.
2. *Lack-of-Progress Dismissal:* Any student who is on lack-of-progress probation and whose semester work indicates 50 percent or more units of "W," "I" or "NP" will be dismissed. Any student on lack-of-progress probation whose semester work indicates fewer than 50 percent units of "W," "I" or "NP," but whose cumulative records show 50 percent or more units of "W," "I" or "NP," will be continued on lack-of-progress probation.

If, at the end of the third consecutive semester in which the student earned a cumulative GPA of less than 2.0 or whose cumulative records show the percentage of units is W, I or NP is greater than 50%, the student will be dismissed. A notice that the student is dismissed will be sent to the student informing him/her that he/she is dismissed.

READMISSION

After being dismissed, a student may not attend either college in the district for one semester. The student may attend summer school. Any student believing to be unjustifiably dismissed may file a petition with documentation to the Admissions and Records Office requesting that such dismissal be reconsidered. Students are encouraged to see a counselor for assistance with petitions. To facilitate the official adding of courses prior to the published add deadline, a petition for reinstatement should be submitted no later than ten working days prior to the published add deadline.

Any veteran who petitions for readmission to the college following dismissal must meet with a counselor and have the counselor make a recommendation on the petition prior to being considered for readmission.

PROGRAM DISCONTINUANCE

Cuyamaca College adheres to the GCCCD Governing Board Policy when elimination of a program is determined. When a program is discontinued, students are notified in writing of the program discontinuance. Students are given a timeline for completing the program and are advised of options.

COURSE REPETITION

Repetition of courses at Cuyamaca College is allowable only in certain situations.

SUBSTANDARD WORK

A course may be repeated in order to alleviate substandard academic work (D, F or NP) or if a "W" (withdrawal) was recorded. Students will be allowed to enroll in a course three times under this policy. Military withdrawals do not count in terms of repetition restrictions. If the course is offered at both colleges in the district, the student may repeat the course at either college. Only the last grade will be included in determining GPA and only those units will count towards graduation.

Students with extenuating circumstances may seek approval to enroll in a course a fourth time by submitting a petition to the Admissions and Records Office. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. The student must provide appropriate documentation. If approved, only the last grade will be included in determining GPA.

SPECIAL CIRCUMSTANCES

A student may not repeat a course in which a "C" grade or higher was earned unless one of the following special circumstances apply.

1. A course may be repeated due to a significant lapse of time of no less than 36 months if there is an approved recency prerequisite for the course or program, or another institution of higher education to which the student seeks to transfer has a recency requirement. Only the last grade will be included in determining GPA.
2. A student with a disability may repeat a special class any number of times when an individualized determination verifies that such repetition is required as a disability-related accommodation.
3. A course may be repeated if there are extenuating circumstances which justify the repetition. Extenuating circumstances are verified cases of accidents, illness, or other circumstances beyond the control of the student. The student must file a petition with appropriate documentation. Only the last grade will be included in determining GPA.
4. A student may repeat a course in occupational work experience as long as he/she does not exceed the limits on the number of units of cooperative work experience stated in the course description. The grade received each time shall be included for purposes of calculating the student's GPA.
5. A student may repeat a course any number of times if it is determined to be legally mandated. Proper documentation must be submitted to the Admissions & Records Office. Only the last grade will be included in determining GPA.
6. A student may repeat a course as a result of a significant change in industry or licensure standards such that repetition of the course is necessary for employment or licensure. Proper documentation must be submitted to the Admissions & Records Office. Only the last grade will be included in determining GPA.

Academic renewal does not provide an exception to the course repetition policy. All courses that are repeated shall be recorded on the student's permanent academic record using an appropriate symbol.

REPEATABLE COURSES

A course may be repeated if it is specifically designated as a "repeatable" course in the course listings. Repeatable courses are as follows:

A. A course that is required to meet major requirements of the California State University (CSU) or University of California (UC). Proper documentation must be submitted to the Admissions & Records Office.

B. Intercollegiate athletics courses and their accompanying conditioning courses.

C. Intercollegiate academic or vocation competition courses. Enrollment is limited to four times for semester courses and applies even if the student receives a "W" or substandard grade.

The grade received each time a student takes a "repeatable course" shall be included in the student's grade point average (GPA).

COURSES RELATED IN CONTENT

A student may not take courses in Art, Exercise Science, or Music that are related in content and have a similar primary educational activity more than four times. The limitation applies if a student receives a substandard grade or "W" during one or more of the enrollments.

A maximum of four enrollments in each of the groupings below in the Grossmont-Cuyamaca Community College District is allowed. Enrollment includes: course completed, W, NP, F, Incomplete.

	Cuyamaca College	Grossmont College
Studio Arts Foundation:		
ART 120	√	√
ART 129	√	√
ART 148	√	
Digital Arts Foundation:		
ART 171		√
ART 172		√
ART 175		√
GD 105	√	
GD 126	√	
Digital Arts-Drawing and Illustration:		
ART 177	√	√
ART 184		√
ART 240		√
GD 225	√	
Human Figure Drawing:		
ART 230	√	√
ART 231	√	√
ART 232	√	
ART 233	√	
Drawing Foundations:		
ART 124	√	√
ART 125	√	√
ART 224	√	
ART 225	√	
ART 241	√	
ART 242	√	
Painting Foundations:		
ART 121	√	√
ART 220	√	√
ART 221	√	√
ART 222	√	√
Watercolor Painting:		
ART 135	√	
ART 235	√	
ART 236	√	
Photography Foundations:		
PHOTO 150		√
PHOTO 151		√
GD 210	√	
GD 211	√	
GD 212	√	
Total Body Fitness:		
ES 004ABC		√
ES 006ABC		√
ES 021ABC		√
ES 024ABC	√	√
ES 011	√	
ES 019ABC	√	
Mind/Body and Flexibility Fitness:		
ES 026		√
ES 027		√
ES 028ABC	√	√
ES 013	√	
Muscle Development:		
ES 005ABC		√
ES 023ABC		√
ES 014ABC	√	

	Cuyamaca College	Grossmont College
Cardiovascular Fitness:		
ES 007ABC	√	
ES 008ABC	√	√
ES 009ABC	√	√
ES 017ABC	√	
ES 010	√	
Combative Sports:		
ES 180ABC	√	
ES 185ABC	√	
ES 180	√	
Racquet Sports:		
ES 060ABC	√	√
ES 076ABC	√	√
Individual Sports:		
ES 125ABC	√	√
ES 130ABC	√	
ES 012	√	
ES 037ABC	√	
Team Sports/Gym:		
ES 155ABC	√	√
ES 175ABC	√	√
Team Sports/Field:		
ES 170ABC	√	√
ES 171ABC	√	√
ES 172ABC	√	
ES 176ABC	√	
Vocal Ensembles:		
MUS 136	√	
MUS 137	√	
MUS 236	√	
MUS 237	√	
MUS 138	√	
MUS 139	√	
MUS 238	√	
MUS 239	√	
MUS 158	√	
MUS 159	√	
MUS 258	√	
MUS 259	√	
Jazz/Popular Ensembles:		
MUS 108	√	
MUS 109	√	
MUS 208	√	
MUS 209	√	
MUS 156	√	√
MUS 157	√	√
MUS 256	√	√
MUS 257	√	√
MUS 166	√	
MUS 167	√	
MUS 266	√	
MUS 267	√	
Non-Western Ensembles:		
MUS 154	√	
MUS 155	√	
MUS 254	√	
MUS 255	√	
Large Instrumental Ensembles:		
MUS 148	√	
MUS 149	√	
MUS 248	√	
MUS 249	√	
MUS 150	√	
MUS 151	√	
MUS 250	√	
MUS 251	√	
MUS 152	√	√
MUS 153	√	√
MUS 252	√	√
MUS 253	√	√

SEXUAL HARASSMENT

Legal Background: Guidelines of Title VII of the Civil Rights Act focus upon sexual harassment as an unlawful practice. "Sexual harassment like harassment on the basis of color, race, religion or national origin, has long been recognized by the Equal Employment Opportunity Commission as a violation of Section 703 of Title VII of the Civic Rights Act as amended" (Federal Register, April 11, 1980). Interpretation of Title IX of the Education Amendments similarly delineates sexual harassment as discriminatory and unlawful.

Definition: Sexual harassment is defined in GCCCD Policy 3430 as the following:

Unwelcome sexual advances, requests for sexual favors, and other verbal, visual, or physical conduct of a sexual nature made by someone from, or in, the work or educational setting when:

- Submission to the conduct is made a term or condition of an individual's employment, academic status, or progress;
- Submission to or rejection of the conduct by the individual is used as a basis of employment or academic decisions affecting the individual;
- The conduct has the purpose or effect of having a negative impact upon the individual's work or academic performance, or of creating an intimidating, hostile or offensive work or education environment; or
- Submission to or rejection of the conduct by the individual is used as the basis for any decision affecting the individual.

Process: Complaints must 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 (California Code Regulations, Title 5, Section 59328e).

If the alleged harasser is a student, initial action on the complaints shall be the joint responsibility of the Dean, Student Affairs, and the Director of Employee and Labor Relations.

If the alleged harasser is an employee, initial action on the complaint shall be the joint responsibility of the employee's immediate supervisor and the Director of Employee and Labor Relations.

STUDENT CODE OF CONDUCT

GROUNDS FOR DISCIPLINARY ACTION

Student conduct must conform to District and College rules and regulations. If a Student Code of Conduct violation occurs while a student is enrolled in any program of instruction within the District, to include distance programs, he or she may be disciplined for one or more of the following causes that must be District related. These categories of behavior are not intended to be an exhaustive list, but are examples of causes and are good and sufficient causes for discipline, including but not limited to the removal, suspension or expulsion of a student. Other misconduct not listed may also result in discipline if good cause exists (Education Code Section 76034).

- Causing, attempting to cause, or threatening to cause physical injury to another person.
- 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 Vice President of Student Services or designee.
- Unlawful possession, use, sale, offer to sell, or furnishing, or being under the influence of, any controlled substance listed in California Health and Safety Code Sections 11053 et seq., an alcoholic beverage, or an intoxicant of any kind; or unlawful possession of, or offering, arranging or negotiating the sale of any drug paraphernalia, as defined in California Health and Safety Code Section 11014.5.
- Committing or attempting to commit robbery or extortion.
- Causing or attempting to cause damage to District property or to private property on campus.
- Stealing or attempting to steal District property or private property on campus, or knowingly receiving stolen District property or private property on campus.
- Willful or persistent smoking in any area where smoking has been prohibited by law or by regulation of the college or the District.
- Committing sexual harassment as defined by law or by District policies and procedures.
- Engaging in harassing or discriminatory behavior based on disability, gender, gender identity, gender expression, nationality, race or ethnicity, religion, sexual orientation or any other status protected by law.
- Engaging in intimidating conduct or bullying against another student through words or actions, including direct physical contact; verbal assaults, such as teasing or name-calling; social isolation or manipulation; and cyberbullying.
- Willful misconduct that results in injury or death to a student or to District personnel or which results in cutting, defacing, or other injury to any real or personal property owned by the District or on campus.
- Disruptive behavior, willful disobedience, habitual profanity or vulgarity, or the open and persistent defiance of the authority of, or persistent abuse of, college personnel.
- Cheating, plagiarism (including plagiarism in a student publication), or engaging in other academic dishonesty as defined by the College's academic integrity standards.
- Dishonesty; forgery; alteration or misuse of District documents, records or identification; or knowingly furnishing false information to the District.
- Unauthorized entry upon or use of District facilities.
- Lewd, indecent or obscene conduct or expression on District-owned or controlled property, or at District sponsored or supervised functions.
- 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 District premises, or the violation of lawful District regulations, or the substantial disruption of the orderly operation of the District.

- Persistent, serious misconduct where other means of correction have failed to bring about proper conduct.
- Unauthorized preparation, giving, selling, transfer, distribution, or publication, for any commercial purpose, of any contemporaneous recording of an academic presentation in a classroom or equivalent site of instruction, including but not limited to handwritten or typewritten class notes, except as permitted by any district policy or administrative procedure.
- 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.
- 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.
- Sexual assault and sexual exploitation as defined in Education Code section 76033(g), (h).
- Misconduct where good cause exists (Education Code Section 76033).

TYPES OF DISCIPLINARY ACTIONS

Types of Student Conduct Action Student Conduct actions that may be imposed for violations of the Student Code of Conduct include the following:

- **Warning:** Written or oral notice to the student that continuation or repetition of misconduct may be cause for further Student Conduct action.
- **Student Conduct Probation:** Specific period of conditional participation in campus and academic affairs that may involve exclusion from designated privileges or extracurricular activities. If a student violates any condition of probation, or is charged a second time with a violation of the Standards of Student Conduct during the probationary period, it shall be grounds for revocation of the student's probationary status and for further Student Conduct action to be taken in accordance with these procedures.
- **Removal from Class by Instructor (Education Code 76032):** An instructor may remove, for good cause, any student from his or her class for up to two (2) class sessions. The student shall not return to the class during the period of the removal without concurrence of the instructor, and if required the consent of the CSSO or designee. Nothing herein will prevent the College President or Designee or CSSO from recommending further Conduct in accordance with these procedures based on the facts that led to the removal. As used in this rule, "good cause" includes those offenses listed in the Student Code of Conduct. The instructor shall immediately report the removal to the respective Division Administrator and to the College President or designee. If the student is a minor, the College President or designee shall schedule a conference with the student and the student's parent or guardian regarding the removal. The Administrator shall arrange for a conference between the student and appropriate college personnel regarding the removal. Instructors are not obliged to provide makeup opportunities for class work, including quizzes, tests or examinations, missed during the two (2) class periods of removal. Suspension or
- **Termination of Financial Aid:** In the event a student is suspended for willfully and knowingly disrupting the orderly operation of the campus, this action will result in ineligibility for State Financial Aid, as defined in Education Code Sections 69810 and 69813, for the period of suspension.
- **Immediate Interim Suspension:** The College President, the President's designee, or the CSSO may order immediate suspension of a student when he or she concludes that immediate interim suspension is required to protect lives or property and to ensure the maintenance of order. A reasonable opportunity shall be afforded the suspended person to have a hearing within ten (10) days of the time that the CSSO or designee, or the College President became aware of the infraction unless mutually agreed upon by the student and the designated Administrator that more time is required. In cases where an immediate interim suspension has been ordered, the time limits contained in these procedures shall not apply, and all hearing rights, including the right to a formal hearing where a long-term suspension or expulsion is recommended, will be afforded to the student according to the provisions above. In the event that a student does not request a hearing within the ten (10) days or contact the College President, CSSO or his or her designee or Administrator, to establish a mutually agreed upon time for hearing, the College where the infraction occurred will proceed with a due process AP 5520 Student Discipline Procedures (Page 6 of 14) Grossmont-Cuyamaca Community College District hearing twenty (20) days after the point that the aforementioned administrators became aware of the infraction with or without the accused student being present. Students placed on Immediate Interim Suspension shall have holds placed on all records and transcripts pending the outcome of the due process hearing (Education Code Section 66017). Instructors are not obliged to provide makeup opportunities for class work, including quizzes, tests or examinations, missed during the period of suspension.
- **Short-Term Suspension:** Temporary exclusion from student status, or other privileges or activities, one (1) or more classes for a period of up to ten (10) consecutive days of instruction. Faculty members are not obliged to provide makeup opportunities, including quizzes, tests or examinations, for class work missed during the period of suspension.
- **Long-term Suspension:** Temporary exclusion from student status, or other privileges or activities, the remainder of the current semester and/or one or more terms. Instructors are not obliged to provide makeup opportunities for class work missed, including quizzes, tests or examinations, during the period of suspension. If any student is suspended or expelled from the GCCCD, he or she shall not be present on any of the campuses or at the District Office without authorization from the College President, CSSO, or the District Vice Chancellor of Human Resources and must be escorted by a District Public Safety officer. The student may not attend any official campus sanctioned events or activities during the term of the suspension.
- **Expulsion Subject to Reconsideration:** Permanent termination of student status, subject to reconsideration by the Board of Trustees after a specified length of time. Reconsideration may be requested in accordance with the procedure for Reconsideration. Permanent Expulsion: Permanent termination of student status. There shall be no right of reconsideration of a permanent expulsion at any time. On its own motion, the Board of Trustees may reconsider such actions at any time.
- **Restitution:** Appropriate restitution shall be sought from any student found responsible of theft, vandalism, or willful destruction of District or College property.
- **Educational Sanctions:** Educational sanctions may be assigned instead of, or in addition to those specified in this section at the discretion of the Administrator. Educational sanctions may include, but are not limited to, reflection papers, participation in alcohol or drug education programs, or meeting with college officials.
- **Community Service:** Community Service may be assigned instead of, or in addition to, those specified in this section at the discretion of the Administrator. Community Services assignments will require a student to perform unpaid work of benefit to the College community. Community Service provides an opportunity for the student to contribute positively to their community. The assigned tasks shall support and supplement services existing on campus. The Dean of Student Affairs shall approve the community service site. Student must present hours to the Dean of Student Affairs upon completion. Referral: A student may be referred by the Administrator to any college/community resource deemed necessary for the assistance of the student.

STUDENTS RIGHTS, GRIEVANCES, AND DUE PROCESS

The educational philosophy of the Grossmont-Cuyamaca Community College District ("District" or "College") set forth by board policy BP 1300 Educational Philosophy states that "The colleges recognize the worth of the individual and the fact that individual needs, interests, and capacities vary greatly." With acceptance of this principle comes the recognition that divergent viewpoints may result and that a process by which these viewpoints can be aired and resolved must be established.

The purpose of this document is to provide a prompt and equitable means for resolving student grievances. In the pursuit of academic goals, the student should be free of unfair or improper action by any member of the campus community. These procedures shall be available to any student who reasonably believes a college decision or action has

adversely affected his/her status, rights or privileges as a student. It is the responsibility of the student to submit evidence of alleged unfair or improper action for investigation. These procedures shall include, but not be limited to, grievances regarding:

- Course grades, to the extent permitted by Education Code Section 76224(a), which provides: "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 incompetency, shall be final." "Mistake" may include, but is not limited to errors made by an instructor in calculating a student's grade and clerical errors;
- The exercise of rights of free expression protected by state and federal constitutions and Education Code Section 76120.

This Student and Grievance Procedure does not apply to:

- The challenge process for prerequisites, corequisites, advisories, and limitations on enrollment; an appeal of residence decision determination; or the determination of eligibility, disqualification or reinstatement of Financial Aid. The appeal procedure for eligibility, disqualification, and reinstatement of financial aid may be obtained in the Financial Aid Office. Information about other procedures is listed in the schedule of classes, the college catalog, or may be obtained from the Chief Student Services Officer or directed to the administrator in charge of the specific area of concern.
- Alleged violations of sexual harassment policies, sex discrimination in education programs and activities as prohibited by Title IX of the Higher Education Amendments of 1972 (see AP 3435).
- Actions dealing with student discipline, alleged discrimination on the basis of ethnic group identification, religion, age, gender, color, sexual orientation, physical or mental disability. These should be directed to the Dean of Student Affairs and the Vice Chancellor of Human Resources.
- Parking citations (i.e., "tickets") and complaints regarding citations must be directed to the Campus and Parking Services Office.
- Law Enforcement citations (i.e., "tickets") and complaints regarding citations must be directed to the Campus and Corresponding Police Agency.
- If it is reasonable to conclude that, if substantiated, discipline of an employee may follow from a violation, such grievance is not subject to this process. Allegations of this nature will be directed to the appropriate college administrator.

If the grievance is predicated on an alleged unlawful discrimination on the basis race, nationality, ethnic group identification, religion, age, gender, color, sexual orientation, physical or mental disability, or other legally protected status, a complaint may be filed with the:

Vice Chancellor of Human Resources
District Office
Grossmont-Cuyamaca Community
College District
8800 Grossmont College Drive
El Cajon, CA 92020
(619) 644-7572

Grossmont College
Dean, Student Affairs
8800 Grossmont College Drive
El Cajon, CA 92020
(619) 644-7600

Cuyamaca College
Dean, Student Affairs Office
900 Rancho San Diego Parkway
El Cajon, CA 92019
(619) 660-4295

Information about grievance procedures and a copy of this document should be available to grievant(s) and/or the student respondent(s) upon request.

Definition of Student Grievance Terms

Academic Senate: The elected representative body of the faculty at each College of the District.

Administrator: The College President or other person or persons designated by him or her.

Dean of Student Affairs: The Dean of Student Affairs at each college of the District or their designee.

Associated Student Government: The elected student representative body at each college of the District.

Chief Student Services Officer: The Vice Presidents of Student Services at each College of the District.

College President or Designee: The Chief Executive Officer (CEO) at each College of the District or an Administrator selected by the CEO to represent him or her in matters of Student Conduct.

Days: Days during which College is in session and regular classes are held, including summer and intersession days, and excluding Saturdays and Sundays, unless otherwise specified in the procedures.

Decision: The final outcome of the Grievance Council. This includes tie votes or no decision.

District or GCCCD: The Grossmont-Cuyamaca Community College District (GCCCD), including all Colleges, programs and offerings.

Formal Grievance Hearing Committee: The Formal Grievance Hearing Committee is appointed by the College President and shall consist of two (2) students, two (2) faculty members, and one (1) college administrator, supervisor or staff member.

Grievance Council: The Grievance Council is composed of the Chief Student Services Officer, the Vice President of Instruction and the Chief Business Officer of the college or their designees.

Grievant: A grievant is a person currently enrolled, or a person who has filed an application for admission to the college, or a former student of the District, including both in-person and online. Former students shall be limited to grievances relating to course grades to the extent permitted by Education Code Section 76224(a) and must file their grievance within one (1) year of the date that a reasonable person would have had knowledge, but not to exceed one (1) year (to be determined by the Formal Grievance Committee).

Instructor: Any academic employee of the District who is the instructor of record for a class in which a student is enrolled, or a counselor who is providing or has provided services to the student, or other academic employees who provide services related to the student's educational program.

Party: The student grievant or any persons alleged to have been responsible for the student's alleged grievance, together with their representatives. Party shall not include the Formal Grievance Hearing Committee, members of the Grievance Council, or the Dean of Student Affairs.

Respondent: Any party who is a student and who is claimed by a grievant to be responsible for the alleged grievance.

Student: A currently enrolled student, a person who has filed an application for admission to, or a former student at any college within

INFORMAL RESOLUTION

All parties involved are encouraged to seek an informal resolution. Informal meetings and discussion between persons directly involved in a grievance are essential at the outset of any dispute and should be encouraged. An equitable solution should be sought before persons directly involved in the case have assumed official or public positions that might tend to polarize the dispute and render a solution more difficult.

In an effort to resolve the matter in an informal manner, the student may, if appropriate, schedule a meeting with the person with whom the student has the grievance, schedule a meeting with the person's immediate supervisor, and/or schedule a meeting with the appropriate college administrator.

The College President shall appoint the Dean of Student Affairs to assist students in seeking resolution by informal means. The role of the Dean of Student Affairs is that of a facilitator of the grievance process, and not that of an advocate for either the Grievant(s) or the Respondent(s). The Dean, Student Affairs and the student may also seek the assistance of the Associated Student Organization or any other appropriate resource(s) in attempting to resolve a grievance informally.

REQUEST FOR FORMAL GRIEVANCE HEARING

If the student believes the issue has not been resolved satisfactorily, the student may obtain a Written Statement of Grievance form from the Office of Student Affairs, specifying the time, place, nature of the complaint, the specific policy or regulation alleged to have been violated, if any, and the remedy or correction requested. This Statement shall be submitted to the Dean of Student Affairs. A grievance by an applicant shall be limited to a complaint regarding denial of admission. Former students shall be limited to grievances relating to course grades to the extent permitted by Education Code Section 76224(a) and must file their grievance within one (1) year of the date the grade was awarded.

Following submission of the Written Statement of Grievance, the student may, if appropriate, schedule a meeting with the Dean of Student Affairs to explore student rights and responsibilities and receive assistance with an informal resolution.

- During the informal resolution stage of the grievance process, the Dean of Student Affairs shall facilitate informal meetings and discussions that may lead to a resolution of the grievance.
- The Dean of Student Affairs may gather information, communicate with all parties

and attempt to mediate an informal resolution.

At the end of fifteen (15) days, barring any exigent circumstance, following the receipt of the Written Statement of Grievance by the Dean of Student Affairs, if there is no informal resolution of the complaint, the student(s) shall have the right to request a Formal Grievance Hearing.

The request for a Formal Grievance Hearing shall be made in writing to the Dean of Student Affairs within five (5) days, barring any exigent circumstance, following the conclusion of the information resolution process. If the Grievant fails to exercise his/her due process rights within this time frame, no further action shall be taken. Any exception to these time restrictions will be granted at the discretion of Dean of Student Affairs and will only be granted in extremely exigent circumstances.

Following receipt of the Formal Grievance Hearing Form from the Grievant, upon request from either Party, the Grievant(s) or Respondent(s), the Dean of Student Affairs shall meet with the Grievant(s) and Respondent(s) to outline their rights and responsibilities.

FORMAL GRIEVANCE HEARING COMMITTEE

The College President shall establish annually a standing panel from which one or more Formal Grievance Hearing Committees may be appointed. The panel shall consist of a minimum of:

- Five (5) students recommended by the Associated Student Government;
- Five (5) faculty members recommended by the Academic Senate;
- Five (5) administrators, supervisors or staff selected by the College President.

The College President shall appoint a Formal Grievance Hearing committee from the standing panel. The College President shall ensure that these committee members have no possible conflict of interest in hearing the grievance. The committee shall include two (2) students, two (2) faculty members, and one (1) College administrator, supervisor or staff member selected from the panel described above.

The Formal Grievance Hearing Committee shall select a chairperson from among its members.

Once a Formal Grievance Hearing has commenced, only those committee members present throughout the Hearing may vote on the recommendation.

No person shall serve as a member of the Formal Grievance Hearing Committee if that person has been personally involved in any matter giving rise to the grievance, has made any public statement on the matters at issue, or could otherwise not act in a neutral manner. The grievant(s) or the respondent(s) may challenge for cause any member of the Formal Grievance Hearing Committee prior to the beginning of the hearing by addressing a challenge in writing to the College President, who shall determine whether cause for disqualification has been shown. If the College President believes that sufficient grounds for removal of a member of the Formal Grievance Hearing Committee have been presented, the College President shall remove the challenged member or members and replace them with another member or members from the standing panel.

FORMAL GRIEVANCE HEARING COMMITTEE DETERMINATION OF STANDING

Within ten (10) days following receipt of the Formal Grievance Hearing Request, the Formal Grievance Hearing Committee shall meet to select a chairperson and to determine if the Formal Grievance Hearing Request fulfills all of the following requirements:

- The request contains facts/documentation which, if true, would constitute a grievance;
- The grievant is a student as defined in these procedures, which includes applicants and former students;
- The grievant is personally and directly affected by the alleged grievance;
- The grievant conformed with the grievance procedures and the grievance was filed in a timely manner; The grievance is not clearly frivolous or without foundation, or not clearly filed for purposes of harassment or retaliation.

If the Formal Grievance Hearing Committee rejects the request for a Formal Grievance Hearing, the grievant and the Dean of Student Affairs shall be notified in writing, within five (5) days, by the committee's chairperson. The specific reason(s) for rejection and the appeal process outlined in this document shall be included in this notification.

If the grievant(s) is dissatisfied with the decision of the Formal Grievance Hearing Committee not to grant a Formal Grievance Hearing, a written appeal may be filed with the Grievance Council via the Dean of Student Affairs within five (5) days after receipt of the Formal Grievance Hearing Committee's decision. The Grievance Council's decision on the appeal is final.

If the request for a Formal Grievance Hearing satisfies all of the requirements listed above, the committee Chairperson shall notify the Grievant and the Dean of Student Affairs, in writing, within five (5) days.

The Dean of Student Affairs shall schedule a Formal Grievance Hearing which shall commence within twenty (20) days barring any exigent circumstances, following the decision to grant a Formal Grievance Hearing. All parties to the grievance shall be given no less than five (5) days, barring any exigent circumstance, notice of the date, time and place of the hearing.

HEARING PREPARATION

The Dean of Student Affairs shall be responsible for making the necessary arrangements for the Hearing. Arrangements shall include scheduling a room, providing for a tape recorder, providing notice to the parties, notifying members of the Grievance Hearing Committee, and any other arrangements deemed necessary.

Parties requesting accommodations in accordance with the Americans with Disabilities Act of 2008 or Section 504 of the Rehabilitation Act (1973) may do so by contacting the Dean of Student Affairs in writing at least five (5) days in advance of the needed accommodation.

During the Formal Grievance Hearing stage of the grievance process, the Dean of Student Affairs shall coordinate the preparation and shall prepare the chairperson on conduct of the hearing, including providing any additional necessary training to committee members. The Dean of Student Affairs shall sit with the Formal Grievance Hearing Committee but shall not serve as a member or vote. The Dean of Student Affairs shall ensure that the entire grievance process is conducted in an orderly, fair, and respectful manner.

Right to Representation: The Grievant(s) or the Respondent(s) shall represent themselves. Parties are allowed an advisor of their choice whose role is to advise, not represent. The advisor shall not be an attorney or a person acting as an attorney. The advisor's name shall be summited to the Dean of Student Affairs no later than 48 hours prior to the hearing. If the student needs assistance finding an advisor, the Dean of Student Affairs can assist in finding an advisor. The Grievance Hearing Committee may also request legal assistance through the College President. Any legal advisor provided to the hearing committee may sit with it in an advisory capacity to provide legal counsel but shall not be a member of the panel nor vote with it.

The Dean of Student Affairs shall have the authority to exclude from the hearing any individuals who fail to conduct themselves in an orderly, fair, and respectful manner.

CONDUCT OF THE HEARING

Opening: The committee chairperson shall call the hearing to order, introduce the participants, and announce the purpose of the hearing

Review of Alleged Grievance: The chairperson shall distribute copies of the Formal Grievance Hearing Form submitted by the Grievant to the members of the Grievance Hearing Committee and read them aloud on to the record.

Burden of Proof: The burden shall be upon the grievant to prove by a preponderance of evidence ("more likely than not" that the facts alleged are true.

Statements: Unless the Grievance Hearing Committee determines to proceed otherwise, beginning with the Grievant(s), each party to the grievance shall be permitted to make or waive an opening statement. Thereafter, the Grievant(s) shall make the first presentation, followed by the Respondent(s). The Grievant(s) may present rebuttal evidence after the Respondent(s)' evidence. The burden shall be on the Grievant(s) to prove by a preponderance of evidence that the facts alleged are true and that a grievance has been established as specified above.

Evidence: Formal rules of evidence shall not apply. All relevant information is admissible, including but not limited to testimony of witnesses, physical objects, police reports, photographs, copies of documents, and signed and dated declarations of witnesses shown to be unavailable to attend the hearing. The Grievant(s) and the Respondent(s) have the right to question all witnesses and to review all documents presented to the Formal Grievance Hearing Committee. The Chairperson shall make all determinations as to the relevance and/or admissibility of evidence and testimony.

Exclusion of Witnesses: Hearings shall be closed and confidential. Only persons participating in the hearing shall be present during the hearing. All witnesses shall be excluded except when testifying. Both Parties shall be entitled to call witnesses presented by the other. Either party may recall a witness, who again may be questioned by both parties and the committee. A member of the Formal Grievance Hearing Committee may ask questions at any time upon recognition by the chairperson.

Conclusion: First the Grievant(s), and then the Respondent(s), shall be afforded the opportunity to make or waive a final statement.

Formal Grievance Committee Decision: Upon conclusion of the Hearing, the Formal Grievance Hearing Committee shall retire to deliberate with only members of the Grievance Committee present. Only those committee members present throughout the entire hearing may vote on the decision. The Formal Grievance Hearing Committee's deliberations shall not be tape-recorded and shall be confidential and closed to all Parties. With permission of the Grievance Hearing Committee, the Dean of Student Affairs and/or legal counsel retained on behalf of the Committee may be consulted during deliberations to assist in procedural matters.

The Formal Grievance Hearing Committee shall meet and consider the relevance and weight of the testimony and evidence presented. This committee shall reach a decision only upon the record of the hearing and shall not consider matters outside of that record.

Within five (5) days following the conclusion of the hearing, barring any exigent circumstance, this committee shall issue a written recommendation that includes a rationale for its conclusions. The committee's recommendation shall be forwarded to the Grievance Council through the Chief Student Services Officer with copies to the Grievant(s), Respondent(s) and Dean of Student Affairs.

Tape Recording: The Dean of Student Affairs shall be responsible for tape recording the hearing and arranging for safe storage of the grievance file, including tape(s) and documents, for a period of no less than seven (7) years. The hearing shall be tape-recorded in accordance with the following procedures:

- All oral testimony shall be tape-recorded. If a person called upon to give oral testimony refuses to consent to being recorded, they may not testify at the hearing.
- At the beginning of every hearing, all parties present for the hearing shall verbally identify themselves by name for the tape-recording.
- The committee chairperson shall instruct all parties present for the hearing to identify themselves when speaking and instruct all present that only one person is to speak at a time so the tape-recording will be understandable.
- Only one tape-recorder shall be allowed at the hearing. No other recording device shall be allowed.

Absence of the Party: If either Party, Grievant(s) or Respondent(s), do not appear, and no satisfactory explanation for the absence is made at the earliest opportunity, or if either Party leaves the Hearing before its conclusion, the Formal Grievance Hearing Committee shall determine if the hearing should proceed without the party. The committee will decided whether they can make a determination of the information that was presented to that point.

GRIEVANCE COUNCIL

The Grievance Council shall be composed of the Chief Student Services Officer, the Vice President of Instruction/Academic Affairs, and the Chief Business Officer of the College or designees.

Upon receipt of the Formal Grievance Hearing Committee's recommendation, the Chief Student Services Officer shall call a meeting of the Grievance Council.

The Grievance Council shall consider the committee's recommendation and any materials pertinent to the grievance but shall not consider matters outside of the record. The Grievance Council shall render a written decision to the grievant(s) and the respondent(s) within five (5) days of receipt of the Formal Grievance Hearing Committee's recommendation.

APPEAL

If either Party is dissatisfied with a Grievance Council's decision, a written appeal may be filed with the College President within five (5) days, barring any exigent circumstance, of receipt of the Grievance Council's decision. If the College President is a party to the grievance, the appeal will be submitted directly to the District Chancellor.

Within five (5) days, barring any exigent circumstance, the Grievance Council, or the College President (or District Chancellor if the President is a party to the grievance) shall send copies of the appeal to each party.

The College President (or the District Chancellor if the President is a party to the grievance), after reviewing the record of the Formal Grievance Hearing Committee, shall make a decision on the appeal and notify the parties in writing within five (5) days, barring any exigent circumstance.

The College President's (or the District Chancellor's if the College President is a party to the grievance) decision shall be in writing and shall include a statement of reasons for the decision. The College President's (or District Chancellor's) decision shall be final.

The decision of the Grievance Council is final. Further complaints may be submitted to the California Community College State Chancellor's Office Office (www.cccco.edu/Complaint-Process-Notice).

GENERAL PROVISIONS

The facts of any Grievance action and the reasons shall be recorded on the student's records subject to access, review and comment by the student as authorized by the Family Education Rights and Privacy Act (FERPA) and Education Code Sections 76200 Legislative Intent through Section 76246. All access or release of such records to members of the public shall also be in accordance with applicable State and Federal laws.

The grievance file, including tapes and all documents, shall be retained in a secure location on campus for a period of seven (7) years. The Grievant(s) and the Respondent(s) may have access, upon request, to the files and tapes through the Dean of Student Affairs. The individual making the request shall pay the costs of any copies requested.

The records shall be available only to officers or employees of the GCCCD and only used when necessary to represent the College or District in litigation or other legal or administrative proceedings.

Any specified time limits stated in these procedures may be shortened or lengthened by mutual concurrence of all parties.

Technical departures from these procedures and errors in its application shall not constitute grounds to invalidate action against a student unless, in the opinion of the College President or Designee, the technical departure or error prevented a fair determination of the issue.

STUDENT SUCCESS AND SUPPORT PROGRAM

The Student Success and Support Program is designed to assist students in planning and achieving their educational goals. The College will provide:

Orientation – all new students must participate unless exempt (see below)

Assessment – all new students must participate unless exempt (see below)

Counseling for course selection and assistance in creating a student education plan

Referrals to specialized support services

Follow-up services to evaluate students' progress and referral to appropriate interventions

Each student has the responsibility to:

Participate in assessment, orientation and advisement

Identify an academic and career goal

Declare a specific course of study

Develop a Student Educational Plan in consultation with a counselor no later than the term after completion of 15 semester units of degree applicable credit coursework

EXEMPTIONS

A student may challenge and be exempted from the Student Success and Support Program requirements based on one or more of the following criteria;

- Has completed an associate degree or higher;
- Has enrolled at the college for a reason other than career development or advancement, transfer, attainment of a degree or certificate of achievement, or completion of a basic skills or English as a Second Language course sequence;
- Has completed these services at another community college;
- Is enrolling at the college to take a course that is legally mandated for employment or in response to a significant change in industry or licensure standards;
- Is a special admit student pursuant to Education Code 76001.

Any student exempted from orientation, assessment, counseling, advising, or student education plan development shall be notified and may be given the opportunity to participate in those services.

CUYAMACA COLLEGE COMPLAINT PROCEDURES

There are established procedures for resolving complaints from not only prospective and current students, but also community members. For example, as a standard practice, the first step should be to seek a resolution at the local level with the appropriate department. If the complainant does not feel

that the issue has been solved at this level to his or her satisfaction, the complainant is able to pursue the matter through the established chain of command. The process must be clearly stated and in compliance with Federal regulation (HEA Title 1V, CFR, Sections 600.9 and 668.4 (3) (b) since all Title 1V eligible institutions must not only have, but also state its administered complaint process.

PROCESS FOR SUBMITTING ALL TYPES OF COMPLAINTS BY PROSPECTIVE AND CURRENT STUDENTS:

Send an email to the department supervisor detailing a summary of the problem, including the steps taken to resolve the issue, and the desired outcome. If, after meeting with the department supervisor, you are not satisfied with the outcome, contact the Administrator of the appropriate Department or Division. If, after meeting with the Administrator of the appropriate Department or Division, you are not satisfied with the outcome and have taken the appropriate steps to resolve the matter through the established chain of command, contact the Vice President of that Division.

PROCESS FOR SUBMITTING ALL TYPES OF COMPLAINTS BY COMMUNITY MEMBERS:

Send an email, detailing a summary of the problem, including the steps taken to resolve the issue and the desired outcome to the Vice President of Administrative Services, Vice President of Instruction or the Vice President of Student Services or the College President.

PROCESS FOR SUBMITTING UNRESOLVED COMPLAINTS FROM PROSPECTIVE STUDENTS, CURRENT STUDENTS, AND/OR COMMUNITY MEMBERS TO THE STATE LEVEL:

Although it is our goal to resolve complaints at the campus level, there may be times when a complainant is not satisfied with the outcome. In these situations, the complainant is encouraged to contact the California Community Colleges Chancellor's Office. The form to submit your complaint can be found at www.cccco.edu/Complaint-Process-Notice. There is a separate link for discrimination complaints.

PROCESS FOR SUBMITTING DISCRIMINATION COMPLAINTS:

Filing a Complaint

A student or employee of a community college district who wishes to file a complaint alleging that they were subjected to unlawful discrimination may do so by filing a complaint with their community college district.

Unlawful discrimination complaints can be directed to: Vice Chancellor Human Resources, Tim.Corcoran@gcccd.edu

For additional information regarding the process and appeals, please refer to www.cccco.edu/About-Us/Chancellors-Office/Divisions/General-Counsel/Programs/College-District-Discrimination-Appeals

PROCESS FOR SUBMITTING ACCREDITATION COMPLAINTS:

If you are submitting a complaint that pertains to the institution's compliance with academic program quality and accrediting standards, please submit the information to the Accrediting Commission for Community and Junior Colleges (ACCJC), which accredits the academic programs of the California Community Colleges. The link to submit your complaint can be found at accjc.org/complaint-process/. (Nothing in this disclosure should be construed to limit any right you may have to take civil or criminal legal action to resolve your complaints.)

STUDENT RIGHT-TO-KNOW RATES

For Fall 2014 Cohort:

COMPLETION RATE: 26.07 %
TRANSFER RATE: 9.87 %

In compliance with the Student-Right-To-Know and Campus Security Act of 1990 (Public Law 101-542), it is the policy of our collage district to make available its completion and transfer rates to all current and prospective students. Beginning in Fall 2014, a cohort of all certificate-, degree-, and transfer-seeking first-time, full-time students were tracked over a three-year period. Their completion and transfer rates are listed above. These rates do not represent the success rates of the entire student population at the College nor do they account for student outcomes occurring after this three-year tracking period.

Based upon the cohort defined above, a Completer is a student who attained a certificate or degree or became 'transfer prepared' during a three-year period from Fall 2014 to Spring 2017. Students who have completed 60 transferable units for a GPA of 2.0 or better are considered 'transfer-prepared'. Students who transferred to another post-secondary institution, prior to attaining a degree, certificate, or becoming 'transfer-prepared' during a five-semester period from Spring 2015 to Spring 2017 are transfer students.

TUTORING

We Make Good Students Better! Tutoring is free and students may begin using services at any point in the semester. Learning Assistants -- most of whom are current or former Cuyamaca students, themselves – help students adapt to college, learn course skills and content, refine general study skills and strategies, and become more confident, independent learners.

Tutoring is offered in a variety of formats through the Academic Resource Center (ARC), the STEM Achievement Center, and the Writing Center depending on the course and student need. For more information and current hours, please visit the website at: www.cuyamaca.edu/tutoring or email at cuyamaca.tutoring@gcccd.edu.

UNIT VALUE AND STUDENT LOAD

College work is measured in terms of the semester Carnegie unit. In lecture courses, one hour in the classroom and two hours of study preparation per week constitute one unit of work. In the laboratory, three hours in the classroom per week with no outside study time constitute one unit of work. The number of units of credit is listed with each course description.

Full-time load is defined as a minimum of 12 units per semester (fall/spring). The load for full-time students planning to graduate in four semesters is 15-16 units per semester. Students desiring to enroll in more than 18 units during the fall and spring term and more than 8 units during summer, must obtain approval from a Counselor.

The winter intersession is considered part of spring; therefore, if the combination of winter and spring units goes over 18 units a unit overload approval will be needed.

Overload	Maximum Units Students are Able to Register for:
Fall Semester	18 units total for the entire semester
Spring Semester	18 units total for the entire semester
Summer Semester	8 units total for the entire semester

To receive unit overload approval all of the requirements below must be met:

1. Earned a minimum of 12 units with a cumulative college GPA of 3.0 in college coursework.

2. Currently not on probation or dismissal status.

*Final recommendation is based on the discretion of the Counselor.

WORK EXPERIENCE REQUIREMENTS

In order to participate in Cooperative Work Experience Education, students shall be enrolled as specified in Title 5, Section 55250.

The unit value for work experience or field experience is one semester unit for 75 hours of paid work experience or 60 hours of unpaid work experience completed during the course. The maximum occupational work experience units allowable in one semester is eight.

Specific work experience agreements between the employer-supervisor, the student and the instructor are required by the Grossmont-Cuyamaca Community College District Plan for Cooperative Work Experience Education. All requirements specified in the Plan must be met, including the submittal of records validating attendance and satisfactory completion of course objectives.

199 COURSES—SPECIAL STUDY

The special study or project (199) is for the purpose of allowing students to increase their knowledge of a subject matter not included in regular course offerings. These courses are at times referred to as Independent Study courses.

Special studies shall be available to those students who have accumulated the skills and breadth of academic experience necessary to utilize this special learning method. Special study credit shall be limited to nine semester units at Cuyamaca College. The unit value for a special study or project will be determined on the basis of one semester unit for each

48 hours of work. Coursework is degree-applicable, but not transferable.

A typewritten one-page paper describing the goals and methods of the special study or project is to be written by the student and attached to the contract. This paper will be used as a criterion for acceptance or rejection of the proposal. This paper will also be used by the instructor to evaluate the extent to which the stated goals of the special study have been achieved. Grades will be assigned by the instructor based on the level of this achievement. The Cuyamaca College grading policy applies to special study courses.

Contracts for special studies or projects are available in the Admissions and Records Office. The deadline for enrolling in a special study or project will be the end of the second week for full-term classes and the end of the first week for eight week and summer session classes.

Degree Requirements and Transfer Information

Associate Degree for Transfer℠

California Community Colleges offer Associate Degrees for Transfer (ADT) for students interested in transfering to the CSU. These include Associate in Arts (AA-T) and Associate in Science (AS-T) degrees, which are designed to provide a clear pathway to a CSU major and baccalaureate degree. Students who are awarded an ADT degree are guaranteed admission to the CSU system and given priority admission consideration to their local CSU campus or to a program deemed similar to their community college major. This priority does not guarantee admission to specific majors or campuses.

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

In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0 including CSU GE Breadth or IGETC-CSU. This degree may not be the best option for students intending to transfer to a particular CSU campus or a college not part of the CSU system.

To find out which CSU campuses accept each degree, please go to www2.calstate.edu/apply/transfer/Pages/associate-degree-for-transfer-major-and-campus-search.aspx, and look under CSU Similar Degrees by major. 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 DEGREES

Cuyamaca College provides career, technical and general education to students who plan to complete their formal education at the community college level. In addition, the college provides the lower division requirements in general education and pre-professional majors for those students who plan to transfer to four-year colleges and universities. To assist students in educational planning, this section describes the graduation requirements for the Associate in Science (AS) degree and the Associate in Arts (AA) degree.

Granting of the AS or AA degree indicates successful completion of general educational requirements, plus evidence of proficiency in a specialized field. As a member of the Western Association of Schools and Colleges, most courses taken at Cuyamaca College are fully accepted on transfer by the University of California, all California State University campuses and other universities throughout the United States.

The emphasis on career planning and education at Cuyamaca College is evidenced by the number of programs leading to the AS degree. In curriculum planning for career education, advisory committees composed of persons from various fields of specialization give of their time in order to ensure quality courses that furnish students with proficiencies essential to employment, retention on the job, and for living a more productive and full life. Students wishing to discuss career planning should consult with a counselor or a representative of the program in which they have special interest prior to registration.

GENERAL EDUCATION

Students earning the Associate in Science or the Associate in Arts degree have three general education patterns from which to choose.

Plan A: Completion of Cuyamaca College General Education Requirements; see below.

Plan B: Completion of Intersegmental General Education Transfer Curriculum for California State University (IGETC-CSU) or for the University of California (IGETC-UC).

Plan C: Completion of California State University General Education (CSU GE).

Exceptions are University Studies degrees, which require completion of Plan B or C, General Studies degrees, which require completion of Plan A, Associate Degrees for Transfer (ADT), and Paralegal Studies which have clearly defined GE requirements. Students are encouraged to meet with a counselor for assistance in selecting the most appropriate general education pattern for their educational goal. Only one pattern may be selected.

PLAN A:

CUYAMACA COLLEGE GENERAL EDUCATION REQUIREMENTS:

NOTE: GE course choices for the Associate Degree may differ between Cuyamaca College and Grossmont College. Students should check both college catalogs for specific information if they plan to attend both campuses.

AREA A – LANGUAGE AND RATIONALITY

(Minimum of 6 semester units)
One course from each area:

1. **Written Communication**
   ENGL 120, 124
   ESL 122
2. **Oral Communication and Analytical Thinking**
   COMM 120, 122, 130, 137, 145
   ENGR 100
   MATH 110, 120, 121, 125, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284
   PHIL 125, 130
   PSY 215

AREA B – NATURAL SCIENCES

(Minimum of 4 semester units)
One laboratory course must be included (laboratory courses are underlined):

ANTH 130
ASTR 110, 112
BIO 112, 115, 122, 130, 131, 133, 134, 135, 140, 152, 230, 240
CHEM 102, 115*, 116, 120*, 141, 232
ET 110
GEOG 120, 121
GEOL 104, 105, 110, 111
OCEA 112, 113
PHYC 110, 130, 131, 190, 200, 201, 202, 203, 210

*Students will not receive credit for more than one of the following courses: CHEM 115, 120.

AREA C – HUMANITIES

(Minimum of 3 semester units)
One of the following courses:

ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 130, 145, 220, 221, 250, 251, 254
ART 100, 120, 124, 129, 140, 141, 143, 144, 145, 146, 148, 149
ASL 120, 121, 140, 220, 221
COMM 135
ENGL 122, 126, 201, 202, 214, 217, 221, 222, 231, 232, *236, *238, 270, 271
ETHN *111, *236, *238
HIST 100, 101, 105, 106, 114, 115, *148
HUM 110, *111, 115, 116, 120, 140, 155
MUS 110, 111, 115, 116, 117, 123
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 141, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 141, 145, 220, 221, 250, 251
THTR 110

AREA D – SOCIAL AND BEHAVIORAL SCIENCES

(Minimum of 3 semester units)
One of the following courses:

ANTH 120, 140, 150
CD 115, 125, 131, 145
COMM 110, *124
ECON 110, 120, 121
ETHN *107, *114, *118, *119, *130, *131, *132, *133, *150, *165, *166, *180, *181
GEOG 106, 130
HED 120, 201, 203, 204, 251
HIST *107, 108, 109, *114, *115, *118, *119, 122, 123, 124, *130, *131, *132, *133, *180, *181
NUTR 155, 158
POSC 120, 121, 124, 130, 140, *165, *166, 170, 180
PSY 120, *125, 134, 138, 140, 150, 170, 211, 220
SOC *114, *120, *125 130, 138, 140, *150

ADDITIONAL REQUIREMENTS:

(Minimum 6 semester units)
Two additional courses from two different areas:

- Area B - Natural Sciences
- Area C - Humanities
- Area D - Social and Behavioral Sciences

Courses with an asterisk (*) meet the Cultural Diversity Graduation Requirement.

PHILOSOPHY OF GENERAL EDUCATION

Cuyamaca College has a philosophy of general education based on the belief that students who receive an associate degree will possess knowledge, skills and abilities in the following areas: oral and written communication; physical and natural sciences; arts and humanities; and social and behavioral sciences. The faculty at Cuyamaca College believe that the general education experience, and the foundation of knowledge that it imparts, will enable students to:

- Develop verbal and quantitative skills;
- Use the scientific method to understand the natural world;
- Understand and appreciate cultural heritages, social traditions, humanity and artistic expression;
- Analyze and think critically;
- Evaluate personal values;
- Develop an approach to learning in an interdisciplinary manner;
- Effectively participate in a diverse and complex society.

Students completing general education requirements will have attained the knowledge, skills and abilities that are evident in Student

Learning Outcomes at the course, program and institutional levels.

PLAN A:
DEGREE REQUIREMENTS:

Cuyamaca College will confer the Degree of Associate in Science or Associate in Arts upon students who successfully complete the following requirements:

1. A minimum of 60 semester units of college work.
2. Competency Requirements
   A. Completion of ENGL 120 with a grade of "C" or better, or a grade of "P"*.
   B. Completion of MATH 110 or a higher numbered math course with a grade of "C" or higher or a grade of "P"; or a statisics course from another discipline with a grade of "C" or higher or a grade of "P"; or placing into MATH 125 or a math course numbered MATH 170 or above.
   C. Successful score on an approved external examination in English and/or Math; see External Exams Credit (IB, CLEP, AP and SAT) within this chapter.
3. Cultural Diversity Graduation Requirement
   Students satisfy the cultural diversity requirement by completing one course from the approved list of courses. The course may also satisfy a general education, a major, or an elective requirement. For more information refer to the section "Cultural Diversity Requirement."
4. Exercise Science Degree Requirements
   Two activity courses in exercise science are required for graduation from Cuyamaca College using Plan A. These courses are marked with an asterisk in the "Course Descriptions" section.
   A. If medical reasons necessitate exclusion from exercise science, a medical statement must be on file with the Admissions and Records Office. Adaptive exercise science classes are available.
   B. Veterans who have completed at least one year of honorable active service will receive up to 3 units of credit for exercise science which will satisfy the activity requirement for graduation. To receive credit for military service, a DD-214 and appropriate military records must be submitted to the Admissions and Records Office.
5. Achievement of a "C" average (2.0 GPA) in all college work counted toward general education requirements.
6. Achievement of a "C" grade or better in all courses counted towards a major requirement. (P/NP grading not accepted for major requirements.)
7. A maximum of 12 "P"* semester units taken in regular course work at this institution may be counted toward the 60 semester units required for graduation but shall not be included as part of the requirements for the major.
8. Residency
   A. Students that have met all graduation requirements may obtain their degree from Cuyamaca College if they are currently enrolled and have satisfactorily completed AT LEAST 12 DEGREE APPLICABLE SEMESTER UNITS of approved course work at Cuyamaca College.
   B. Students NOT enrolled at Cuyamaca College during the semester in which they meet all graduation requirements must have a total of 45 units of degree applicable courses in residence in the district, regardless of how much time has elapsed.
   C. Active military personnel may obtain their degree from Cuyamaca College if they have met all graduation requirements and have completed at least 12 semester units of approved course work at Cuyamaca College, regardless of whether or not they are enrolled during the term in which they graduate.
9. Petition for Graduation
   A. It is the responsibility of the student who expects to graduate to file a written petition for graduation on the form provided by the Admissions and Records Office. The application should be filed prior to the deadline for the semester in which the student plans to complete requirements for a degree. (See Academic Calendar for deadline dates.)
   B. Official transcripts from all colleges attended must be on file in the Admissions and Records Office.
   C. The student may choose to meet requirements in a catalog published after admission provided continuous attendance is maintained. A student not in continuous attendance at Cuyamaca College should be aware that he/she must meet degree requirements listed in the catalog in effect at the time of readmission unless he/she has applied for and been granted a leave of absence.
10. Major Requirements
    See "Associate Degree Programs and Certificates" for the major areas for the AS and AA degrees.
11. Additional Associate Degree
    An additional associate degree may be earned under the following conditions:
    A. Having received an associate's degree or higher, the student will not receive an AA or AS degree in the same area, unless the field is broad enough that the new courses would not be a repetition of content from previous education.
    B. All General Education requirements as specified by the current catalog are met.
    C. Completion of a major as specified in this catalog with a minimum of 12 remaining required semester units in the major completed at Cuyamaca College subsequent to the preceding degree(s) at any college.
12. Multiple Majors
    Multiple majors differ from additional associate degrees (see section above) in that the student with a multiple major works simultaneously toward the completion of more than one major. Multiple majors must be available and meet general education requirements from the same catalog year. An AA or AS degree with a multiple major can be earned by completion of all general education requirements plus the courses required for both majors as outlined in this catalog. The General AA degree offered for catalog years 1978-79 through 2007-08 may not be included as part of the multiple major.
13. Grade Forgiveness
    Grade forgiveness, as defined by Cuyamaca College, is the omission of courses in which "D" or "F" grades are earned when computing GPA for granting of degrees.
    Under the Cuyamaca College forgiveness policy, degree candidates must meet all the requirements as stated in the college catalog with the following exception:
    Any course in which a "D" or "F" grade is earned may be forgiven without repeating only if that particular course is NOT being used to meet a degree requirement, and when the grade point average prior to forgiveness is below a 2.0, and the grade point average after grade forgiveness is 2.0 or better.
    The grade forgiveness policy is automatically applied at the time of graduation.
    Please note: The grade forgiveness policy does not apply to the Associate Degrees for Transfer (AA/AS-T).

*A grade of "P" (Pass) represents a "C" grade or better.

CULTURAL DIVERSITY REQUIREMENT

Cuyamaca College's cultural diversity requirement is intended to help students better understand the perspectives of those whose histories, experiences, cultures, and social conditions may differ from their own.

Cultural diversity courses are designed to:

- Promote critical analyses of power, privilege, and opportunity in the United States and/or globally
- Facilitate understanding of the practices of discrimination and inequality toward historically underrepresented groups in the United States
- Enhance skills needed for effective citizenship and communication between individuals from different backgrounds and/or cultures
- Foster cultural awareness and mutual respect among individuals of diverse backgrounds

Cultural diversity courses examine the following topics: ability status, age, citizenship status, environmental justice, ethnicity, gender, gender expression, language, race, religion, sexual orientation, socio-economic status and/or class, and world cultures.

Students satisfy the cultural diversity requirement by completing one 3-unit course from the approved list of courses. The course may also satisfy a General Education, a major, or an elective requirement.

Courses must be on the approved cultural diversity requirement list during the semester they are taken.

Approved Cultural Diversity Courses:

COMM 124

ENGL 236, 238

ETHN 107, 111, 114, 118, 119, 130, 131, 132, 133, 150, 165, 166, 180, 181, 236, 238

HIST 107, 114, 115, 118, 119, 130, 131, 132, 133, 148, 180, 181

HUM 111

POSC 165, 166

PSY 125

SOC 114, 120, 125, 150

CERTIFICATES OF ACHIEVEMENT

Certificates of Achievement are awarded to students who have attained well-defined levels of competency in specific areas. To qualify for a Certificate of Achievement, a student must:

1. Complete all courses which are listed for the major area in the Associate Degree Programs and Certificates section of this catalog.
2. Achieve a "C" or better in all courses which are to be applied toward the certificate. (P/NP grading not accepted for certificate requirements.)
3. Complete the last course required for the certificate at Cuyamaca College.
4. File a petition for the certificate in the Admissions and Records Office before the deadline of the semester in which the requirements will be completed. (See Academic Calendar for deadline dates.)
5. Meet the requirements in a catalog published after admission provided continuous attendance is maintained. A student not in continuous attendance at Cuyamaca or Grossmont College should be aware that he/she must meet certificate requirements listed in the catalog in effect at the time of readmission.

CERTIFICATES OF SPECIALIZATION

Certificates of Specialization are awarded to students who have achieved an acceptable foundation of knowledge in a specific area. Students receiving only a Certificate of Specialization are not able to participate in commencement. To qualify for a Certificate of Specialization, a student must:

1. Complete all courses which are listed for the certificate in the Associate Degree Programs and Certificates section of this catalog.
2. Achieve a "C" or better in all courses which are to be applied toward the certificate. (P/NP grading not accepted for certificate requirements.)
3. Complete the last course required for the certificate at Cuyamaca College.
4. File a petition for the certificate in the Admissions and Records Office before the deadline of the semester in which the requirements will be completed. (See Academic Calendar for deadline dates.)
5. Meet the requirements in a catalog published after admission provided continuous attendance is maintained. A student not in continuous attendance at Cuyamaca or Grossmont College should be aware that he/she must meet certificate requirements listed in the catalog in effect at the time of readmission.

TRANSFER INFORMATION

This section of the catalog is designed primarily to assist students who plan to further their education in a four-year institution. Although every effort has been made to assure the accuracy of the following transfer information at the time of catalog publication, changes may occur. Students are encouraged to make an early selection of the four-year institution and to check its catalog for more precise information. Counselors are available to assist students with program selection and planning. It is recommended that students utilize ASSIST (www.assist.org) to access course equivalencies with many UC and CSU campuses. ASSIST is the recognized source of statewide articulation data. Students should also utilize the Cuyamaca College Transfer Center resources at www.cuyamaca.edu/student-support/transfer-center/index.php or the Student Services One-Stop Center, Room A-221.

Students who plan to transfer may meet general education transfer requirements through the University Studies major. For requirements, see "University Studies" in the Associate Degree Programs and Certificates section of the catalog.

PLAN B:

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (IGETC) 2021-2022

The Intersegmental General Education Transfer Curriculum (IGETC) is a general education package which community college transfer students can take to fulfill lower division general education requirements for either the CSU or UC system.

Completion of the IGETC is not a requirement for transfer to a CSU or UC campus, nor is it the only way to fulfill lower division general education requirements. Students should see a counselor before deciding on an alternative that best meets their own needs.

There is no catalog year or rule of continuing attendance for IGETC certification. A course is certifiable if, and only if, it was on the IGETC list at the time the course was taken.

Cuyamaca College students may be "certified" upon completion of IGETC requirements. Courses completed at California community colleges and participating institutions will be certified based on approval at the original campus. Courses taken at other colleges and universities; i.e. out-of-state, private, may be used in the certification under certain conditions. Certifications are processed in the Admissions and Records Office.

All courses must be completed with a grade of "C" or better or "Pass." There is a limit to the number of courses taken with a grade of "Pass." Check with a counselor.

Attention students: IGETC choices for transfer may differ between Cuyamaca and Grossmont. If you plan to attend both colleges, it is strongly recommended that you visit the Counseling Centers or visit the individual college websites at www.gcccd.edu for specific information.

Up-to-date at time of catalog printing. Please see a counselor for changes.

IGETC-CSU, AND IGETC-UC

For transfer and certification purposes, students may follow the IGETC-CSU coursework or the IGETC-UC package. When applying to graduate, students will select the specific package they have followed (IGETC-CSU or IGETC-UC). Requirements for both packages are listed below, with two areas of distinction.

IGETC-CSU. Students are not required to complete Area 6, Language Other Than English, but must complete Area 1C.

IGETC-UC. Students are not required to complete Area 1C, Oral Commnumication, but must complete Area 6.

AREA 1 – ENGLISH COMMUNICATION

CSU: 3 courses required, one from each group
UC: 2 courses required, one from groups A and B

A. English Composition: ENGL 120
B. Critical Thinking: ENGL 124
C. Oral Communication: COMM 120, 122, 130

AREA 2 – MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

(1 course, 3 semester units)

BIO 215*
MATH 120*, 125*, 126*, 160, 175*, 176* , 178*, 180*, 245, 280, 281, 284, 285
PSY 215*

*Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

AREA 3 – FINE ARTS AND HUMANITIES

(At least 3 courses, 9 semester units)
At least one course from Fine Arts and one from Humanities.

A. Fine Arts:
ART 100, 120, 140, 141, 143, 144, 145, 146, 149
MUS 110, 111, 115, 116, 117
THTR 110

B. Humanities:
ARAM 121, 220
ARBC 121, 123, 145, 220, 221
ASL 121, 140, 220, 221
ENGL 122, 201, 202, 214, 217, 221, 222, 231, 232, 236, 238, 270, 271
HIST 100, 101, 105, 106
HUM 110, 115, 116, 120, 140, 155
NAKY 121, 220
PHIL 110, 115, 117, 140, 160, 170
RELG 120, 130, 160, 170
SPAN 121, 141, 145, 220, 221

AREA 4 – SOCIAL AND BEHAVIORAL SCIENCES

(At least 3 courses, 9 semester units)
Courses must be taken from at least 2 disciplinary perpectives.

ANTH 120, 140, 160
CD 115, 125, 131
COMM 110, 124
ECON 110*, 120, 121
GEOG 106, 130
HED 204
HIST 100, 101, 105, 106, 108, 109, 114, 115, 118*, 119*, 122, 123, 124, 130*, 131*, 132, 133, 148, 180*, 181*, 275, 276, 277
POSC 120, 121, 124, 130, 140, 170
PSY 120, 125, 134, 138, 140, 150, 170, 211, 220
SOC 114, 120, 125, 130, 140

*Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

AREA 5 – BIOLOGICAL AND PHYSICAL SCIENCES

(At least 2 courses required, 7-9 semester units) One Biological Science course and one Physical Science course; at least one must include a laboratory (laboratory courses are underlined). Laboratory courses must correspond to related lecture courses.

A. Physical Sciences:
ASTR 110, 112
CHEM 102*, 115*, 116*, 120*, 141, 142, 231, 232
GEOG 120†, 121†
GEOL 104†, 105, 110, 111
OCEA 112, 113
PHYC 110*, 130*, 131*, 190*, 200*, 201*, 202*, 203*, 210*

B. Biological Sciences:
ANTH 130
BIO 112, 122, 130*, 131*, 133, 134, 135, 140, 141, 141L, 152, 230, 240

C. Laboratory:
This requirement is met by completing a lab course or a combined lecture/lab in 5A or 5B. Lab courses are underlined. Lab must correspond to its related lecture course.

†GEOG 121 corresponds to either GEOG 120 or GEOL 104.

*Indicates that transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

AREA 6 – LANGUAGE OTHER THAN ENGLISH

UC: 1 course, 3 semester units, any of the following courses.

Students shall demonstrate proficiency in a language other than English equal to two years of high school study. Those students who have satisfied the UC freshman entrance requirement in a language other than English will have fulfilled this requirement. There are other ways to fulfill this area; please see a counselor.

ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 220, 221, 250, 251
ASL 120, 121, 220, 221
NAKY 120, 121, 220
SPAN 120, 121, 220, 221, 250, 251

U.S. HISTORY, CONSTITUTION, AND AMERICAN IDEALS REQUIREMENT:

The California State University, before awarding a degree, requires students to complete courses or examinations that address:

Area US-1 (The historical development of American institutions and ideals), AND

Area US-2 (The Constitution of the United States and the operation of representative democratic government under that Constitution), AND

Area US-3 (The process of California state and local government).

This requirement may be fulfilled at Cuyamaca College prior to transfer by completing a course (or courses) that satisfy all three areas. Courses used to satisfy this requirement may also be applied to IGETC Area 4 and/or CSU GE Area D. Please consult www.assist.org to see which courses fulfill US-1, US-2 and US-3 at Cuyamaca College.

UC bound students meet the American Institutions requirement with a one-year course in U.S. history and government in high school with a grade of "C" or better. Students who have not met this requirement should discuss with a counselor ways to meet this deficiency.

IGETC FOR STEM

Students majoring in the Associate Degree for Transfer in Biology may follow the IGETC for STEM requirements, allowing them to complete the ADT in 60 units. IGETC for STEM permits a student to delay one GE course in Humanities & one in Social Sciences until after transfer. One 3A and one 3B course must be selected.

UNIVERSITY OF CALIFORNIA

The University of California is an integral part of the public education system of California. Its campuses usually accept at full unit value transfer courses completed with satisfactory grades in the public community colleges of the state. Students intending to continue their studies at the University of California will find it advantageous to complete their lower division requirements at Cuyamaca College. However, students should become familiar with specific requirements of the particular campus to which transfer is planned by examining the University catalogs and separate bulletins of the various schools and colleges of the University.

The campuses of the University of California are located in:

Berkeley	Riverside
Davis	San Diego
Irvine	San Francisco (Medical Center)
Los Angeles	Santa Barbara
Merced	Santa Cruz

UC TRANSFER ADMISSION GUARANTEE (TAG)

Students may apply for TAG at one of the 6 participating UC campuses: Davis, Irvine, Merced, Riverside, Santa Barbara, and Santa Cruz. Students may apply for the TAG at only one UC campus. The following UC Campuses do not participate in TAG: Berkeley, Los Angeles and San Diego.

- The first step in the UC application process is to fill out an online TAG application during the month of September. Visit www.cuyamaca.edu/student-support/transfer-center/uc-tag.php for more information.
- The second step is to fill out an online application for admission during the month of November. Visit www.universityofcalifornia.edu/admissions for more information.

UC TAG MINIMUM REQUIREMENTS

- 60 UC-transferable semester units
- Maintain acceptable GPA for your major and for specific UC campus
- Two UC-transferable English composition courses
- One UC-transferable mathematics course
- A full certification of IGETC or 7 course pattern

*Please check each UC campus website for specific TAG requirements

Articulation agreements have been completed with most campuses of the University of California (see assist.org/). An Intersegmental General Education Transfer Curriculum pattern acceptable at all University of California (IGETC) campuses is available. Specific courses required for major preparation should be discussed with a counselor.

UCSD UNIVERSITY LINK PROGRAM

University Link is the guarantee admission program to UCSD for high school seniors and Veterans attending Cuyamaca College.

To be eligible for the University Link Program, the University Link agreement must be signed and submitted online to UCSD during your first year at the community college (high school students only). Please see a counselor for more details.

UCSD UNIVERSITY LINK MINIMUM ELIGIBILITY REQUIREMENTS

- 60 UC-transferable semester units
- Meet UC subject eligibility
- Maintain a minimum cumulative GPA of 3.5 in all UC-transferable courses
- Two UC-transferable English composition courses
- One UC-transferable mathematics course
- Completion of 7 course pattern
- Family income is no more than $40,000 per year (U.S. students only)

UNIVERSITY OF CALIFORNIA CREDIT LIMITATION

Up-to-date at time of catalog printing.

Biology	BIO 215 combined with MATH 160 and PSY 215: maximum credit, one course.
CADD Technology	All CADD courses, ENGR 119, ENGR 129, OH 200 and OH 201 combined: maximum credit, one course.
Chemistry	No credit for CHEM 102, 113, 115 or 120 if taken after 141. No credit for CHEM 102 if taken after 115/116. No credit for CHEM 116 if taken after 231.
Economics	No credit for ECON 110 if taken after ECON 120 or 121.
Engineering	All CADD courses, ENGR 119, ENGR 129, OH 200 and OH 201 combined: maximum credit, one course.
ESL	Any or all courses combined (103, 106, 119, 120): maximum credit, eight units.
Exercise Science	Maximum of four units of credit for Physical Activity courses.
Health Education	HED 120 and 122 combined: maximum credit, one course.
History	HIST 118, 130 and 180 combined: maximum credit, one course. HIST 119, 131 and 181 combined: maximum credit, one course.
Math	Credit only for MATH 120 (3 units) or 125 and 126 combined (6 units). MATH 160, BIO 215 and PSY 215 combined: maximum credit, one course. MATH 175 and 176 combined: only one course.

	MATH 178 and 180 combined: maximum credit, one course.
Ornamental Horticulture	All CADD courses, ENGR 119, ENGR 129, OH 200 and OH 201 combined: maximum credit, one course.
Physical Science	No credit for PSC 110 if taken after a college course in Astronomy, Chemistry, Earth Science or Physics.
Physics	No credit for PHYC 110 if taken after PHYC 130 or 190.
	PHYC 130 and 131 combined with PHYC 190, 200, 210: maximum credit, one series.
	Deduct credit for duplication of topics.
Psychology	PSY 215 combined with BIO 215 and MATH 160: maximum credit, one course.

THE CALIFORNIA STATE UNIVERSITY

As with the University of California, the California system of state universities is a member of the higher education family. Its many campuses provide upper division educational programs for graduates or transfers from over 100 California public community colleges.

Cuyamaca College students wishing to transfer to a California State University may choose from the following campuses:

Bakersfield	Northridge
Channel Islands	Pomona
Chico	Sacramento
Dominguez Hills	San Bernardino
East Bay	San Diego
Fresno	San Francisco
Fullerton	San Jose
Humboldt	San Luis Obispo
Long Beach	San Marcos
Los Angeles	Sonoma
Maritime	Stanislaus
Monterey Bay	

A student is eligible for admission to the California State University with 60 transferable semester units (84 quarter units) if the student:

- Has a college grade point average of 2.0 or better (2.4 for non-California residents) in all transferable college units attempted.
- Is in good standing at the last college or university attended.
- Has completed or will complete at a California community college prior to transfer at least 30 semester units (45 quarter units) of courses equivalent to general education requirements with a grade of "C" or better. The 30 units must include all of the general education requirements in communication in the English language (English composition, oral communication and critical thinking) and at least one course of at least 3 semester units (4 quarter units) required in college level mathematics.

IMPACTED CAMPUSES MAY HAVE STRICTER REQUIREMENTS; SEE A COUNSELOR.

All California State University campuses are on a "Common Admissions Program." Applications are available online at www2.calstate.edu/apply.

SDSU UPPER DIVISION TRANSFER ADMISSION GUARANTEE (TAG)

Please refer to https://admissions.sdsu.edu/transfers/apply/transfer_pathways for more information on the SDSU TAG.

PLAN C:

CALIFORNIA STATE UNIVERSITY (CSU) GENERAL EDUCATION BREADTH 2021-2022

Attention students: CSU GE Breadth choices for transfer may differ between Cuyamaca and Grossmont. If you plan to attend both colleges, it is strongly recommended that you visit the Counseling Centers or visit the individual college websites at www.gcccd.edu for specific information.

Up-to-date at time of catalog printing. Please see a counselor for any additional changes.

There is no catalog year or rule of continuing attendance for General Education Breadth Requirements certification. A course is certifiable if, and only if, it was on the General Education Breadth Requirements list at the time the course was taken. Please check with a counselor if you have any questions.

The California State University system has established a requirement of 48 semester units in general education as part of a baccalaureate degree. At least nine of the 48 semester units must be upper division courses. A student attending a community college may complete 39 of the 48 semester units prior to transfer.

The 48 semester units are distributed as follows:

1. A minimum of nine (9) semester units in communication in the English language to include both oral communication and written communication, and in critical thinking to include consideration of common fallacies in reasoning.
2. A minimum of twelve (12) semester units to include inquiry into the physical universe and its life forms with some immediate participation in laboratory activity, and into mathematical concepts and quantitative reasoning and their applications.
3. A minimum of twelve (12) semester units among the arts, literature, philosophy and foreign languages.
4. A minimum of twelve (12) semester units dealing with human social, political and economic institutions and behavior and their historical background.
5. A minimum of three (3) semester units in study designed to equip human beings for lifelong understanding and development of themselves as integrated physiological and psychological entities.

Cuyamaca College students will be "certified" as completing up to 39 lower division semester units of general education at Cuyamaca College for California State University campuses upon completion of the requirements for Areas A through E listed below (courses which are listed in more than one category may be used to certify only one requirement). Courses completed at California Community Colleges and participating institutions will be certified based on approval at the original campus. Courses taken at out-of-state or private colleges and universities may be used in the certification under certain conditions. CSU GE certifications are processed in the Admissions and Records Office.

NOTE: General Education course choices for transfer and the Associate degree may differ between Cuyamaca College and Grossmont College. Each college strongly recommends that students visit the Counseling Centers for specific information if they plan to attend both campuses.

Courses required in Oral Communication (A1), Written Communication (A2), Critical Thinking (A3) and Mathematics/Quantitative Reasoning (B4) must be completed with grades of "C" or better for admission to most CSU campuses.

AREA A – ENGLISH LANGUAGE COMMUNICATION AND CRITICAL THINKING

(Minimum of 9 semester units)
Minimum of 3 courses, at least one from each category.

1. **Oral Communication:**
   COMM 120, 122, 130
2. **Written Communication:**
   ENGL 120
3. **Critical Thinking:**
   COMM 137, 145
   ENGL 122, 124
   PHIL 125, 130

AREA B – SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING

(Minimum of 9 semester units)
Minimum of 3 semester units in B1, B2 and B4. One lab course must be included (laboratory courses are underlined). Lab must correspond to its related lecture course.

1. **Physical Sciences:**
   ASTR 110, 112
   CHEM 102, 105, 113 , 115, 116, 120, 141, 142, 231, 232
   ET 110
   GEOG 120†, 121†
   GEOL 104†, 105, 110, 111
   OCEA 112, 113
   PHYC 110, 130, 131, 190, 200, 201, 202, 203, 210
2. **Life Sciences:**
   ANTH 130
   BIO 112, 122, 130, 131, 133, 134, 135, 140, 141, 141L, 152, 230, 240
   OCEA 112, 113
3. **Laboratory Activity:** This requirement is met by completing a lab course in B1 or B2. Lab courses are underlined. Lab must correspond to its related lecture course.

†GEOG 121 corresponds to either GEOG 120 or GEOL 104.

4. **Mathematics/Quantitative Reasoning:**
   BIO 215, PSY 215
   CS 240
   MATH 120, 125, 126, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285

AREA C – ARTS AND HUMANITIES

(Minimum of 9 semester units)
At least 1 course in each category.

1. **Arts:**
   ART 100, 120, 140, 141, 143, 144, 145, 146, 148, 149
   HUM 110, 120, 140
   MUS 110, 111, 115, 116, 117, 123
   THTR 110

2. Humanities:
ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 145, 220, 221, 250, 251, 254
ASL 120, 121, 140, 220, 221
ENGL 122, 201, 202, 214, 217, 221, 222, 231, 232, 236, 238, 270, 271
ETHN 111
HIST 100, 101, 105, 106,114, 115, 148
HUM 110, 111, 115, 116, 120, 140, 155
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 141, 145, 220, 221, 250, 251

AREA D – SOCIAL SCIENCES
(Minimum of 6 semester units)
Courses must be taken from at least 2 disciplinary perspectives.

ANTH 120, 140, 150, 160
CD 115, 125, 131, 145
COMM 110, 124
ECON 110, 120, 121
ETHN 107, 165
GEOG 106, 130
HED 203, 204, 251
HIST 100, 101, 105, 106, 107, 108*, 109*, 114, 115, 118*, 119*, 122*, 123*, 124, 130*, 131*, 132, 133, 148, 180*, 181*, 275, 276, 277
POSC 120, 121*, 124, 130, 140*, 165, 170
PSY 120, 125, 134, 138, 140, 150, 170, 211, 220
SOC 114, 120, 125, 130, 138, 140, 150
SPAN 145

AREA E – LIFELONG LEARNING AND SELF-DEVELOPMENT
Three semester units, not all from physical activity, from:

BIO 115
CD 125, 145
CIS 110
COUN 120, 140
ES 019ABC
HED 120, 201, 203, 251
NUTR 155, 158, 255
PSY 134, 140, 150, 220
SCI 100
SOC 125

OR

DD 214 and/or military transcripts.

AREA F – ETHNIC STUDIES
One course (Minimum of 3 semester units) is required.

ENGL 236, 238
ETHN 114, 236, 238
SOC 114

US HISTORY, CONSTITUTION AND AMERICAN IDEALS REQUIREMENT:
The California State University requires students to complete courses or examinations that address:

US-1: The historical development of American institutions and ideals; and

US-2: The Constitution of the United States and the operation of representative democratic government under that Constitution; and

US-3: The process of California state and local government.

This requirement may be fulfilled prior to transfer by completing a course or courses that satisfy all three areas (US-1, US-2, and US-3). Please review www.assist.org to see which courses at Cuyamaca College fulfill US-1, US-2 and US-3.* Courses used to satisfy this requirement may also be applied to IGETC Area 4 and/or CSU GE-Breadth Area D.

*Please note: Courses may differ between Cuyamaca and Grossmont Colleges.

CREDIT FOR PRIOR LEARNING (CPL)

Credit for prior learning may be earned for District approved courses for students who satisfactorily pass an authorized assessment. Authorized assessments may include the evaluation of approved external standardized examinations, military service/training, the evaluation of industry recognized credentials, student-created portfolios, and credit by examination. Details may be found in Administrative Procedure (AP) 4235. Students may demonstrate proficiency in a course eligible for Credit for Prior Learning and receive college credit through the approved alternative methods for awarding credit listed below:

- Achievement of a satisfactory score on an Advanced Placement (AP) examination
- Achievement of a satisfactory score on a high level International Baccalaureate (IB) examination
- Achievement of a satisfactory score on the College Level Examination Program (CLEP)
- Evaluation of military service Joint Service Transcripts (JST)
- Evaluation of industry recognized credential documentation
- Evaluation of student-created portfolios
- Satisfactory completion of an institutional examination, known as Credit by Examination, administered by the college in lieu of completion of an active course listed in the current college catalog.

Note: See AP/IB/CLEP charts for satisfactory scores.

Determination of Eligibility for Credit for Prior Learning:
(with the exception of AP/IB/CLEP – See information under External Exams):

- The student must not be on academic probation or have financial holds
- The student must have previously earned credit from the District or be currently registered in the District
- Current students must have an education plan on file
- The student must consult with the academic department to determine if credit is appropriate
- The course is listed in the current Grossmont and/or Cuyamaca College Catalog
- The student is not currently enrolled in nor received credit for a more advanced course in the same subject

Students wishing to receive CPL credit should consult with a Counselor. Credits acquired by examination are not applicable to meeting unit load requirements such as Selective Service deferment, Veterans, or Social Security benefits. Additionally, credits acquired by examination shall not be counted in determining the 12 semester hours of credit in residence required for an Associate degree. Applicable fees must be paid to the Cashier/Business Office.

EXTERNAL EXAMS CREDIT

Examinations may be used for CSU GE-Breadth and IGETC certification and for placement purposes in Mathematics and English courses. In order to receive credit, students must send official score reports to the Admissions and Records Office. The student's academic transcript will be annotated to designate unit credit awarded by external examinations. The following charts show the examinations, the total units awarded at GCCCD, CSU and UC, the specific area of general education requirements that may be cleared and the equivalent Cuyamaca course(s), if any. If a student receives External Exam credit and then takes the equivalent Cuyamaca College course, the unit credit will be deducted prior to being awarded the AA/AS degree. For exams not on this list, see the Articulation Officer.

ADVANCED PLACEMENT (AP)

As indicated in the chart below, credit is awarded for AP examinations passed with a score of 3 or above. Credit may be applied to specific general education areas and in some cases fulfill major requirements. Elective units are granted for examinations that do not fit into general education areas and/or fulfill major requirements. In the Grossmont-Cuyamaca Community College District, the manner in which credit is awarded mirrors the California State University General Education (CSU GE) Breadth certification. Transfer students should check the catalog of the four-year institution to see how AP credits are awarded outside of general education (how credits are applied toward major coursework). To obtain AP score reports visit www.collegeboard.org.

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Cuyamaca College awards general education and/or elective credit for CLEP examinations. Passing scores range from 50 and above (see chart). At the discretion of the appropriate instructional department faculty, CLEP may be used to clear major requirements. A student may earn up to a maximum of 18 units of CLEP at Cuyamaca College. Students intending to transfer should check with the transferring institution to determine their policy. Students are cautioned that CLEP policies vary among colleges. The CSU has approved the application of CLEP on GE certifications and has a 30-unit overall cap on the acceptance of CLEP credit. To obtain CLEP transcripts, visit www.collegeboard.org.

INTERNATIONAL BACCALAUREATE (IB)

Cuyamaca College grants 3-6 units for each International Baccalaureate Higher Level (HL) Subject Examination passed with an appropriate score (see chart). Examinations may be evaluated for specific course credit to satisfy a major requirement or to clear a prerequisite by the appropriate instructional department faculty. Students planning to transfer without a CSU or IGETC certification should check the catalog of the four-year institution to see how IB credits are awarded. To request IB transcripts, students may contact International Baccalaureate at www.ibo.org.

For the AP, CLEP and IB charts, the following definitions apply:

GCCCD = Grossmont-Cuyamaca Community College District

CC = Cuyamaca College

GC = Grossmont College

CSU = California State University General Education Breadth Certification

UC = University of California

IGETC = Intersegmental General Education Transfer Curriculum

CCC = California Community College General Education Advanced Placement (minimum units)

AP EXAM	TOTAL UNITS AWARDED	GENERAL EDUCATION	GCCCD MAJOR COURSES FULFILLED
Art History	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C1 or C2 IGETC: 3, Area 3A or 3B CCC: 3, Humanities	ART 140, 141
Biology	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 4	CC: 4, Area B CSU GE: 4, Area B2, B3 IGETC: 4, Area 5B, 5C CCC: 4, Natural Sciences	CC: BIO 130, 131 GC: BIO 120
Calculus AB	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 180
Calculus BC	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area A CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 280
Calculus BC/AB Subscore	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 180
Chemistry	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	CHEM 120 (Score of 3) CHEM 141 (Score of 4 or 5)
Chinese Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	GC: CHIN 120, 121
Comparative Government & Politics	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	POSC 124

AP EXAM	TOTAL UNITS AWARDED	GENERAL EDUCATION	GCCCD MAJOR COURSES FULFILLED
Computer Science A	GCCCD: 3 CSU: 3 UC: 1.3 CCC: 3	N/A	CC: CS 182 GC: CSIS 293
Computer Science AB	GCCCD: 6 CSU: 6 UC: 2.6 CCC: 3	N/A	N/A
Computer Science Principles	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC:A2 CSU: B4 IGETC: N/A	
English Language & Composition	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area A CSU GE: 3, Area A2 IGETC: 3, Area 1A CCC: 3, Language and Rationality	ENGL 120
English Literature & Composition	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 6, Area A, C CSU GE: 6, Area A2, C2 IGETC: 3, Area 1A or 3B CCC: 3, Language and Rationality or Humanities	ENGL 120, 122
Environmental Science	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	N/A
European History	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 or D IGETC: 3, Area 3B or 4 CCC: 3, Social/Behavioral Sciences or Humanities	HIST 105, 106
French Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	GC: FREN 120, 121
German Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	GC: GERM 120, 121
Human Geography	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	GEOG 130
Italian Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	GC: ITAL 120, 121
Japanese Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	GC: JAPN 120, 121
Latin	GCCCD: 6 CSU: 6 UC: 2.6 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	N/A
Macroeconomics	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	ECON 120
Microeconomics	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	ECON 121
Music Theory	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: 3, Humanities	MUS 105, 106
Physics 1: Algebra-Based	GCCCD: 4 CSU: 4 UC: 5.3 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	PHYC 110
Physics 2: Algebra-Based	GCCCD: 4 CSU: 4 UC: 5.3 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	PHYC 110
Physics B	GCCCD: 4 CSU: 6 UC: 5.3 CCC: N/A	CC: 4, Area B2 - w/lab CSU: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: N/A	N/A

AP EXAM	TOTAL UNITS AWARDED	GENERAL EDUCATION	GCCCD MAJOR COURSES FULFILLED
Physics C: Electricity & Magnetism	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	CC: Area B – w/lab GC: PHYC 240
Physics C: Mechanics	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	CC: Area B – w/lab GC: PHYC 140
Psychology	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	PSY 120
Spanish Language & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	SPAN 120, 121
Spanish Literature & Culture	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	N/A
Statistics	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 160
Studio Art - 2D Design	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 120
Studio Art - 3D Design	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 129
Studio Art - Drawing	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 3	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 124
US Government & Politics	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area D CSU GE: 3, Area D, AI US-2 IGETC: 3, Area 4 CCC: 3, Social/Behavioral Sciences	POSC 121
US History	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C or D CSU GE: 3, Area C2 or D, AI US-1 IGETC: 3, Area 3B or 4 CCC: 3, Social/Behavioral Sciences or Humanities	HIST 108, 109
World History Modern	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C or D CSU GE: 3, Area C2 or D IGETC: 3, Area 3B or 4 CCC: 3, Social/Behavioral Sciences or Humanities	HIST 100

Questions regarding the Advance Placement (AP) examination chart can be directed to Counselors. Please note that information identified by "CC" is specific to Cuyamaca College. For examinations not on this list see the Articulation Officer.

*If a student passes more than one AP examination in Calculus or Computer Science, only one examination may be applied to the baccalaureate.

*If a student passes more than one AP examination in Physics, only six units of credit may be applied to the baccalaureate and only four units of credit may be applied to a certification in General Education Breadth.

Reference: CSU Chancellor's Office Memo Code: ASA-2018-06; Systemwide Credit for External Examinations, April 11th, 2018.

CLEP EXAM	APPROVED SCORE	TOTAL UNITS AWARDED	GENERAL EDUCATION
American Government	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D IGETC: N/A
American Literature	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C CSU GE: 3 units, Area C2 IGETC: N/A
Analyzing and Interpreting Literature	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C CSU GE: 3 units, Area C2 IGETC: N/A
Biology	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area B - no lab CSU GE: 3 units, Area B2 - no lab IGETC: N/A
Calculus	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A
Chemistry	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area B - no lab CSU GE: 3 units, Area B1 - no lab IGETC: N/A
College Algebra	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A
College Algebra-Trigonometry	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A
College Composition	50	GCCCD: 3 CSU: N/A UC: N/A	CC: 3 units, Area A1 CSU GE: N/A IGETC: N/A
College Mathematics	50	GCCCD: 3 CSU: N/A UC: N/A	CC: 3 units, Area A2 CSU GE: N/A IGETC: N/A
English Composition (with or without essay)	50	GCCCD: 3 CSU: N/A UC: N/A	CC: 3 units, Area A1 CSU GE: N/A IGETC: N/A
English Literature	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C CSU GE: N/A IGETC: N/A
Financial Accounting	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
French Level I	50	GCCCD: 6 CSU: 6 UC: N/A	CC: 5 units, Area C CSU GE: N/A IGETC: N/A
French Level II	59	GCCCD: 9 CSU: 9 UC: N/A	CC: 5 units, Area C CSU GE: 3 units, Area C2 IGETC: N/A
German Level I	50	GCCCD: 6 CSU: 6 UC: N/A	CC: 5 units, Area C CSU GE: N/A IGETC: N/A
German Level II	60	GCCCD: 9 CSU: 9 UC: N/A	CC: 5 units, Area C CSU GE: 3 units, Area C2 IGETC: N/A
History: US I	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D, US-1 IGETC: N/A
History: US II	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D, US-1 IGETC: N/A
Human Growth and Development	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area E IGETC: N/A
Humanities	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C CSU GE: 3 units, Area C2 IGETC: N/A
Information Systems and Computer Applications	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
Introduction to Educational Psychology	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
Introductory Business Law	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A

CLEP EXAM	APPROVED SCORE	TOTAL UNITS AWARDED	GENERAL EDUCATION
Introductory Psychology	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D IGETC: N/A
Introductory Sociology	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D IGETC: N/A
Natural Sciences	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area B - no lab CSU GE: 3 units, Area B1 or B2 - no lab IGETC: N/A
Precalculus	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A
Principles of Accounting	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
Principles of Macroeconomics	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU GE: 3 units, Area D IGETC: N/A
Principles of Management	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
Principles of Marketing	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Elective Credit CSU GE: N/A IGETC: N/A
Principles of Microeconomics	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area D CSU: 3 units, Area D IGETC: N/A
Social Sciences and History	50	GCCCD: 3 CSU: N/A UC: N/A	CC: 3 units, Area D CSU GE: N/A IGETC: N/A
Spanish Level I	50	GCCCD: 6 CSU: 6 UC: N/A	CC: 5 units, Area C CSU GE: N/A IGETC: N/A
Spanish Level II	63	GCCCD: 9 CSU: 9 UC: N/A	CC: 5 units, Area C CSU: 3 units, Area C2 IGETC: N/A
Trigonometry	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area A2 CSU: N/A IGETC: N/A
Western Civilization I	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C or D CSU: 3 units, Area C2 or D IGETC: N/A
Western Civilization II	50	GCCCD: 3 CSU: 3 UC: N/A	CC: 3 units, Area C or D CSU: 3 units, Area D IGETC: N/A

Questions regarding the CLEP chart can be directed to Counselors. Please note that information identified as “CC” is specific to Cuyamaca College. For examinations not on this list see the Articulation Officer.

CLEP is currently not accepted for IGETC or by the UC System.

Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

If a student passes more than one CLEP test in the same language other than English, then only one examination may be applied to the baccalaureate.

At the discretion of discipline faculty, CLEP may be used to clear major requirements. A Modification of Major form must be submitted to the appropriate department chair for approval.

Reference: CSU Chancellor’s Office Memo Code: ASA-2018-06; Systemwide Credit for External Examinations, April 11th, 2018.

IB EXAM	APPROVED SCORE	TOTAL UNITS AWARDED	GENERAL EDUCATION
Biology HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area B – no lab CSU GE: 3, Area B2 – no lab IGETC: 3, 5B – no lab
Chemistry HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area B – no lab CSU GE: 3, Area B1 – no lab IGETC: 3, Area 5A – no lab
Economics HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4
Geography HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4
History (any region) HL (any language except English)	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area C or D CSU GE: 3, Area C2 or D IGETC: 3, Area 3B or 4
IB Language A: Literature (any language) HL	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC 5.3	CC: 3, Area C CSU: GE, 3, Area C2 IGETC: 3, Area 3B
IB Language B: Language and Literature (any language) HL	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area C CSU: GE, 3, Area C2 IGETC: 3, Area 3B
Language A Literature HL† (any language except English)	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B & 6A*
Language A Language and Literature HL† (any language except English)	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: 3, Area 3B & 6A*
Language B (any language) HL	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: N/A CSU: N/A IGETC: 3, Area 6A
Mathematics HL	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area A2 CSU GE: 3, Area B4 IGETC: 3, Area 2A
Physics HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area B CSU: 4, Area B1 – no lab IGETC: 3, Area 5A – no lab
Psychology HL	GCCCD: 5 CSU: 5 UC: 5	GCCCD: 3 CSU: 3 UC: 5.3	CC: 3, Area D CSU GE: 3, Area D IGETC: 3, Area 4
Theater HL	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: 3, Area C CSU GE: 3, Area C1 IGETC: 3, Area 3A

Questions regarding the International Baccalaureate (IB) examination chart can be directed to Counselors. Please note that information identified by "CC" is specific to Cuyamaca College. For examinations not on this list see the Articulation Officer.

† Please note that SDSU uses Language A HL (English) to satisfy RWS 100 and ENGL 220, see SDSU catalog "Academic Credit Through Examination" policies for more information.

*Score must be 5. All Languages including English receive IGETC 3B credit. All languages except English receive IGETC 6A credit.

Reference: CSU Chancellor's Office Memo Code: ASA-2018-06; Systemwide Credit for External Examinations, April 11th, 2018.

INDEPENDENT CALIFORNIA COLLEGES AND UNIVERSITIES

California's fully accredited independent colleges and universities provide a host of options for students planning to continue their education beyond community college.

Students who transfer to independent colleges or universities find they are given academic credit for most, if not all, of their community college studies. Virtually all institutions give full credit for general education courses and usually for other courses designated for transfer by the community college.

Requirements for independent colleges are outlined in the respective college catalogs, available upon request from the Counseling Center or Transfer Center. Transfer Center's website contains information on transfer agreements, transfer guides and articulation agreements to private and independent institutions.

COURSE IDENTIFICATION NUMBERING SYSTEM (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID designation at another community college. However, students should always go to www.assist.org to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change and because courses may be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

C-ID NUMBERS APPROVED:

Cuyamaca Course	*C-ID*
ANTH 120	ANTH 120
ANTH 130	ANTH 110
ANTH 140	ANTH 150
ART 100	ARTH 100
ART 120	ARTS 100
ART 121	ARTS 210
ART 124	ARTS 110
ART 125	ARTS 205
ART 129	ARTS 101
ART 140	ARTH 110
ART 141	ARTH 120
ART 143	ARTH 150

C-ID NUMBERS APPROVED:

Cuyamaca Course	*C-ID*
ART 148	ARTS 280
ART 230	ARTS 200
AUTO 099	AUTO 110X
AUTO 130	AUTO 150X
AUTO 140	AUTO 140X
AUTO 160	AUTO 170X
BIO 140	BIOL 110B
BIO 141, 141L	BIOL 120B
BIO 230	BIOL 190
BIO 230, 240	BIOL 135S
BIO 240	BIOL 140
BUS 110	BUS 110
BUS 120	ACCT 110
BUS 121	ACCT 120
BUS 125	BUS 120, 125
BUS 128	BUS 115
CD 123	ECE 120
CD 125	CDEV 100
CD 130	ECE 130
CD 131	CDEV 110
CD 134	ECE 220
CD 153	ECE 230
CD 212	ECE 210
CD 213	ECE 200
CHEM 115	CHEM 101
CHEM 141	CHEM 110
CHEM 141,142	CHEM 120S
CHEM 231	CHEM 150
CHEM 231, 232	CHEM 160S
CIS 110	BUS 140, ITIS 120
CIS 125	ITIS 150
CIS 263	ITIS 160
COMM 110	JOUR 100
COMM 120	COMM 130
COMM 122	COMM 110
COMM 124	COMM 150
COMM 135	COMM 170
COMM 137	COMM 140
COMM 145	COMM 120
COMM 240	COMM 160B
CS 119, 119L	COMP 112
CS 165	COMP 142
CS 181	COMP 122
CS 182	COMP 122
CS 240	COMP 152
CS 281	COMP 132
CS 282	COMP 132
ECON 120	ECON 202
ECON 121	ECON 201
ED 200	EDUC 200
ENGL 120	ENGL 100
ENGL 122	ENGL 120
ENGL 124	ENGL 105
ENGL 126	ENGL 200
ENGL 221	ENGL 160
ENGL 222	ENGL 165
ENGL 231	ENGL 130
ENGL 232	ENGL 135
ENGL 270	ENGL 140
ENGL 271	ENGL 145
ENGR 100	ENGR 110
ENGR 220	ENGR 230
ES 250	KIN 100
GD 110	ARTS 250
GEOG 106	GEOG 125
GEOG 120	GEOG 110
GEOG 121	GEOG 111
GEOG 121	GEOL 120L
GEOG 122	GEOG 160
GEOG 130	GEOG 120
GEOL 104	GEOL 120
GEOL 105	GEOG 111
GEOL 110	GEOL 100
GEOL 111	GEOL 100L
HED 120	PHS 100
HED 201	PHS 101
HED 204	PHS 102
HED 203	PHS 103
HIST 100	HIST 150
HIST 101	HIST 160
HIST 105	HIST 170

C-ID NUMBERS APPROVED:

Cuyamaca Course	*C-ID*
HIST 106	HIST 180
HIST 108	HIST 130
HIST 109	HIST 140
MATH 125	MATH 120
MATH 160	MATH 110
MATH 175	MATH 151
MATH 178	MATH 140
MATH 180	MATH 210
MATH 180, 280	MATH 900S
MATH 245	MATH 160
MATH 280	MATH 220
MATH 281	MATH 230
MATH 285	MATH 240
MATH 284	MATH 250
MATH 284, 285	MATH 910S
MUS 001	MUS 110
MUS 105	MUS 120
MUS 105	MUS 125
MUS 110	MUS 100
MUS 152	MUS 180
MUS 156	MUS 180
MUS 157	MUS 180
MUS 158	MUS 180
MUS 159	MUS 180
MUS 190	MUS 160
MUS 191	MUS 160
MUS 205	MUS 140
MUS 205	MUS 145
MUS 206	MUS 150
MUS 206	MUS 155
MUS 290	MUS 160
MUS 291	MUS 160
MUS 252	MUS 180
MUS 253	MUS 180
MUS 258	MUS 180
MUS 259	MUS 180
NUTR 255	NUTR 110
OH 121	AG-EH 116L
OH 130	AG-EH 120X
OH 220	AG-EH 132X
PHIL 110	PHIL 100
PHIL 115	PHIL 130
PHIL 140	PHIL 120
PHYC 130	PHYS 105
PHYC 130, 131	PHYS 100S
PHYC 131	PHYS 110
PHYC 190	PHYS 205
PHYC 190, 200, 210	PHYS 200S
PHYC 200	PHYS 210
PHYC 201	PHYS 205
PHYC 201, 202, 203	PHYS 200S
PHYC 202	PHYS 210
PHYC 203	PHYS 215
PHYC 210	PHYS 215
POSC 120	POLS 150
POSC 121	POLS 110
POSC 124	POLS 130
POSC 130	POLS 140
POSC 170	POLS 160
PSY 120	PSY 110
PSY 134	PSY 130
PSY 138	PSY 170
PSY 140	PSY 150
PSY 150	PSY 180
PSY 170	PSY 120
PSY 205	PSY 200
PSY 215	SOCI 125
SOC 114	SOCI 150
SOC 120	SOCI 110
SOC 125	SOCI 130
SOC 130	SOCI 115
SOC 140	SOCI 140
SPAN 120	SPAN 100
SPAN 121	SPAN 110
SPAN 220	SPAN 200
SPAN 221	SPAN 210
THTR 110	THTR 111

Associate Degree Programs and Certificates

Academic & Career Pathways

BEHAVIORAL & SOCIAL SCIENCES
Anthropology
Child Development
Education
Ethnic Studies
Political Science
Psychology
Social Work
Sociology

BUSINESS
Accounting
Business
Business Office Technology
Economics
Entrepreneurship & Small Business Management
Paralegal Studies
Real Estate

CULTURE, PEOPLE & IDEAS
Ethnic Studies
History
Kumeyaay Studies
Philosophy

ENVIRONMENTAL & APPLIED TECHNOLOGY
Automotive Technology
CADD Technology
Center for Water Studies
Computer Information Science
Environmental Health & Safety
Ornamental Horticulture
Surveying

HEALTH SCIENCE
Biology Pre-Allied Health
Kinesiology
Public Health

LANGUAGE & COMMUNICATION
American Sign Language
Arabic Studies
Communication
English
Spanish

STEM
Biological Science
Marine Biology
Chemistry
Engineering
Environmental Science
Mathematics
Physics

VISUAL & PERFORMING ARTS
Art
Graphic Design
Music

ASSOCIATE DEGREE PROGRAMS AND CERTIFICATES

Courses that satisfy a degree or certificate requirement must be completed with a "C" grade or higher (P/NP grading not accepted).

✦ ASSOCIATE DEGREE FOR TRANSFER
❖ ASSOCIATE DEGREE
◆ CERTIFICATE OF ACHIEVEMENT
✱ CERTIFICATE OF SPECIALIZATION

CUYAMACA COLLEGE OFFERS 102 ASSOCIATE DEGREES AND 86 CERTIFICATES

BEHAVIORAL & SOCIAL SCIENCES

Associate Degree for Transfer℠

ANTHROPOLOGY FOR TRANSFER (AA-T)

The AA-T in Anthropology for Transfer guides students in their quest to understand what it means to be human, and how humans make meaning in life. Students take courses from three subfields: archaeology, cultural anthropology and physical anthropology, and learn about human cultures and civilizations, past and present. The AA-T in Anthropology for Transfer is designed specifically to prepare students for transfer to a California State University, where a baccalaureate degree may be earned in Anthropology or a closely related field.

The following is required for the AA-T in Anthropology for Transfer degree:

1. 60 semester or 90 quarter CSU-transferable units;
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements;
3. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
4. Minimum grade point average (GPA) of 2.0;
5. Grade of C or better in all courses required for the major or area of emphasis.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of the core concepts of archaeology, cultural anthropology and physical anthropology;
- Demonstrate knowledge of cultural variation and diversity of perspectives, practices and beliefs found within and across cultures;
- Understand long term changes in the conditions that have shaped humans and the environments they inhabit.

Associate in Arts for Transfer Degree Requirements:

Course	*Title*	*Units*
Required Core:		
ANTH 120	Cultural Anthropology	3
ANTH 130	Introduction to Physical Anthropology	3
ANTH 140	Introduction to Archaeology	3
List A: (Select 1 course)		
MATH 160	Elementary Statistics	4
PSY 215	Statistics for the Behavioral Sciences	4
List B: (Select 1-2 courses; 3-5 units)		
BIO 140	Human Anatomy	5
PSY 205	Research Methods in Psychology	3
GEOL 110	Planet Earth	3
and		
GEOL 111	Planet Earth Laboratory *(must be taken if GEOL 110 is selected)*	1
GEOL 104	Earth Science	3
and		
GEOG 121	Physical Geography: Earth Systems Laboratory *(must be taken if GEOL 104 is selected)*	1
List C: (Select 1 course)		
MUS 116	Introduction to World Music	3
RELG 120	World Religions	3
	Total Required	19-21
	Double-Counted Units	15-16
	General Education Requirements (CSU GE or IGETC-CSU)	37-39
	Electives	15-20
	Total Degree Units	60

CHILD DEVELOPMENT

Associate Degree for Transfer℠

I. CHILD AND ADOLESCENT DEVELOPMENT FOR TRANSFER (AA-T)

The Associate in Arts in Child and Adolescent Development for Transfer is designed to provide students with the lower division coursework needed to transfer to a California State University for a bachelor's degree in Child Development or Child and Adolescent Development or a closely related field.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate the key developmental concepts and teaching strategies into a cogently articulated philosophy of child and adolescent education and care.
- Employ curriculum that is well planned, developmentally appropriate and based on the interests and needs of children and adolescents.
- Implement effective guidance strategies with children and adolescents.
- Demonstrate the ability to plan programs for children and adolescent which enhance their physical, intellectual, emotion and social development.

Associate in Arts for Transfer Degree Requirements:

Course	*Title*	*Units*
Required Core:		
CD 125	Child Growth and Development	3
PSY 120	Introductory Psychology	3
MATH 160	Elementary Statistics	4
List A: (Choose 9 units)		
CD 131	Child, Family and Community	3
BIO 130	General Biology I	3
CD 130	Curriculum: Design and Implementation	3
CD 213	Observation and Assessment	3
	Total Required	19
	Double-Counted Units	12-18
	General Education Requirements (CSU GE or IGETC-CSU)	37-39
	Electives	14-20
	Total Degree Units	60

Associate Degree for Transfer℠

II. EARLY CHILDHOOD EDUCATION FOR TRANSFER (AS-T)

The AS-T in Early Childhood Education is designed to prepare students planning to transfer to a California State University for a bachelor's degree in Child Development or Early Childhood Education by providing lower division course preparation. This degree facilitates a clearly defined career pathway for students wishing to pursue a career in early childhood development and care.

The following is required for the AS-T in Early Childhood Education for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" OR better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: if following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate the key developmental concepts and teaching strategies into a cogently articulated philosophy of early childhood education and care.
- Employ appropriate classroom organizational and management techniques in a variety of early childhood education settings, including the implementation of curriculum that is well planned, developmentally appropriate, and based on the interests and needs of the children.
- Survey, assemble, and expand curricula resources for use in specific early childhood classrooms and centers.
- Apply and implement effective and sensitive discipline and guidance strategies directly with children.
- Clearly demonstrate the ability to plan child development programs which deliberately intend to advance, stimulate or otherwise enhance children's physical, intellectual, emotional and social development in ways which are appropriate to the children's developmental level.
- Assess their own professional competence and progress and develop a plan for professional career steps and growth.

Associate in Science Degree Requirements:

Course	Title	Units
CD 123	Principles and Practices of Programs and Curriculum for Young Children	3
CD 125	Child Growth and Development	3
CD 130	Curriculum: Design and Implementation	3
CD 131	Child, Family and Community	3
CD 134	Health, Safety and Nutrition of Young Children	3
CD 153	Teaching in a Diverse Society	3
CD 212	Practicum in Early Childhood Education	3
CD 213	Observation and Assessment	3
	Total Units for Major (6 units may be double-counted with GE)	24
	Total Units for CSU GE or IGETC-CSU	37-39
	Total Transferable Elective Units	3-5
	Total Units for Degree	60

III. CHILD DEVELOPMENT

The Child Development curriculum is designed to prepare students for employment as teachers, directors and aides in preschools and child care centers, including infant/toddler and extended day facilities. The curriculum is also appropriate for parents, administrators, health care professionals, and others working with children. Course work meets the educational components of the Department of Social Services license regulations for child care programs. The degree meets the Title 5 Department of Education educational requirements of the Assistant, Associate, Teacher, Master Teacher and Site Supervisor Child Development Permits. The curriculum meets lower division course preparation for students planning to obtain a bachelor's degree in Child Development at most CSU campuses.

The Department of Social Services Title 22 minimum requirements to be a preschool teacher are 12 units in Child Development which must include: CD 125, CD 131, one curriculum class (CD 123, 126, 127, 128, 129 or 130), and one additional CD course (3 units).

The California Department of Education Title 5 minimum education requirements at the Teacher level on the Child Development Matrix are 24 units in Child Development which must include: CD 125, CD 131, one curriculum class (CD 123, 126, 127, 128, 129 or 130), 12 additional units in CD, and 16 units of general education which must include one degree applicable course in each of four general education categories: English/Language Arts; Math or Science; Social Sciences; Humanities and/or Fine Arts.

The California Community Colleges' Curriculum Alignment Project (CAP) consolidates and clarifies the transfer requirements for teachers of young children in the state of California. The eight CAP courses, CD 123, 125, 130, 131, 134, 153, 212 and 213, provide a strong foundation for transfer to four-year programs in Child Development of Early Childhood Education.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Integrate the key developmental concepts and teaching strategies into a cogently articulated philosophy of early childhood education and care.
- Employ appropriate classroom organizational and management techniques in a variety of early childhood education settings, including the implementation of curriculum that is well planned, developmentally appropriate, and based on the interests and needs of the children.
- Survey, assemble, and expand curricula resources for use in specific early childhood classrooms and centers.
- Apply and implement effective and sensitive discipline and guidance strategies directly with children.
- Clearly demonstrate the ability to plan child development programs which deliberately intend to advance, stimulate or otherwise enhance children's physical, intellectual, emotional and social development in ways which are appropriate to the children's developmental level.
- Assess their own professional competence and progress and develop a plan for professional career steps and growth.

CAREER OPPORTUNITIES

*Adoption Counselor
Camping Guide
Child Care Specialist
*Child Psychologist
Curriculum Development
*Development Specialist (Child, Adolescent and Family)
*Early Intervention Aide
*Educational Consultant
Infant/Toddler Teacher
Outdoor Education Specialist
Preschool Director
Preschool Teacher
Recreation Leader
*Recreation Specialist
School Age Child Care Teacher
*Social Service Specialist
Special Education Assistant – Children with Special Needs

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Core Curriculum:

Course	Title	Units
CD 106	Practicum: Beginning Observation and Experience	1
CD 123	Principles and Practices of Programs and Curriculum for Young Children	3
CD 125	Child Growth and Development	3
CD 126	Art for Child Development	3
CD 127	Science and Mathematics for Child Development	3
CD 128	Music and Movement for Child Development	3
CD 129	Language and Literature for Child Development	3
CD 131	Child, Family and Community	3
CD 134	Health, Safety and Nutrition of Young Children	3
CD 141	Working with Children with Special Needs	3
or		
CD 210	Working with Young Children with Challenging Behaviors	3
CD 153	Teaching in a Diverse Society	3
		31

Areas of Emphasis:

A. INFANTS AND TODDLERS

CD 124	Infant and Toddler Development	3
CD 132	Observation and Assessment: Field Experience Seminar	3
CD 143	Responsive Planning for Infant/Toddler Care	3
CD 170	Practicum: Field Experience with Infants and Toddlers	2
		11
	Total Required Including Core Courses	42
	Plus General Education Requirements	

B. PRESCHOOL CHILDREN

CD 130	Curriculum: Design and Implementation	3
CD 132	Observation and Assessment: Field Experience Seminar	3
CD 133	Practicum–Field Experience: Student Teaching	2
		8
	Total Required Including Core Courses	39
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the courses required for the major including an area of emphasis qualify for a Certificate in Child Development in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATES OF SPECIALIZATION:

ADMINISTRATION

This certificate offers specific training for individuals who are seeking a position as the director of a California Title 22 early childhood development program. Students who complete the requirements below qualify for a Certificate in Child Development: Administration. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Develop and manage the budget for a child care or preschool program.
- Incorporate regulatory laws into planning for a preschool program.
- Develop and apply school policies and procedures, including those related to personnel and families.

CAREER OPPORTUNITIES

Students may find positions as the director or assistant director of early childhood programs licensed by California Title 22 for children from 2-5 years. Students wanting to direct programs that include infants and toddlers from birth-2 years should take a Child Development course specifically related to infants and toddlers (CD 124 or 143).

Certificate Requirements

Course	Title	Units
CD 125	Child Growth and Development	3
CD 131	Child, Family and Community	3
		6

Select one of the following:

CD 126	Art for Child Development	3
CD 127	Science and Mathematics for Child Development	3
CD 128	Music and Movement for Child Development	3
CD 129	Language and Literature for Child Development	3
		3

Select one of the following:

CD 124	Infant and Toddler Development	3
CD 136	Adult Supervision	3
CD 143	Responsive Planning for Infant/Toddler Care	3
		3

Select one of the following:

CD 137	Administration of Child Development Programs I	3
CD 138	Administration of Child Development Programs II	3
		3
	Total Required	15

EARLY CHILDHOOD INTERVENTION

This certificate prepares students for entry-level positions and greater opportunities for advancement in the early childhood field. It is designed to demonstrate an area of expertise in working with young children with special needs in typical early childhood programs or those specifically designed for young children with special needs.

Program Learning Outcomes

Upon completion of this certificate, students will be able to:

- Observe and document specific behaviors, skills, and interests of young children.
- Plan and implement schedule, curriculum, and guidance strategies adapted for a young child with special needs.

Career Opportunities

Students may find employment as an inclusion specialist, inclusion aide, or intervention assistant in a wide variety of programs serving young children with special needs. These programs include but are not limited to corporate child care, Head Start, State Preschools, special day classes, intervention programs, home visit programs, community-based programs such as park, recreation and camping programs, and faith-based early childhood programs.

Certificate Requirements

Course	*Title*	*Units*
CD 125*	Child Growth and Development	3
CD 134	Health, Safety and Nutrition of Young Children	3
CD 141	Working with Children with Special Needs	3
		9

Select two of the following:

CD 126*	Art for Child Development	3
CD 127*	Science and Mathematics for Child Development	3
CD 128*	Music and Movement for Child Development	3
CD 129*	Language and Literature for Child Development	3
CD 131*	Child, Family and Community	3
CD 145	Child Abuse and Family Violence in Our Society	3
CD 210	Working with Children with Challenging Behaviors	3
	Total Required	15

*Meets the educational components of the Department of Social Services license regulations for child care programs.

At least 50% of the units required for the Certificate of Specialization must be completed at Cuyamaca College.

ELEMENTARY EDUCATION

Associate Degree for Transfer℠

I. ELEMENTARY TEACHER EDUCATION FOR TRANSFER (AA-T)

The Associate in Arts in Elementary Teacher Education for Transfer (AA-T in Elementary Teacher Education) is designed to provide lower division preparation for Liberal Arts, Liberal Studies, Integrated Teacher Education, or a similar major at a baccalaureate institution. It is an interdisciplinary program that provides students with a foundation of knowledge in the areas of English composition, oral communication, physical and life sciences, social sciences, arts and humanities, and critical thinking. Transfer students earning the AA-T in Elementary Teacher Education will receive a broad, general education focus that will prepare them to teach a variety of subjects at the elementary school level.

The following is required for the AA-T in Elementary Teacher Education for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate interpersonal skills in a diverse setting.
- Demonstrate effective communication in teaching and learning environments.
- Use arithmetical, algebraic, geometric and statistical methods to solve problems.
- Describe general principles of the political institutions and government of the United States.
- Assess how social issues are influenced by geographical and historical processes.
- Analyze basic concepts of physical and biological science to evaluate scientific information and solve scientific problems.
- Analyze the principle elements of representative examples of art, architecture, literature, theater, philosophy, music, dance, film, or other relevant areas of cultural and/or intellectual creative.
- Demonstrate an awareness of the historical and philosophical context of representative areas, movements, media, works, or styles of cultural and/or intellectual creativity.
- Demonstrate the ability to write effectively.
- Organize thoughts and ideas in both oral and written format.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1
CD 125	Child Growth and Development	3
CHEM 115	Fundamentals of Chemistry	4
COMM 122	Public Speaking	3
ED 200	Teaching as a Profession	3
ENGL 120	College Composition and Reading	3
ENGL 122	Introduction to Literature	3
GEOG 106	World Regional Geography	3
GEOG 121	Physical Geography: Earth Systems Laboratory	1
GEOL 104	Earth Science	3
HIST 100	Early World History	3
HIST 108	Early American History	3
MATH 125	Structure and Concepts of Elementary Mathematics I	3
PHYC 110	Introductory Physics	4
POSC 121	Introduction to U.S. Government and Politics	3
		46

List A

ENGL 124	Advanced Composition: Critical Reasoning and Writing	3

List B: Select one:

ART 100	Art Appreciation	3
MUS 110	Great Music Listening	3
THTR 110	Introduction to the Theatre	3
		3

List C: Select eight units:

Any course in List B not selected		3
ARBC 121	Arabic II	5
ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
ASL 121	American Sign Language II	4
COMM 120	Interpersonal Communication	3
ES 253	Physical Education in Elementary Schools	3
FREN 121	French II	5
HED 105	Health Education for Teachers	1
ITAL 121	Italian II	5
MATH 126	Structure and Concepts of Elementary Mathematics II	3
MUS 118	Introduction to Music	4
PHIL 125	Critical Thinking	3
PHIL 130	Logic	3
PHIL 140	Problems in Ethics	3
RELG 120	World Religions	3
RELG 130	Scriptures of World Religions	3
SPAN 121	Spanish II	5
		8

Total Units for Major	60
Total Units for CSU GE or IGETC-CSU General Education Requirements (all met)	37-39
Total Transferable Elective Units	0
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Liberal Studies Generalist Education.

II. ELEMENTARY EDUCATION

This degree program is designed to provide lower division preparation for transfer to San Diego State University as a Liberal Studies major. Because the degree emphasizes a strong general education approach, it may be an appropriate major for a variety of career options. Students are encouraged to refer to the San Diego State University catalog and/or consult with an academic advisor before selecting the various options listed below. Upon completion, students may request certification of lower division general education course work required by the California State University system. Students interested in transferring to another college or university should check the requirements of that institution.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate global awareness and cultural sensitivity.
- Demonstrate interpersonal skills in a diverse setting.
- Demonstrate effective communication in teaching and learning environments.
- Demonstrate technological awareness.
- Be prepared to request certification of lower division general education course work required by the California State University system.

CAREER OPPORTUNITIES

*Administrator
Audiovisual Specialist
School Clerical Worker
*Counselor
*Educational Consultant
*Educational Psychologist
*Educational Therapist
*Educational Writer
Food Service
*Guidance Worker
*Librarian
Library Technician
*Social Psychologist
*Speech Pathologist/Audiologist
*Teacher
Teacher's Aide
Tutor

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*

COMPOSITION, ORAL COMMUNICATION, AND LITERATURE

1. Composition (minimum six units)

ENGL 120	College Composition and Reading	3
and one of the following:		
COMM 137	Critical Thinking in Group Communication	3
COMM 145	Argumentation	3
ENGL 124*	Advanced Composition: Critical Reasoning and Writing	3
PHIL 125	Critical Thinking	3
PHIL 130	Logic	3

*Preferred

2. Communication (minimum three units)

COMM 120	Interpersonal Communication	3
COMM 122	Public Speaking	3

3. Literature (minimum three units)

ENGL 122	Introduction to Literature	3
ENGL 270	World Literature I	3
ENGL 271	World Literature II	3

MATHEMATICS AND SCIENCES

4. Mathematics

MATH 125	Structure and Concepts of Elementary Mathematics I	3
MATH 126	Structure and Concepts of Elementary Mathematics II	3

5. Biological Sciences

BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1

6. Physical Sciences

GEOL 104	Earth Science	3
GEOG 121/GEOL 105	Physical Geography: Earth Systems Laboratory or Physical Geology: Earth Systems Laboratory	1

SOCIAL SCIENCE AND HISTORY

7. Global Perspective

GEOG 106	World Regional Geography	3

8. American Institutions (minimum six units, choose one course from each category):

A:

HIST 108	Early American History	3
HIST 118	U.S. History: Chicano/Chicana Perspectives I	3
HIST 130	U.S. History and Cultures: Native American Perspectives I	3
HIST 180	U.S. History: Black Perspectives I	3

B:

HIST 109	Modern American History	3
HIST 119	U.S. History: Chicano/Chicana Perspectives II	3
HIST 131	U.S. History and Cultures: Native American Perspectives II	3
HIST 181	U.S. History: Black Perspectives II	3
POSC 121	Introduction to U.S. Government and Politics	3

9. Civilizations

HIST 100	Early World History	3

VISUAL AND PERFORMING ARTS/HUMANITIES

10. Music

MUS 118	Introduction to Music	4

11. Art/Humanities

ART 100	Art Appreciation	3

12. Human Growth and Development (choose one option):

Option I:

CD 125	Child Growth and Development	3

Option II:

PSY 120	Introductory Psychology	3
and		
PSY 150	Developmental Psychology	3

13. General Education/Humanities (choose one option):

Option I:
ARBC 121, ASL 121, FREN 121, ITAL 121 or SPAN 121 4-5

Option II:
PHIL 140 or RELG 120 or RELG 130 (choose this option only if 3 years of foreign language have been taken in high school) 3

Option III:
ARBC 220, ASL 220, FREN 220, ITAL 220 or SPAN 220 (choose this option only if 3 years of foreign language have been taken in high school) 4-5

14. Additional Requirements

ED 200	Teaching as a Profession	3
ES 253	Physical Education in Elementary Schools	3
HED 105	Health Education for Teachers	1
ES Activity	(At least two courses marked with an asterisk)	2-3
	Total Required	60-66

Recommended Elective:

PSC 100†	Physical Science for Elementary Education	3

†Offered at Grossmont College; required for major at SDSU

ETHNIC STUDIES

Ethnic Studies is a dynamic academic discipline and community that provides an understanding of the history, culture, and contributions of African Americans, Asian Americans, Latino/a/x Americans, Middle Eastern Americans, and Native Americans. Courses introduce students to the concepts of race and ethnicity, how race and ethnicity intersect with other forms of identity, and the role of power and inequality in the United States. It is an interdisciplinary degree, drawing from the arts, English, history, humanities, Kumeyaay studies, political science, sociology, and others. Ethnic Studies faculty foster community and promote civic engagement and social justice through a variety of panels, presentations, and field trips.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Interpret and evaluate evidence by analyzing biases, patterns, trends, and relationships.
- Evaluate and apply subject matter to students' lived experiences and current events.
- Analyze how power and privilege operate in society, through the categories of race, class, gender, ethnicity, and sexuality.
- Develop and support arguments with evidence, including academic and organic (i.e. cultural, traditional, and experiential).
- Research and explore career options and/or obtain experience in a career field.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
ETHN/HIST 107	History of Race and Ethnicity in the U.S.	3
ETHN/HUM 111	Culture, Art, and Ideas of the United States	3
ETHN/SOC 114	Introduction to Race & Ethnicity	3
		9

List A: Select two of the following:

ETHN/HIST 118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN/HIST 119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN/HIST 130	U.S. History and Cultures: Native American Perspectives I	3
ETHN/HIST 131	U.S. History and Cultures: Native American Perspectives II	3
ETHN/HIST 132	Kumeyaay History I: Precontact – 1845	3
ETHN/HIST 133	Kumeyaay History II: 1846 – Present	3
ETHN/HIST 180	U.S. History: Black Perspectives I	3
ETHN/HIST 181	U.S. History: Black Perspectives II	3
		6

List B: Select two of the following:

ETHN/ENGL 236	Chicana/o Literature	3
ETHN/ENGL 238	Black Literature	3
ETHN/POSC 165	Introduction to the Politics of Race and Gender	3
ETHN/POSC 166	Introduction to Native American Politics and Policy	3
ETHN/SOC 150	Latinx Sociology	3
		6

Total Required 21
Plus General Education Requirements

GENERAL STUDIES: SOCIAL AND BEHAVIORAL SCIENCES

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS
To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)

AND

II. Choose a minimum of 18 units from one Area of Emphasis:

- Social and Behavioral Sciences

The Associate in Arts in General Studies with an Emphasis in Social and Behavioral Sciences will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study and understanding of human behavior. Students will evaluate and interpret human societies; the institutions, organizations and groups that form them; the ways in which individuals and groups relate to one another; and various approaches and methodologies of the disciplines. Students must complete a minimum of three units in Social Science and three units in Behavioral Science. The remaining twelve units may be taken from either category.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Describe general principles of the political institutions and government of the United States.
- Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
- Evaluate the ways people act and interact in cultures, societies and social subgroups.
- Assess how social issues are influenced by geographical and historical processes.
- Apply knowledge of social and behavioral sciences theories and scientific methods in an assessment of real-world problems.

Social Science
ANTH 120, 140
ARBC 145
BIO 134
CD 145
ECON 110, 120, 121
ETHN 107, 114, 118, 119, 130, 131, 132, 133, 150, 165, 166, 180, 181
GEOG 106, 122, 130
HIST 100, 101, 105, 106, 107, 108, 109, 118, 119, 122, 123, 124, 130, 131, 132, 133, 148, 180, 181, 275, 276, 277
POSC 120, 121, 124, 130, 140, 165, 166, 170
SOC 114, 120, 125, 130, 138, 140, 150
SPAN 145

Behavioral Science
CD 115, 125, 131
COMM 110, 124
HED 120, 201, 203, 204, 251
NUTR 158
PSY 120, 125, 134, 138, 140, 150, 170, 201, 211, 220

Associate Degree for Transfer℠

POLITICAL SCIENCE FOR TRANSFER (AA-T)

The AA-T in Political Science for Transfer is designed to prepare students to transfer to a California State University (CSU) with the intent of earning a Bachelor of Arts degree in Political Science.

The following is required for the AA-T in Political Science for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Remember the major concepts of subfields of political science and their relevance to political behavior and political institutions across diverse communities and cultures.
- Understand the historical roots and major theories, conceptualizations, operationalizations, and measurements utilized in political science and its subfields from multiple perspectives.
- Apply the scientific method to explain political behavior and political institutions.
- Analyze the application of political science's abstract theories, empirical regularities, and public policy applications towards civic engagement domestically and internationally.
- Evaluate how concepts of political actors, networks, and status quo are theoretically and empirically analyzed and their application across diverse communities and cultures.
- Create a professional research project that uses the scientific method and follows ethical guidelines to analyze political phenomenon and/or a public policy project that utilizes data, geographic information systems, policy, and communication analysts' perspectives.

Career Opportunities:
Students who earn an AA-T in Political Science from Cuyamaca College will be prepared for entry level positions such as a:

- Staff member to an elected official: local (City Councilor or Mayor), state (i.e. Statewide constitutional official, State Senator, State Assembly Member), or federal (i.e. U.S. Senator or Member of Congress)
- Staff member to an appointed official: local (i.e. City Manager or County Chief Executive Officer), regional (i.e. San Diego Association of Governments), or state (i.e. California State Water Resources Control Board Commissioner)
- Staff member in public, private, or non-profit sector's external affairs, government affairs, or regulatory affairs department
- Intern with an international government or non-governmental organization or institution
- Research assistant to a professor at a 4-year university, or a researcher at a public policy think tank, or in an institutional research department

Associate in Arts Degree Requirements:
Core Curriculum:

Course	*Title*	*Units*
POSC 121	Introduction to U.S. Government and Politics	3

List A: Select three of the following:

POSC 120	Introduction to Politics and Political Analysis	3
POSC 124	Introduction to Comparative Government and Politics	3
POSC 130	Introduction to International Relations	3
POSC 170	Introduction to Political Science Research Methods	3
		9

List B: Select two of the following:

POSC 140	Introduction to California Governments and Politics	3
MATH 160	Elementary Statistics	4
or		
PSY 215	Statistics for the Behavioral Sciences	4

Any course from List A not selected above 3
6-7

Total Units for Major (9 units may be double-counted with GE) 18-19
Total Units for CSU GE Breadth or IGETC-CSU 39-37
Total Transferable Elective Units 11-12/13-14
Total Units for Degree 60

Associate Degree for Transfer℠

PSYCHOLOGY FOR TRANSFER (AA-T)

This degree program is designed to present students with a broad base understanding of human behavior so that they may explore human thought and behavior, and various methodologies. Students completing this degree may be interested in pursuing careers in research, counseling, teaching, and other behavioral science professions.

The following is required for the AA-T in Psychology for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
- Understand and apply basic research methods in psychology, including research design, data analysis, and interpretation.
- Respect and use critical and creative thinking, skeptical inquiry, and, when possible, the scientific approach to solve problems related to behavior and mental processes.
- Understand and apply psychological principles to personal, social, and organizational issues.
- Weigh evidence, tolerate ambiguity, act ethically, and reflect other values that are the underpinnings of psychology as a discipline.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
PSY 120	Introductory Psychology	3
PSY 205	Research Methods in Psychology	3
PSY 215	Statistics for the Behavioral Sciences	4
		10

List A: Select one of the following:

BIO 130	General Biology I	3
PSY 140	Physiological Psychology	3
		3

List B: Select one of the following:

PSY 138	Social Psychology	3
PSY 150	Development Psychology	3
PSY 211	Cognitive Psychology	3
Any course not selected above		3
		3

List C: Select one of the following:

PSY 125	Cross-Cultural Psychology	3
PSY 134	Human Sexuality	3
PSY 220	Learning	3
Any course not selected above		3
		3

Total Units for Major (15 units may be double-counted with GE)	19
Total Units for CSU GE Breadth or IGETC-CSU	39/37
Total Transferable Elective Units	17/19
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Psychology (Applied)

SOCIAL WORK

This degree offers lower division preparation for students who wish to pursue a bachelor's degree in social work. The program is designed to prepare students for transfer to four-year social work programs.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Apply critical thinking to the research, effects and planning in the field and practice of social work.
- Investigate social worker duties in dealing with a wide variety of difficult social situations including discrimination, oppression, maltreatment, poverty and injustice.
- Analyze various situations and determine the proper role of a social worker and the various factors influencing the situation.

CAREER OPPORTUNITIES

*Administration
*Child Welfare
Clinical:
*Counseling, Therapy
Community Organizations:
*Advocacy, Politics, Education
*Criminal Justice/Corrections
*Developmental Disabilities
*Gerontology
*Health Care
Occupational:
*Counseling
*Organizational Development
*Teaching
*Wellness Promotion
*Human Resources
Public Welfare:
*Social Work
*Research

*Bachelor degree or higher recommended

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
BIO 130	General Biology I	3
ECON 120	Principles of Macroeconomics	3
or		
ECON 121	Principles of Microeconomics	3
HED 201	Introduction to Public Health	3
MATH 160	Elementary Statistics	4
or		
PSY 215	Statistics for the Behavioral Sciences	4
or		
BIO 215	Statistics for Life Sciences	3
PSY 120	Introductory Psychology	3
SOC 120	Introductory Sociology	3
SW 110	Social Work Fields of Service	3
SW 120	Introduction to Social Work	3
	Total Required	24-25
	Plus General Education Requirements	

Associate Degree for Transfer℠

SOCIOLOGY FOR TRANSFER (AA-T)

This degree program is designed to provide students with a broad understanding of human interaction, social processes, social structures, and tools of sociological investigation. Students completing this degree may be interested in pursuing careers in teaching, research, social work, and other behavioral science professions.

The following is required for the AA-T in Sociology for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Evaluate society and make appropriate suggestions for improvement directed at social change.
- Analyze and interpret the diversity of social experience using a sociological perspective.
- Engage in critical thinking, analysis and problem solving about social issues.
- Employ theoretical and methodological approaches to sociological observations of everyday life.
- Evaluate the implications of multicultural diversity and global interdependence.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
MATH 160	Elementary Statistics	4
PSY 138	Social Psychology	3
SOC 120	Introductory Sociology	3
SOC 125	Marriage, Family and Alternative Lifestyles	3
SOC 130	Contemporary Social Problems	3
		16

List A: Select one of the following:

ANTH 120	Cultural Anthropology	3
PSY 120	Introductory Psychology	3
		3

Total Units for Major	19
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	3
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Sociology B.A.

UNIVERSITY STUDIES: SOCIAL AND BEHAVIORAL SCIENCES

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

REQUIREMENTS:

I. California State University (CSU) General Education Breadth

1. Complete CSU General Education Breadth (see Degree Requirements and Transfer Information section).
2. Earn a grade of "C" or better in 30 of the required 39 semester units of general education to include all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Credit earned through external examinations, i.e., AP, will be applied towards general education in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on a CSU certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable CSU transferable semester units.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

OR

II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Degree Requirements and Transfer Information section.
2. Earn a grade of "C" or better in all IGETC courses.
3. Credit earned through external examinations, i.e., AP, will be applied in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on an IGETC certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable UC transferable semester units for UC University Studies.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

AND

III. Area of Emphasis

A. Business and Economics
B. Communication and Language Arts
C. Humanities and Fine Arts
D. Science and Mathematics
E. Social and Behavioral Sciences

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the associate degree. Courses that are not UC-transferable will not be used in the UC University Studies Area of Emphasis Degrees. Completion of the University Studies degree does not guarantee admission to a four-year institution.

Courses for the Associate in Arts in University Studies with an Emphasis in Social and Behavioral Sciences focus on the study and understanding of human behavior. Students will evaluate and interpret human societies; the institutions, organizations, and the groups that form them; the ways in which individuals and groups relate to one another; and various approaches and methodologies of the disciplines. Students completing this area may be interested in the following baccalaureate majors: anthropology, child development, education, history, nutrition, political science, psychology, social work, and sociology. Students must complete a minimum of six units in Social Science and six units in Behavioral Science. The remaining six units may be taken from either category.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe general principles of the political institutions and government of the United States.
- Demonstrate an understanding and appreciation of social, political, and economic institutions within a historical perspective.
- Evaluate the ways people act and interact in cultures, societies and social subgroups.
- Assess how social issues are influenced by geographical and historical processes.
- Apply knowledge of social and behavioral sciences theories and scientific methods in an assessment of real-world problems.

Social Science

ANTH 120, 140
BIO 134
ECON 110, 120, 121
GEOG 106, 130
HIST 100, 101, 105, 106, 108, 109, 118, 119, 122, 123, 130, 131, 132, 180, 181, 275, 276, 277
POSC 120, 121, 124, 130, 140, 170*
SOC 114*, 120, 125, 130, 140*
SPAN 145

Behavioral Science

CD 115, 125, 131, 145
COMM 110, 124
HED 120, 201, 203, 204, 251*
NUTR 158
PSY 120, 125, 134, 138, 140, 150, 170, 201*, 211*, 220

*Course not UC-transferable

BUSINESS

ACCOUNTING

This degree program is designed to prepare students to enter the workforce as accounting technicians or tax technicians. The curriculum is supported by related business courses and a strong general education program for students interested in qualifying for responsible positions in accounting. *Designed for a two-year degree or certificate. Students interested in pursuing a bachelor's degree in accounting should consult the catalog of the transfer institution for specific requirements.*

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use personal and ethical frameworks to respond to ethical dilemmas.
- Articulate the role of accounting within economic or industry environments through effective communication.
- Demonstrate analytical and information technology skills needed to solve business problems or give recommendations to improve business processes.

CAREER OPPORTUNITIES

*Auditor
*Budgeter
*Bank Examiner
Bookkeeper
*Cost Accountant
*Certified Accountant
*Controller
Credit Card Clerk
Securities Clerk
*Systems Analyst
*Tax Specialist/Accountant
*Treasurer

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BUS 120	Financial Accounting	4
BUS 121	Managerial Accounting	4
BUS 122	Intermediate Accounting	4
BUS 124	Auditing	3
BUS 125	Business Law: Legal Environment of Business	3
BUS 128	Business Communication	3
BUS 150	Individual Income Tax Accounting	3
BUS 162	Analysis of Financial Statements	3
BUS 176	Computerized Accounting Applications	2
CIS 110	Principles of Information Systems	4
	Total Required	33
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Accounting. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

BOOKKEEPING CERTIFICATE

This certificate is for students who need very specific training in the area of bookkeeping, either to obtain the necessary skills for an entry level office position, start their own business, or provide technical competence for advancement within the office environment.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Apply bookkeeping concepts, principles, standards and processes.
- Demonstrate information technology skills as they apply to today's business environment to solve business problems and to communicate those solutions.
- Use personal and ethical frameworks to respond to ethical dilemmas.

Certificate Requirements:

Course	Title	Units
BOT 123-125	Comprehensive Excel Levels I-III	3
BOT 174	Computer Concepts and Applications	3
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 128	Business Communication	3
or		
BUS 125	Business Law	3
BUS 129	Payroll Accounting and Business Taxes	2
BUS 176	Computerized Accounting Applications	2
	Total Required	16-17

Note: BUS 109 may be taken instead of BUS 120 for the Bookkeeping certificate only.

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Bookkeeping. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

BUSINESS

Associate Degree for Transfer℠

I. BUSINESS ADMINISTRATION FOR TRANSFER (AS-T)
This program is designed to provide students with the common core of lower division courses required to transfer and pursue a baccalaureate degree in Business Administration. This includes business degrees with options such as accounting, finance, human resources management, international business, management, operations management, and marketing. This major aligns with the California State University (CSU) Bachelor of Science in Business Administration.

The following is required for the AS-T in Business Administration for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Recognize and appropriately respond to ethical and legal concerns relating to human resource and organizational management.
- Identify and analyze business problems or entrepreneurial opportunities and effectively communicate recommendations for courses of actions.

Associate in Science Degree Requirements:

Core Curriculum:

Course	Title	Units
BUS 120	Financial Accounting	4
BUS 121	Managerial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
ECON 120	Principles of Macroeconomics	3
ECON 121	Principles of Microeconomics	3
		17

List A: Select one of the following:

MATH 160*	Elementary Statistics	4
MATH 178*	Calculus for Business, Social and Behavioral Sciences	4
		4

List B: Select two of the following

BUS 128*	Business Communication	3
CIS 110	Principles of Information Systems	4
Any course from List A not selected above*		4
		7-8

Total Units for Major (9 units may be double-counted with GE)	28-29
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	1
Total Units for Degree	60

*Students planning to transfer to SDSU are strongly encouraged to complete Math 160, Math 178, and BUS 128.

Please note: SDSU accepts this degree for students transferring into Business Administration (Financial Services) or Business Administration (General) majors.

II. BUSINESS ADMINISTRATION
This degree program is designed to provide students who choose to work toward a bachelor's degree a well-balanced introduction to a professional career in business. The curriculum fulfills the lower division requirements for most majors in the School of Business Administration at San Diego State University and is typical of requirements at other four-year schools. For specific requirements, transfer students should consult the catalog of their selected institution.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Apply accounting concepts and methods to interpret financial statements for evaluating the financial position and performance of organizations.
- Recognize and appropriately respond to ethical and legal concerns relating to human resource and organizational management.
- Identify and analyze business problems or opportunities and effectively communicate recommendations for courses of actions.

CAREER OPPORTUNITIES
- *Advertising/Marketing Manager
- *Agricultural Marketing Specialist
- *Banker
- *Broker
  Consultant
- *Computer Operations Specialist
  Credit Investigator
- *Economic Forecaster
- *Financial Analyst
- *Hospital Administrator
  Import/Export Agent
- *Market Research Analyst
- *Personnel Manager
  Real Estate Broker/Agent
  Retail Manager
- *Securities Analyst/Trader

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	Title	Units
BUS 120	Financial Accounting	4
BUS 121	Managerial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
BUS 128	Business Communication	3
CIS 110	Principles of Information Systems	4
ECON 120	Principles of Macroeconomics	3
ECON 121	Principles of Microeconomics	3
MATH 160	Elementary Statistics	4
MATH 178	Calculus for Business, Social and Behavioral Sciences	4
	Total Required	32
	Plus General Education Requirements	

Recommended Elective: BUS 156

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Business Administration. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. BUSINESS–GENERAL
This degree program is designed to develop and foster those skills and understandings which can be utilized for employment in an increasingly challenging business environment. The curriculum provides students with a broad preparation for a career in business. Business courses are included which provide a solid background for future promotion in a chosen occupational area. The degree is designed for students who do not plan to transfer to a four-year college or university.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Apply accounting concepts and methods to interpret financial statements for evaluating the financial position and performance of organizations.
- Recognize and appropriately respond to ethical and legal concerns relating to human resource and organizational management.
- Identify and analyze business problems or opportunities and effectively communicate recommendations for courses of actions.

CAREER OPPORTUNITIES
Administrative Assistant
Bookkeeper
- *Budget Consultant

Buyer
Conciliator
- *Credit Analyst

Employment Interviewer
- *Hospital Administrator

Sales Agent
- *Trust Officer

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	Title	Units
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 110	Introduction to Business	3
BUS 115	Human Relations in Business	3
BUS 125	Business Law: Legal Environment of Business	3
BUS 128	Business Communication	3
BUS 161	Business Internship	1-3
BUS 195	Principles of Money Management for Success	3

BOT 174	Computer Concepts and Applications	3
or		
CIS 110	Principles of Information Systems	4
ECON 110	Economic Issues & Policies	3
or		
ECON 120	Principles of Macroeconomics	3
	Total Required	25-29
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Business–General. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

IV. ENTREPRENEURSHIP-SMALL BUSINESS MANAGEMENT

This degree program provides a course of study for students who are interested in developing an appreciation and understanding of the functional areas within the small business environment. The degree provides a working knowledge of small business operations to both the prospective business person as well as the owner/manager of an existing business.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Recognize and appropriately respond to ethical and legal concerns relating to human resource and organizational management.
- Identify and analyze business problems or entrepreneurial opportunities and effectively communicate recommendations for courses of actions.
- Demonstrate an understanding of the requirements to start a new venture, including the basics of leadership, team building, finance, marketing and management.

CAREER OPPORTUNITIES
Small Business Owner/Manager
Entrepreneur
Intrapraneur (acting as an entrepreneur within a large company)
Franchisee
Consultant
Assistant Manager
Small Business Specialist
Associate Account Manager
Small Business Developer
Business Assistant Coordinator

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
BUS 128	Business Communication	3
		15-16

Select two of the following:

BUS 112	Craft Entrepreneur	2
BUS 115	Human Relations in Business	3
BUS 156	Principles of Management	3
BUS 176	Computerized Accounting Applications	2
		4-6

Select at least three units from the following:

BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BOT 116	Essential Access	1
BOT 117	Essential PowerPoint	1
BOT 132	Google Applications for Business	3
BOT 174	Computer Concepts and Applications	3
		3
	Total Required	22-25
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Entrepreneurship–Small Business Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

V. CRAFT INDUSTRIES ENTREPRENEURSHIP

Certificate of Specialization
The Craft Industries program is designed to provide those entering this highly charged business environment with the basic skills to make it happen. Each student will build their business from the bottom up by understanding the standards and innovative solutions to the practical components of establishing any operational business model. The program is unique; it incorporates the traditional entrepreneurship theory mixed with down-to-earth tools and applications, while keeping in sight its ultimate goal of providing a means for the student to launch their craft business.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Demonstrated understanding of the Craft Industry's environment and its relationship to the many facets of entrepreneurship.
- Demonstrated competency in management practices, in particular business's role in achieving sustainability, and ethical and civic responsibility.

ENTREPRENEURSHIP OPPORTUNITIES
Small businesses that include:
Breweries and Brewpubs
Coffee Shops and Roasters
Artisan Foods
Cultivation and Production Management
Handmade Textiles
Manufacturing and Production Material Suppliers for Artisans

Certificate Requirements:

Core Curriculum:

Course	*Title*	*Units*
BUS 112	Craft Entrepreneur	2
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
BUS 109	Elementary Accounting	3
		11

Select at least four units from the following:

BOT 107	Office Systems and Procedures	2
BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BOT 117	Essential PowerPoint	1
BOT 132	Google Applications for Business	3
BOT 151	Using Microsoft Outlook	1
		4
	Total Required	15

BUSINESS OFFICE TECHNOLOGY

I. BUSINESS OFFICE TECHNOLOGY

This degree program prepares students for employment in today's business offices which are technology intensive. The curriculum is also appropriate for those wishing to update current skills. Emphasis is on the computerized office and development into supervisory positions.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

CAREER OPPORTUNITIES
Account Clerk
Administrative Assistant
Bank Teller
Billing Clerk
Bookkeeper
Brokerage Clerk
Computer Operator
Court Clerk
Customer Service Representative
Executive Assistant
Executive Secretary
File Clerk
General Office Clerk
Hotel/Motel Desk Clerk
Information Clerk
Insurance Clerk
Legal Secretary
Loan/Credit Clerk
Medical Secretary
Office Manager
Personnel Clerk
Real Estate Clerk
Secretary
Word Processing Specialist

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 101AB	Keyboarding/ Document Processing I-II	3
BOT 102AB	Intermediate Keyboarding/ Document Processing I-II	3
BOT 107	Office Systems and Procedures	2
BOT 120-122	Comprehensive Word Levels I-III	3
BOT 174	Computer Concepts and Applications	3
BUS 128	Business Communication	3
		18

Select at least six units from the following:

BOT 119	Windows for the Information Worker	2
BOT 123-125	Comprehensive Excel Levels I-III	3
BOT 223-225	Office Work Experience	1-3
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 156	Principles of Management	3
BUS 176	Computerized Accounting Applications	2
		6
	Total Required	24
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Business Office Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. ADMINISTRATIVE ASSISTANT

This degree program prepares students for employment in today's business offices which are technology intensive. The curriculum is also appropriate for those wishing to update current skills. Emphasis is on the computerized office and development into supervisory positions.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 101AB	Keyboarding/Document Processing I-II	3
BOT 104	Filing and Records Management	1
BOT 106	Effective Job Search	1
BOT 107	Office Systems and Procedures	2
BOT 114	Essential Word	1
or		
BOT 120-122	Comprehensive Word Levels I-III	3
BOT 115	Essential Excel	1
or		
BOT 123-125	Comprehensive Excel Levels I-III	3
BOT 116	Essential Access	1
or		
BOT 126-128	Comprehensive Access Levels I-III	3
BOT 117	Essential PowerPoint	1
or		
BOT 129-130	Comprehensive PowerPoint Levels I-II	2
BOT 118	Integrated Office Projects	1
BOT 223-225	Office Work Experience	1-3
BUS 128	Business Communication	3
		17-26

Select at least five units from the following:

BOT 103ABC	Building Keyboarding Skill I, II, III	.5
BOT 132	Google Applications for Business	3
BOT 133	Adobe Acrobat for the Workplace	1
BOT 150	Using Microsoft Publisher	1
BOT 151	Using Microsoft Outlook	1
BUS 109	Elementary Accounting	3
BUS 120	Financial Accounting	4
		5-5.5
	Total Required	22-31.5
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Administrative Assistant. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. EXECUTIVE ASSISTANT

This degree program prepares students for employment in today's business offices which are technology intensive. The curriculum is also appropriate for those wishing to update current skills. Emphasis is on the computerized office and development into supervisory positions.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 101AB	Keyboarding/Document Processing I-II	3
BOT 102AB	Intermediate Keyboarding/ Document Processing I-II	3
BOT 120-122	Comprehensive Word Levels I-III	3
BOT 123-125	Comprehensive Excel Levels I-III	3
BOT 126-128	Comprehensive Access Levels I-III	3
BOT 129-130	Comprehensive PowerPoint Levels I-II	2
BOT 151	Using Microsoft Outlook	1
BUS 128	Business Communication	3
		22

Select at least three units from the following:

BOT 132	Google Applications for Business	3
BUS 109	Elementary Accounting	3
BUS 110	Introduction to Business	3
BUS 115	Human Relations in Business	3
BUS 120	Financial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
		3-4

Select at least three units from the following:

BOT 103ABC	Building Keyboarding Skill I, II, III	.5
BOT 119	Windows for the Information Worker	2
BOT 133	Adobe Acrobat for the Workplace	1
BOT 150	Using Microsoft Publisher	1
		3-3.5
	Total Required	28-29.5
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Executive Assistant. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATE OF ACHIEVEMENT

1. BUSINESS INFORMATION WORKER

The Business Information Worker Certificate of Achievement is a job readiness pathway or certificate for office workers, developed in conjunction with local employers. Enrolled students are prepared in a broad range of entry-level office skills and applications which promote success in a variety of office environments. Essential components of the curriculum include a solid foundation in Microsoft Windows and Office, as well as critical thinking, problem solving, and interpersonal skills.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Use computer input devices to properly and efficiently create and edit documents in word processing and spreadsheet programs, such as Word and Excel, and electronic communications such as email.
- Work effectively, respectfully, ethically and professionally with people of diverse ethnic, cultural, gender and other backgrounds, and with people of different organizational roles, social affiliations, and personalities.
- Communicate effectively and professionally in business situations through physical or virtual presence, writing, speaking, and electronic media.

Certificate Requirements

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BOT 119	Windows for the Information Worker	2
BOT 151	Using Microsoft Outlook	1
BUS 115	Human Relations in Business	3
BUS 128	Business Communication	3
CIS 110	Principles of Information Systems	4
	Total Required	16

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Business Information Worker. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATES OF SPECIALIZATION:

Students who complete the requirements below qualify for a certificate in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

I. ACCOUNT CLERK

This certificate prepares a beginning student to work in a job that requires bookkeeping skills as well as an ability to provide account clerk support using accounting software. Many jobs at the entry level are available for someone who has training in these two areas.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Explain the basic concepts of using computerized accounting software in the relevant field of business.
- Appropriately use the vocabulary and accounting procedures specific to the workplace.
- Use computer input devices, e.g., keyboard or mouse, to efficiently and competently use accounting software specific to the relevant field of business.

Certificate Requirements:

Course	*Title*	*Units*
BOT 101AB	Keyboarding/Document Processing I-II	3
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 176	Computerized Accounting Applications	2
	Total Required	8-9

II. FRONT OFFICE RECEPTIONIST

This certificate would provide an entry-level employment opportunity for a student that finishes the following courses. These skills are aimed at a student who is seeking a front office receptionist-related position in an office. This certificate prepares a beginning student to work in a job that requires basic keyboarding skills, a basic knowledge of filing, and basic office procedures necessary for meeting and greeting the public in person, by telephone, and electronically.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic concepts of business office procedures relevant to an entry-level front office receptionist position.
- Appropriately use the vocabulary specific to an entry-level front office receptionist position.
- Use computer input devices, e.g., keyboard or mouse, to efficiently and competently use the software specific to the relevant field of business.

Certificate Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
or		
BOT 103AB	Building Keyboarding Skill I-II	1
BOT 104	Filing and Records Management	1
BOT 107	Office Systems and Procedures	2
BOT 151	Using Microsoft Outlook	1
BOT 174	Computer Concepts and Applications	3
	Total Required	8

III. OFFICE ASSISTANT LEVEL I

This certificate prepares students for positions that require keyboarding skills, basic knowledge of filing, and basic computer skills. It is designed for students with no prior computer training and who lack general office background and experience. Upon completion, students will qualify for positions as data entry clerks or other entry level office clerical positions.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 101AB	Keyboarding/ Document Processing I-II	3
BOT 104	Filing and Records Management	1
BOT 119	Windows for the Information Worker	2
BOT 132	Google Applications for Business	3
	Total Required	10

IV. OFFICE ASSISTANT LEVEL II

This certificate is designed for students who have completed the Office Assistant Level I certificate or have the equivalent in keyboarding and computer skills. It prepares students for advancement in office careers in which knowledge of Microsoft Office applications is required.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

Course	*Title*	*Units*
BOT 102AB	Intermediate Keyboarding/ Document Processing I-II	3
BOT 107	Office Systems and Procedures	2
BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BOT 116	Essential Access	1
BOT 117	Essential PowerPoint	1
	Total Required	9

V. OFFICE PROFESSIONAL

This certificate is designed for students interested in entry-level positions in a broad spectrum of office environments. Utilizing a short-term, intensive format, students are provided with the basic skills necessary to be productive employees. The curriculum provides the foundation for further study and advancement in the clerical field, which is one of the largest employment areas in our information processing society.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
or		
BOT 101AB	Keyboarding/ Document Processing I-II	3
or		
BOT 102AB	Intermediate Keyboarding/ Document Processing I-II	3
BOT 106	Effective Job Search	1
BOT 107	Office Systems and Procedures	2
BOT 114	Essential Word	1
BOT 115	Essential Excel	1
BUS 128	Business Communication	3
	Total Required	9-11

VI. OFFICE SOFTWARE SPECIALIST LEVEL I

This certificate is designed for students interested in working in an administrative support capacity who need working knowledge of word processing, electronic spreadsheet, database and presentation software. These courses may also be applied to the Office Assistant Level II certificate.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 114	Essential Word	1
or		
BOT 120-121	Comprehensive Word, Levels I-II	2
BOT 115	Essential Excel	1
or		
BOT 123-124	Comprehensive Excel, Levels I-II	2
BOT 116	Essential Access	1
or		
BOT 126-127	Comprehensive Access, Levels I-II	2
BOT 117	Essential PowerPoint	1
or		
BOT 129-130	Comprehensive PowerPoint, Levels I-II	2
	Total Required	5-9

VII. OFFICE SOFTWARE SPECIALIST LEVEL II

This certificate is designed for students interested in working in an administrative support capacity who need working knowledge of word processing, electronic spreadsheet, database and presentation software as well as software integration techniques. Students who complete the certificate may continue taking courses to earn the Executive Assistant Certificate of Achievement.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Explain the basic language and concepts within the field of business office technology.
- Use computer input devices (e.g., keyboard and mouse) to properly and efficiently create and edit documents in word processing, spreadsheet, and presentation programs such as Word, Excel, and PowerPoint, and electronic communications such as email.

Certificate Requirements:

Course	*Title*	*Units*
BOT 100	Basic Keyboarding	1
BOT 118	Integrated Office Projects	1
BOT 120	Comprehensive Word, Level I	1
or		
BOT 114	Essential Word	1
BOT 121	Comprehensive Word, Level II	1
BOT 122	Comprehensive Word, Level III	1
BOT 123	Comprehensive Excel, Level I	1
or		
BOT 115	Essential Excel	1
BOT 124	Comprehensive Excel, Level II	1
BOT 125	Comprehensive Excel, Level III	1
BOT 126	Comprehensive Access, Level I	1
or		
BOT 116	Essential Access	1
BOT 127	Comprehensive Access, Level II	1
BOT 129	Comprehensive PowerPoint, Level I	1
or		
BOT 117	Essential PowerPoint	1
BOT 130	Comprehensive PowerPoint, Level II	1
	Total Required	12

ECONOMICS FOR TRANSFER (AA-T)

The AA-T in Economics for Transfer provides a broad exposure to the field of economics. Students will learn about the factors that determine the production, distribution and consumption of goods and services. They will come to understand the behavior and interactions of economic agents and how economies work. This major prepares student to transfer to a California State University, where a baccalaureate degree may be earned in Economics or a closely related field.

The following is required for the AA-T in Economics for Transfer degree:

1. 60 semester or 90 quarter CSU-transferable units;
2. The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements;
3. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
4. Minimum grade point average (GPA) of 2.0;
5. Grade of C or better in all courses required for the major or area of emphasis.

Program Learning Outcomes
Upon completion of this program, students will be able to:
- Use economic models to predict changes in societal outcomes based on changes in economic variables.
- Identify and apply economic principles to personal-life decisions.

Associate in Arts for Transfer Degree Requirements:

Course	*Title*	*Units*
Required Core:		
ECON 120	Principles of Macroeconomics	3
ECON 121	Principles of Microeconomics	3
MATH 160	Elementary Statistics	4
MATH 178	Calculus for Business, Social and Behavioral Sciences	4
or		
MATH 180	Analytic Geometry and Calculus I	5
List A: (Select 1 course)		
BUS 120	Financial Accounting	4
BUS 121	Managerial Accounting	4
BUS 128	Business Communication	3
CIS 110	Principles of Information Systems	4
List B: (Select 1-2 courses; 3-4 units)		
Any List A course not used		3-4
	Total Required	21-23
	Double-Counted Units	9-12/9
	General Education Requirements	39/37
	Electives	7-12/9-11
	Total Degree Units	60

GENERAL STUDIES: BUSINESS AND TECHNOLOGY

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS
To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)
AND

II. Choose a minimum of 18 units from one Area of Emphasis:
- Business and Technology

The Associate in Science in General Studies with an Emphasis in Business and Technology will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of business transaction theory and practice, the operations and strategies of business decisions, legal concepts, and the place of business in the American and global economy as a whole. Students will apply mathematical and quantitative reasoning skills to the discipline's methodologies, as well as evaluate and interpret basic economic principles and theories related to performance and specific economic sectors. Students must take a minimum of three units from each area. The remaining units may be taken from any area.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Contribute to an effective and ethical organization.
- Use information technology to support effective decision making in the business organization.
- Analyze markets, economic environments and associated trends at the macro and micro levels.
- Express and apply quantitative information in order to make sound decisions and solve problems in the business environment.

Business
BUS 109, 110, 111, 115, 120, 121, 122, 124, 125, 128, 129, 150, 155, 156, 161, 162, 176, 195

Computer and Information Science
CIS 105, 110, 120, 121, 125, 140, 162, 190, 191, 201, 202, 203, 204, 205, 211, 213, 215, 219, 261, 262, 263, 290, 291

Economics
ECON 110, 120, 121

Mathematics
MATH 121, 160, 178, 180

MANAGEMENT

This degree program is designed to provide students with the skills necessary to be successful as a manager in today's demanding organizational climate. The curriculum is beneficial to men or women who aspire to mid-level or higher management positions in any type of organization including business, government and service organizations.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Recognize and appropriately evaluate the ethical and legal concerns inherent in various business practices.
- Identify the differences in leadership and management theories and how they facilitate the overall effectiveness of domestic and multinational business operations.
- Identify and assess business problems from a subordinate and managerial perspective.
- Identify and analyze business problems or entrepreneurial opportunities and effectively communicate recommendations for courses of actions.

CAREER OPPORTUNITIES
*Bank Officer
Claim Adjuster
†Computer Operations Supervisor
*Director, Research and Development
Employment Interviewer
Financial Planner
*Hospital Administrator
Import-Export Agent
Management Trainee
†Management Consultant
Office Manager
Stock Broker
*Teacher, College

*Bachelor Degree or higher required
†Bachelor Degree normally recommended

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BUS 115	Human Relations in Business	3
BUS 120	Financial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
BUS 128	Business Communication	3
BUS 155	Human Resources Management	3
BUS 156	Principles of Management	3
ECON 110	Economic Issues and Policies	3
or		
ECON 120	Principles of Macroeconomics	3
		22
Select two of the following:		
BOT 123-125	Comprehensive Excel Levels I–III	3
BOT 174	Computer Concepts and Applications	3
BUS 176	Computerized Accounting Applications	2
CIS 110	Principles of Information Systems	4
		5-7
Select a minimum of three units of the following:		
BUS 110	Introduction to Business	3
BUS 121	Managerial Accounting	4
BUS 161	Business Internship	1-3
BUS 195	Principles of Money Management for Success	3
COMM 122	Public Speaking	3
		3-4
	Total Required	30-33
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

PARALEGAL STUDIES

The legal profession has evolved, like the medical profession, into a profession of specialties. Based on this development, lawyers need qualified assistants to better help them provide legal services to their clients. Paralegals are trained, professional technicians able to provide this needed legal assistance.

This degree program is specifically designed to prepare and provide students with the analytical skills and written abilities necessary to assist attorneys in the practice of law. The technical curriculum goals and objectives emphasize three primary areas:

1. Legal Research, Analysis and Writing
2. Ethics and the Mechanics of Law
3. Integration of Substantive and Procedural Law

The successful paralegal degree candidate will possess a broad educational background with an opportunity to gain specialized skills in specific areas of law. The large curriculum offering also allows practicing paralegals to attend college refresher or new skills development courses.

This program does not prepare students for law school or the practice of law. Please note: Paralegals may not provide legal services directly to the public, except as permitted by law.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Apply the research, analytical skills and college-level writing abilities necessary to assist attorneys in the practice of law.
- Conduct oneself in an ethical and professional manner when confronted with a law office related conflict scenario.

CAREER OPPORTUNITIES
Claim Examiner
Compensation and Benefits Manager
Compliance and Enforcement Inspector
†Contract Consultant
Forms and Procedures Specialist
Freelance Paralegal
*Labor Relations Specialist
Law Clerk
Legal Aide
Legal Assistant
Legal Research Assistant
Legal Technician
Occupational Safety and Health Worker
†Paralegal
Patent Agent
Title Examiner
*Bachelor Degree or higher required
†Bachelor Degree normally recommended

It is recommended that incoming students complete C grade or higher in ESL 2B or placement into ENGL 120 or equivalent prior to taking any Paralegal Studies classes.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BOT 120-121	Comprehensive Word Levels I–II	2
BOT 122	Comprehensive Word, Level III	1
or		
BOT 151	Using Microsoft Outlook	1
or		
BOT 115	Essential Excel	1
BUS 125	Business Law: Legal Environment of Business	3
PARA 100	Introduction to Paralegal Studies	3
PARA 110	Civil Litigation Practice and Procedures	3
PARA 130	Legal Research and Writing	3
PARA 132	Computer Assisted Legal Research (CALR)	3
PARA 135	Bankruptcy Law	3
		21

Select at least six units from the following:

PARA 120	Introduction to Administrative Law	2
PARA 121	Social Security Law - Practice and Procedure	1
PARA 125	Business Organizations	1
PARA 140	Introduction to Criminal Law and Procedures	1
PARA 145	Estate Planning	2
PARA 146	Probate and Administration of Estates	1
PARA 150	Family Law (Divorce, Separation, Nullity, and Paternity)	2
PARA 151	Family Law (Custody, Visitation, and Support)	1
PARA 160	Personal Injury	1
PARA 170	Worker's Compensation	1
PARA 175	Electronic Discovery: Practice and Procedure	1
PARA 250*	Internship	1-3
		6
	Total Required	27
	Plus General Education Requirements	

*Student must complete 18 units within the major to be eligible for this course.

Recommended Elective: BUS 128

GENERAL EDUCATION REQUIREMENTS FOR THE PARALEGAL STUDIES DEGREE:

AREA A–LANGUAGE AND RATIONALITY
(Minimum of 6 semester units)
One course from each area:

1. Written Communication
ENGL 120

2. Oral Communication and Analytical Thinking
COMM 120, 122, 130, 137, 145
ENGR 100
MATH 110, 120, 125, 160, 170, 175, 176, 178, 180, 245, 280, 281, 284
PHIL 125, 130
PSY 215

AREA B–NATURAL SCIENCES
(Minimum of 4 semester units)
A course that includes a laboratory (laboratory courses are underlined):

ANTH 130
ASTR 110, 112
BIO 112, 115, 122, 130, 131, 140, 152, 230, 240
CHEM 102, 115*, 116, 120*, 141
GEOG 120, 121
GEOL 104, 110, 111
OCEA 112, 113
PHYC 110, 130, 131, 190, 200, 210

*Students will not receive credit for more than one of the following courses: CHEM 115, 120.

AREA C–HUMANITIES
(Minimum of 3 semester units)
One of the following courses:

ARAM 120, 121, 220
ARBC 120, 121, 145, 220, 221, 250, 251
ART 100, 120, 124, 129, 140, 141, 143, 144, 145, 146, 148
ASL 120, 121, 140, 220, 221
ENGL 122, 201, 202, 214, 217, 221, 222, 231, 232, 270, 271
HIST 100, 101, 105, 106
HUM 110, 115, 116, 120, 140, 155
MUS 110, 111, 115, 116, 117
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 141, 145, 220, 221, 250, 251
THTR 110

AREA D–SOCIAL AND BEHAVIORAL SCIENCES
(Minimum of 3 semester units)
One of the following courses:

ANTH 120
CD 115, 125, 131, 145
COMM 110, 124
ECON 110, 120, 121
GEOG 106, 130
HED 120, 201
HIST 108, 109, 118, 119, 122, 123, 124, 130, 131, 132, 133, 180, 181
POSC 120, 121, 124, 130, 140
PSY 120, 125, 134, 138, 140, 150, 170, 220
SOC 120, 125, 130

ADDITIONAL REQUIREMENTS:
(Minimum 6 semester units)
Two additional courses from two different areas:
- Area B - Natural Sciences
- Area C - Humanities
- Area D - Social and Behavioral Sciences

DEGREE REQUIREMENTS:
Cuyamaca College will confer the Degree of Associate in Science in Paralegal Studies upon students who successfully complete the following requirements:

1. A minimum of 60 semester units of college work.
2. Competency Requirements
   A. Completion of ENGL 120 with a grade of "C" or better or "P"*.
   B. Completion of MATH 110 or a higher numbered mathematics class, or a statistics course from another discipline that has intermediate algebra as a prerequisite, with a grade of "C" or better or a grade of "P"* or completion of assessment placing into a class higher than MATH 110.
3. Exercise Science Degree Requirements
   Two activity courses in exercise science are required for graduation from Cuyamaca College. These courses are marked with an asterisk in the Course Descriptions section.
   A. If medical reasons necessitate exclusion from exercise science, a medical statement must be on file with the Admissions and Records Office. Adaptive exercise science classes are available.

B. Veterans who have completed at least one year of honorable active service will receive up to three units of credit for exercise science which will satisfy the activity requirement for graduation. To receive credit for military service, a DD-214 and appropriate military records must be submitted to the Admissions and Records Office.
4. Achievement of a "C" average (2.0 GPA) in all college work counted toward general education requirements.
5. Achievement of a "C" grade or better in all courses counted toward the major. (P/NP grading not accepted for the major.)
6. A maximum of 12 "P"* semester units taken in regular course work at this institution may be counted toward the 60 semester units required for graduation but shall not be included as part of the requirements for the major.
7. A minimum of 12 semester units of Legal Specialty courses must be completed at Cuyamaca College.

*A grade of "P" (Pass) represents a "C" grade or better.

For more information regarding degree requirements, see Degree Requirements and Transfer Information section.

REAL ESTATE

I. REAL ESTATE

In the Real Estate curriculum, special attention is given to the California Department of Real Estate license requirements. This degree program is designed to prepare students for employment in real estate or related fields. It also meets the educational requirements for the California Real Estate Broker's License and helps prepare the student for both the salesperson and broker state examinations. Most real estate classes also meet educational requirements for appraisal licensing.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate and describe the essential elements and legal effects of various real estate documents, steps in an escrow, real estate financing and investment, and real estate valuation techniques.
- Differentiate and describe how to conduct oneself in a professional and ethical manner in any real estate office.

CAREER OPPORTUNITIES

Agent
†Appraiser
Broker
Builder/Developer
*Economist
Escrow Officer/Trust Manager
Investor
Lender/Financial Institution
Property Manager
Salesperson
Title Officer

*Bachelor Degree or higher required
†California Bureau of Real Estate Appraisers License required

Associate in Science Degree Requirements:

Course	*Title*	*Units*
RE 190	Real Estate Principles	3
RE 191	Real Estate Practice	3
RE 192	Real Estate Finance	3
RE 193	Real Estate Legal Aspects	3
RE 194	Real Estate Appraisal	3
		15

Select three of the following including one Accounting course:

BUS 110*	Introduction to Business	3
BUS 120	Financial Accounting	4
or		
BUS 109	Elementary Accounting	3
RE 197	Real Estate Economics	3
RE 201	Real Estate Property Management	3
RE 250*	Real Estate Internship	1-4
Elective	(select one elective from below)	3
		7-11

Electives:

BUS 125	Business Law: Legal Environment of Business	3
RE 204	Real Estate Office Administration	3
	Total Required	22-26
	Plus General Education Requirements	

*Non Department of Real Estate Licensing course

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate of Achievement in Real Estate. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. BROKER'S LICENSE

In the Real Estate curriculum, special attention is given to the California Department of Real Estate license requirements. This is an overall comprehensive program that will provide the student with the educational requirements needed to take the examination for a State of California Real Estate Broker license. An applicant for the broker license must have taken the eight (8) real estate courses required for this Broker's License Certificate of Achievement before taking the California State Broker Examination.

Program Learning Outcomes

Upon successful completion of this Certificate of Achievement, students will be able to:

- Differentiate and describe the essential elements and legal effects of various real estate documents, steps in an escrow, real estate financing and investment, and real estate valuation techniques.
- Differentiate and describe how to conduct oneself in a professional and ethical manner in any real estate office.

Course	*Title*	*Units*
RE 190	Real Estate Principles	3
RE 191	Real Estate Practice	3
RE 192	Real Estate Finance	3
RE 193	Real Estate Legal Aspects	3
RE 194	Real Estate Appraisal	3
RE 201	Real Estate Property Management	3
BUS 109	Elementary Accounting	3
or		
BUS 120	Financial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
Total Required		24-25

Certificate of Achievement

Students who complete the requirements above qualify for a Certificate of Achievement in Broker's License. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

UNIVERSITY STUDIES: BUSINESS AND ECONOMICS

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

REQUIREMENTS:

I. California State University (CSU) General Education Breadth

1. Complete CSU General Education Breadth (see Degree Requirements and Transfer Information section).
2. Earn a grade of "C" or better in 30 of the required 39 semester units of general education to include all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Credit earned through external examinations, i.e., AP, will be applied towards general education in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on a CSU certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable CSU transferable semester units.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

OR

II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Degree Requirements and Transfer Information section.
2. Earn a grade of "C" or better in all IGETC courses.
3. Credit earned through external examinations, i.e., AP, will be applied in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on an IGETC certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable UC transferable semester units for UC University Studies.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

AND

III. Area of Emphasis

A. Business and Economics
B. Communication and Language Arts

C. Humanities and Fine Arts
D. Science and Mathematics
E. Social and Behavioral Sciences

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the associate degree. Courses that are not UC-transferable will not be used in the UC University Studies Area of Emphasis Degrees. Completion of the University Studies degree does not guarantee admission to a four-year institution.

Courses for the Associate in Science in University Studies with an Emphasis in Business and Economics focus on the study of business transaction theory and practice, the operations and strategies of business decisions, legal concepts, and the place of business in the American and global economy as a whole. Students will apply mathematical and quantitative reasoning skills to the discipline's methodologies, as well as evaluate and interpret basic economic principles and theories related to performance and specific economic sectors. Students completing this area may be interested in the following baccalaureate majors: accounting, business, economics, finance, information and decision systems, international business, management, and marketing. Students must complete a minimum of six units in Business, six units in Economics, and six units from the Electives category.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Contribute to an effective and ethical organization.
- Prepare and analyze financial statements.
- Use information technology to support effective decision making in the business organization.
- Analyze markets, economic environments and associated trends at the macro and micro levels.
- Express and apply quantitative information in order to make sound decisions and solve problems in the business environment.
- Communicate clearly in the business environment.

Business
BUS 110, 120, 121, 125, 128*

Economics
ECON 110, 120, 121

Electives
CIS 110; MATH 160, 178, 180

* Course not UC transferable

CULTURE, PEOPLE & IDEAS

ETHNIC STUDIES

Ethnic Studies is a dynamic academic discipline and community that provides an understanding of the history, culture, and contributions of African Americans, Asian Americans, Latino/a/x Americans, Middle Eastern Americans, and Native Americans. Courses introduce students to the concepts of race and ethnicity, how race and ethnicity intersect with other forms of identity, and the role of power and inequality in the United States. It is an interdisciplinary degree, drawing from the arts, English, history, humanities, Kumeyaay studies, political science, sociology, and others. Ethnic Studies faculty foster community and promote civic engagement and social justice through a variety of panels, presentations, and field trips.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Interpret and evaluate evidence by analyzing biases, patterns, trends, and relationships.
- Evaluate and apply subject matter to students' lived experiences and current events.
- Analyze how power and privilege operate in society, through the categories of race, class, gender, ethnicity, and sexuality.
- Develop and support arguments with evidence, including academic and organic (i.e. cultural, traditional, and experiential).
- Research and explore career options and/or obtain experience in a career field.

Associate in Arts Degree Requirements:
Core Curriculum:

Course	*Title*	*Units*
ETHN/HIST 107	History of Race and Ethnicity in the U.S.	3
ETHN/HUM 111	Culture, Art, and Ideas of the United States	3
ETHN/SOC 114	Introduction to Race & Ethnicity	3
		9

List A: Select two of the following:

ETHN/HIST 118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN/HIST 119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN/HIST 130	U.S. History and Cultures: Native American Perspectives I	3
ETHN/HIST 131	U.S. History and Cultures: Native American Perspectives II	3
ETHN/HIST 132	Kumeyaay History I: Precontact – 1845	3
ETHN/HIST 133	Kumeyaay History II: 1846 – Present	3
ETHN/HIST 180	U.S. History: Black Perspectives I	3
ETHN/HIST 181	U.S. History: Black Perspectives II	3
		6

List B: Select two of the following:

ETHN/ENGL 236	Chicana/o Literature	3
ETHN/ENGL 238	Black Literature	3
ETHN/POSC 165	Introduction to the Politics of Race and Gender	3
ETHN/POSC 166	Introduction to Native American Politics and Policy	3
ETHN/SOC 150	Latinx Sociology	3
		6

Total Required	21
Plus General Education Requirements	

GENERAL STUDIES: HUMANITIES AND FINE ARTS

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS
To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)

AND

II. Choose a minimum of 18 units from one Area of Emphasis:
- Humanities and Fine Arts

The Associate in Arts in General Studies with an Emphasis in Humanities and Fine Arts will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of cultural, 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 through artistic and cultural creation. Students will develop an aesthetic awareness and incorporate these concepts when constructing value judgments. Students must complete a minimum of three units in Humanities and three units in Fine Arts. The remaining twelve units may be taken from either category.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Analyze the principle elements of representative examples of art, architecture, literature, theater, philosophy, music, dance, film, or other relevant areas of cultural and/or intellectual creativity.
- Demonstrate an awareness of the historical and philosophical contexts of representative areas, movements, media, works, or styles of cultural and/or intellectual creativity.
- Employ the language, concepts and methods of interpretive criticism as applicable to the respective categories of human creativity.
- When applicable, apply artistic processes and skills as a creative expression, using a variety of media to communicate meaning and intent in original works of art.

Humanities
ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 220, 221, 250, 251, 254
ART 140, 141, 143, 145, 146, 149
ASL 120, 121, 140, 220, 221
ENGL 122, 201, 202, 217, 221, 222, 231, 232, 236, 238, 270, 271
ETHN 111, 236, 238

HIST 100, 101, 105, 106, 114, 115
HUM 110, 111, 115, 116, 117, 120, 140, 155
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 141, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 220, 221, 250, 251

Fine Arts
ART 100, 120, 121, 124, 125, 129, 135, 140, 141, 143, 144, 145, 146, 148, 220, 221, 222, 224, 225, 230, 231, 232, 233, 235, 236, 241, 242
MUS 110, 111, 115, 116, 117, 123
THTR 110

HISTORY

Associate Degree for Transfer℠

I. HISTORY FOR TRANSFER (AA-T)

This degree program is useful for students preparing for careers in teaching, the law, government service, and research. The history program offers a diverse transfer curriculum and is committed to equity-minded teaching in an atmosphere of academic excellence. History course offerings focus on global cultures, historically-underrepresented groups in the United States, and the development of American Institutions. History courses also emphasize research, writing, and interpretive skills that are essential to the college's General Education mission. History faculty create a vibrant intellectual campus culture and promote civic engagement through a variety of panels, presentations, and field trips.

The following is required for the AA-T in History for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Recognize theories of historical interpretation.
- Describe historical and philosophical underpinnings of government systems and ideologies.
- Demonstrate how literature and the arts help us understand the past.
- Define historical periods and transitions.
- Distinguish between primary and secondary sources.

Associate in Arts Degree Requirements

Core Curriculum:

Course	*Title*	*Units*
HIST 108	Early American History	3
HIST 109	Modern American History	3
		6

List A: Select six units:

HIST 100	Early World History	3
or		
HIST 105	Early Western Civilization	3
HIST 101	Modern World History	3
or		
HIST 106	Modern Western Civilization	3
		6

List B: Select one course from each group:

Group 1: Select one of the following diversity courses:
HIST 118, 119, 130, 131, 132, 133, 180, 181, or HIST 100 or 101 if not selected above 3

Group 2: Select one course related to history:
ANTH 120, 140
ART 100, 140, 141, 143, 144, 145
ENGL 122, 221, 222, 231, 232, 236, 238
HIST 122, 123, 124, or any history course not selected above
HUM 110,115, 116, 120, 140, 155
MUS 110, 111, 116
PHIL 160, 170
POSC 120, 121, 124, 130, 140
RELG 120 3
6

Total Units for Major (18 units may be double-counted with GE)	18
Total Units for CSU GE Breadth or IGETC CSU	39-37
Total Transferable Elective Units	3-5
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into History B.A.

II. HISTORY

This degree program is useful for students preparing for careers in teaching, the law, government service, and research. The history program offers a diverse transfer curriculum and is committed to equity-minded teaching in an atmosphere of academic excellence. History course offerings focus on global cultures, historically underrepresented groups in the United States, and the development of American Institutions. History courses also emphasize research, writing, and interpretive skills that are essential to the college's General Education mission. History faculty create a vibrant intellectual campus culture and promote civic engagement through a variety of panels, presentations, and field trips.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Interpret and evaluate evidence by analyzing biases, patterns, trends, and relationships.
- Evaluate and apply subject matter to students' lived experiences and current events.
- Analyze how power and privilege operate in society, through the categories of race, class, gender, ethnicity, and sexuality.
- Develop and support arguments with evidence, including academic and organic (i.e. cultural, traditional, and experiential).
- Research and explore career options and/or obtain experience in a career field.

CAREER OPPORTUNITIES
- *Anthropologist
- *Archaeologist
- Attorney
- *Cartographer
- *College History Professor
- *Historian
- *Intelligence Analyst
- *Journalist
- Legislative Assistant
- Politician
- *Research Historian
- *Secondary School Teacher
- Travel Advisor
- Technical Writer
- *Textbook Writer/Editor
- *Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Select twelve units from any two of the following sequences:

Course	*Title*	*Units*
HIST 100	Early World History	
HIST 101	Modern World History	6
HIST 105	Early Western Civilization	
HIST 106	Modern Western Civilization	6
HIST 108	Early American History	
HIST 109	Modern American History	6
		12

List A: Select one of the following courses:

HIST/ETHN 107	History of Race & Ethnicity in the United States	3
HIST/ETHN 118	U.S. History: Chicano/Chicana Perspectives I	3
HIST/ETHN 119	U.S. History: Chicano/Chicana Perspectives II	3
HIST/ETHN 130	U.S. History and Cultures: Native American Perspectives I	3
HIST/ETHN 131	U.S. History and Cultures: Native American Perspectives II	3
HIST/ETHN 132	Kumeyaay History I: Precontact - 1845	3
HIST/ETHN 133	Kumeyaay History II: 1846 - Present	3
HIST/ETHN 180	U.S. History: Black Perspectives I	3
HIST/ETHN 181	U.S. History: Black Perspectives II	3
		3

List B: Select one of the following courses:

HIST 114	Comparative History of the Early Americas	3
HIST 115	Comparative History of the Modern Americas	3
HIST 122	Women in Early American History	3
HIST 123	Women in Modern American History	3
HIST 124	History of California	3
HIST 148	The Modern Middle East	3
or any course from List A not selected		3
		3
		6

Total Required	18
Plus General Education Requirements	

KUMEYAAY STUDIES

The Associate in Arts program in Kumeyaay Studies is designed to provide an understanding of Kumeyaay history, culture and heritage. It is a multi-disciplinary degree, drawing from the sciences, humanities, world languages and history departments. Through specific coursework that encompasses on-site learning experiences, students will learn about the Kumeyaay Nation of San Diego's East County region.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Interpret and evaluate evidence by analyzing biases, patterns, trends, and relationships.
- Evaluate and apply subject matter to students' lived experiences and current events.
- Analyze how power and privilege operate in society, through the categories of race, class, gender, ethnicity, and sexuality.
- Develop and support arguments with evidence, including academic and organic (i.e. cultural, traditional, and experiential).
- Research and explore career options and/or obtain experience in a career field.

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ANTH 150	Introduction to Cultural Resource Management	3
BIO 133	Ethnoecology	3
or		
BIO 134	Ethnobotany	3
BIO 135	Ethnobotany/Ethnoecology Lab	1
HIST 132	Kumeyaay History I: Precontact - 1845	3
HIST 133	Kumeyaay History II: 1846 - Present	3
HUM 116	Kumeyaay Arts and Culture	3
or		
HUM 117	Kumeyaay Arts and Culture II	3
NAKY 120	Kumeyaay I	4
NAKY 121	Kumeyaay II	4
		24

List A, Select One:

Course not taken above (BIO 133 or BIO 134 or HUM 116 or HUM 117)		3
NAKY 220	Kumeyaay III	4
POSC/ETHN 166	Introduction to Native American Politics and Policy	3
		3-4
	Total Required	27-28
	Plus General Education Requirements	

Certificate of Achievement
Students who complete the requirements below qualify for a Certificate in Kumeyaay Studies. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

The Certificate of Achievement in Kumeyaay Studies is designed to provide an understanding of Kumeyaay language, history, culture, heritage, and land management. Kumeyaay Studies is an interdisciplinary program, drawing from anthropology, biology, history, humanities, Kumeyaay language, and political science. Students will learn about the Kumeyaay Nation of San Diego's East County region through specialized, interactive coursework and on-site learning experiences.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Interpret and evaluate evidence by analyzing biases, patterns, trends, and relationships.
- Evaluate and apply subject matter to students' lived experiences and current events.
- Analyze how power and privilege operate in society, through the categories of race, class, gender, ethnicity, and sexuality.
- Develop and support arguments with evidence, including academic and organic (i.e. cultural, traditional, and experiential).
- Research and explore career options and/or obtain experience in a career field.

Certificate Requirements:

Course	*Title*	*Units*
BIO 133*	Ethnoecology	3
or		
BIO 134	Ethnobotany	3
HIST 132	Kumeyaay History I: Precontact - 1845	3
HUM 116	Kumeyaay Arts and Culture	3
or		
HUM 117	Kumeyaay Arts and Culture II	3
NAKY 120	Kumeyaay I	4
		13

Select one of the following:

Course not taken above (BIO 133 or BIO 134 or HUM 116 or HUM 117)		
ANTH 150	Introduction to Cultural Resource Management	3
HIST 133	Kumeyaay History II: 1846 - Present	3
HUM 116	Kumeyaay Arts and Culture	3
NAKY 121	Kumeyaay II	4
NAKY 220	Kumeyaay III	4
POSC/ETHN 166	Introduction to Native American Politics and Policy	3
		3-4
	Total Required	16-17

PHILOSOPHY FOR TRANSFER (AA-T)

The Associate in Arts in Philosophy for Transfer (AA-T in Philosophy) deals with fundamental issues that have long haunted thinkers for many centuries. The major explores and seeks to understand values and the nature of reality by examining and questioning existence and experience. The degree prepares students for undergraduate study in philosophy.

The following is required for the AA-T in Philosophy for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Identify and discuss the principle questions of universal concern raised in philosophy, including but not limited to the following: What is knowledge? Is there meaning to life? Does free will exist? Why should I be moral?
- Implement critical thinking techniques to enhance reading and writing skills.
- Identify, analyze and discuss cross-cultural perspectives relating to the philosophical issues being considered.
- Demonstrate philosophical thinking by correct use of terminology/argumentation in evaluating various themes discussed.

Associate in Arts Degree Requirements:

Core Curriculum: Select two:

Course	*Title*	*Units*
PHIL 110	A General Introduction to Philosophy	3
PHIL 130	Logic	3
PHIL 140	Problems in Ethics	3
		6

List A: Select one:

Any course from Core not used		3
PHIL 115	History of Philosophy I: Ancient	3
PHIL 117	History of Philosophy II: Modern and Contemporary	3
		3

List B: Select two:

Any course from List A not used		3
HIST 105	Early Western Civilization	3
HIST 106	Modern Western Civilization	3
PHIL 170	Philosophy of Religion: A Cross-Cultural Introduction	3
RELG 120	World Religions	3
		6

List C: Select one:

Any course from List A or B not used		3
PHIL 125	Critical Thinking	3
		3

Total Units for Major (6-15 units may be double-counted with GE)	18
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	11-18
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Philosophy B.A.

UNIVERSITY STUDIES: HUMANITIES AND FINE ARTS

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

REQUIREMENTS:

I. California State University (CSU) General Education Breadth
1. Complete CSU General Education Breadth (see Degree Requirements and Transfer Information section).

2. Earn a grade of "C" or better in 30 of the required 39 semester units of general education to include all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Credit earned through external examinations, i.e., AP, will be applied towards general education in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on a CSU certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable CSU transferable semester units.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

OR

II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Degree Requirements and Transfer Information section.
2. Earn a grade of "C" or better in all IGETC courses.
3. Credit earned through external examinations, i.e., AP, will be applied in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on an IGETC certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable UC transferable semester units for UC University Studies.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

AND

III. Area of Emphasis

A. Business and Economics
B. Communication and Language Arts
C. Humanities and Fine Arts
D. Science and Mathematics
E. Social and Behavioral Sciences

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the associate degree. Courses that are not UC-transferable will not be used in the UC University Studies Area of Emphasis Degrees. Completion of the University Studies degree does not guarantee admission to a four-year institution.

Courses for the Associate in Arts in University Studies with an Emphasis in Humanities and Fine Arts focus on the study of cultural, 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 through artistic and cultural creation. Students will develop an aesthetic awareness and incorporate these concepts when constructing value judgments. Students completing this area may be interested in the following baccalaureate majors: art, humanities, music, philosophy, religious studies, and theatre arts. Students must complete a minimum of six units in Humanities and six units in Fine Arts. The remaining six units may be taken from either category.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze the principle elements of representative examples of art, architecture, literature, theater, philosophy, music, dance, film, or other relevant areas of cultural and/or intellectual creativity.
- Demonstrate an awareness of the historical and philosophical contexts of representative areas, movements, media, works, or styles of cultural and/or intellectual creativity.
- Employ the language, concepts and methods of interpretive criticism as applicable to the respective categories of human creativity.
- When applicable, apply artistic processes and skills as a creative expression, using a variety of media to communicate meaning and intent in original works of art.

Humanities

ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 220, 221, 254
ART 140, 141, 143, 145, 146, 149
ASL 120, 121, 140, 220, 221
ENGL 122, 201, 202, 214, 217, 221, 222, 231, 232, 270, 271
HIST 100, 101, 105, 106
HUM 110, 115, 116, 120, 140, 155
NAKY 120, 121, 220
PHIL 110, 115, 117, 140, 160, 170
RELG 120, 130, 160, 170
SPAN 120, 121, 141, 145*, 220, 221, 250, 251

Fine Arts

ART 100, 120, 124, 125, 129, 140, 141, 143, 144, 145, 146, 148*, 241, 242
MUS 110, 111, 115, 116, 117
THTR 110
* Course not UC transferable

ENVIRONMENTAL & APPLIED TECHNOLOGY

AUTOMOTIVE TECHNOLOGY

I. AUTOMOTIVE TECHNOLOGY

The Automotive Technology degree has nine ASE core competencies for students without a sponsoring business. There is no work experience requirement. All laboratory courses are taught on campus using state of the art vehicles and equipment. The curriculum provides the necessary skills needed to join and advance in the automotive field. Students may further their education and skills by adding a specialization to this degree.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate and practice standardized safety and hazardous waste handling practices.
- Accurately describe knowledge of applied science used in various automotive system operations and interrelationships.
- Diagnose and repair automotive-engineered system problems.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements

Course	*Title*	*Units*
AUTO 099	Introduction to Automotive Technology	3
AUTO 100L	Introduction to Automotive Technology Lab	1
AUTO 111	Engine Diagnosis and Repair	2
AUTO 111L	Engine Diagnosis and Repair Laboratory	1
AUTO 111T	Engine Diagnosis and Repair Assessment Test Out	0.5
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 121L	Automatic Transmission Theory and Operation Laboratory	1
AUTO 121T	Automatic Transmission Theory and Operation Assessment Test Out	0.5
AUTO 131	Manual Transmission and Transaxle Repair	1
AUTO 131L	Manual Transmission and Transaxle Repair Laboratory	1
AUTO 131T	Manual Transmission and Transaxle Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 144	Noise, Vibration, and Harshness Diagnosis	0.5
AUTO 144L	Noise, Vibration, and Harshness Diagnosis Laboratory	1
AUTO 144T	Noise, Vibration, and Harshness Diagnosis Assessment Test Out	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 151L	Brake System Diagnosis and Repair Laboratory	1
AUTO 151T	Brake System Diagnosis and Repair Assessment Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1

AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 171L	Climate Control Systems Diagnosis and Repair Laboratory	1
AUTO 171T	Climate Control Systems Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
AUTO 194	Diesel Engine Performance and Diagnosis	2
AUTO 194L	Diesel Engine Performance and Diagnosis Laboratory	1
AUTO 194T	Diesel Engine Performance and Diagnosis Assessment Test Out	0.5
	Total Required	44
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. AUTOMOTIVE TECHNOLOGY– AUTOMOTIVE SERVICE COUNCILS OF CALIFORNIA ASCCA

The Automotive Service Councils of California Association (ASCCA) sponsored degree program offers a unique, on-the-job training opportunity for students accepted by a sponsoring Automotive Repair Dealer (ARD) or affiliate. Students will be required to further their studies in an ASCCA-sponsoring repair facility as a paid apprentice, technician. Successful students will gain over 1000 hours of documented and evaluated paid work experience relating to the learning objectives of the program, Automotive Service Excellence Certifications, and California Smog Inspector and Repair Technician licensing training. This is an excellent major for students wanting to own or operate an independent business.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Accurately describe and demonstrate knowledge of various automotive system operations and interrelationships at an ASCCA Automotive Repair Dealership or affiliate.
- Diagnose and repair automotive system problems by performing necessary actions at an ASCCA ARD or affiliate.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
Required Core:		
AUTO 099	Introduction to Automotive Technology	3
AUTO 100L	Introduction to Automotive Technology Laboratory	1
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 151L	Brake System Diagnosis and Repair Laboratory	1
AUTO 151T	Brake System Diagnosis and Repair Assessment Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
AUTO 284	Level I Smog Inspector Training	2
AUTO 284L	Level I Smog Inspector Training Laboratory	1
AUTO 284T	Level I Smog Inspector Training Assessment Test Out	0.5
AUTO 285	Level II Smog Inspector Training	1
AUTO 285L	Level II Smog Inspector Training Laboratory	1
AUTO 285T	Level II Smog Inspector Training Assessment Test Out	0.5
AUTO 264	Hybrid and Electric Vehicle Operation and Diagnosis	1
AUTO 264L	Hybrid and Electric Vehicle Operation and Diagnosis Laboratory	1
AUTO 264T	Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out	0.5
*AUTO 213	ASCCA Work Experience	12
	Total Required	41
	Plus General Education Requirements	

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology – Automotive Service Councils of California ASCCA. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. AUTOMOTIVE TECHNOLOGY CHASSIS SPECIALIST

Many businesses need technicians with very specific skills to diagnose and repair complex problems of brakes, suspension, and dynamic vehicle driving systems. This specialized degree includes antilock braking, electronic suspension, and alignment training. Successful students will qualify to take the California Bureau of Automotive Licensing exams for Brake and Lamp licensing. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all courses and general education courses will receive and Associates of Science during Commencement. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Accurately describe and demonstrate knowledge of various automotive brake, steering, and suspension systems.
- Diagnose and repair automotive chassis systems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Certificate Requirements:

Course	*Title*	*Units*
AUTO 131	Manual Transmission and Transaxle Repair	1
AUTO 131L	Manual Transmission and Transaxle Repair Laboratory	1
AUTO 131T	Manual Transmission and Transaxle Repair Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 144	Noise, Vibration, and Harshness Diagnosis	0.5
AUTO 144L	Noise, Vibration, and Harshness Diagnosis Laboratory	1
AUTO 144T	Noise, Vibration, and Harshness Diagnosis Assessment Test Out	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 151L	Brake System Diagnosis and Repair Laboratory	1
AUTO 151T	Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 153	Advanced Brake System Diagnosis and Repair	2
AUTO 153L	Advanced Brake System Diagnosis and Repair Laboratory	1
AUTO 153T	Advanced Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1

AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
*AUTO 212	Automotive Technology Work Experience	12
	Total Required	35.5
	Plus General Education Requirements	

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Automotive Technology Chassis Specialist. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

IV. AUTOMOTIVE TECHNOLOGY DRIVETRAIN SPECIALIST
Many businesses need technicians with very specific skills to diagnose and repair complex problems of transmissions, transaxles, and differential vehicle power systems. This specialized program includes electronic controlled valve bodies, electronic differentials, four wheel drive, and all-wheel drive systems. Successful students will obtain a highly desired specialty set of skills. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Accurately describe and demonstrate knowledge of various automotive automatic, manual, electric and electronic drivetrain systems.
- Diagnose and repair automotive power transmission systems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Certificate of Achievement Requirements:

Course	*Title*	*Units*
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 121L	Automatic Transmission Theory and Operation Laboratory	1
AUTO 121T	Automatic Transmission Theory and Operation Assessment Test Out	0.5
AUTO 126	Automatic Transmission Diagnosis and Testing	2
AUTO 126L	Automatic Transmission Diagnosis and Testing Laboratory	1
AUTO 126T	Automatic Transmission Diagnosis and Testing Assessment Test Out	0.5
AUTO 131	Manual Transmission and Transaxle Repair	1
AUTO 131L	Manual Transmission and Transaxle Repair Laboratory	1
AUTO 131T	Manual Transmission and Transaxle Repair Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 263	Advanced Electronics	1
AUTO 263L	Advanced Electronics Laboratory	1
AUTO 263T	Advanced Electronics Assessment Test Out	0.5
AUTO 264	Hybrid and Electric Vehicle Operation and Diagnosis	1
AUTO 264L	Hybrid and Electric Vehicle Operation and Diagnosis Laboratory	1
AUTO 264T	Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out	0.5
*AUTO 212	Automotive Technology Work Experience	12
	Total Required	36

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Automotive Technology Drivetrain Specialist. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

V. AUTOMOTIVE TECHNOLOGY ELECTRONICS AND ELECTRIC VEHICLE SPECIALIST
Many businesses need technicians with very specific skills to diagnose and repair complex problems in the Electric Vehicle and Hybrid Vehicle specialty. The high voltage battery and vehicle power systems require extremely fast computer multiplexing. This specialized program includes electronic controlled autonomous drive systems, electronic motor drive, four wheel motor drive, and hybrid drive systems. Successful students will obtain a highly desired specialty set of skills. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Accurately describe and demonstrate knowledge of various electrical, electronic, hybrid, and electric vehicle systems.
- Diagnose and repair advanced electronic automotive systems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Certificate of Achievement Requirements:

Course	*Title*	*Units*
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 121L	Automatic Transmission Theory and Operation Laboratory	1
AUTO 121T	Automatic Transmission Theory and Operation Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 153	Advanced Brake System Diagnosis and Repair	2
AUTO 153L	Advanced Brake System Diagnosis and Repair Laboratory	1
AUTO 153T	Advanced Brake System Diagnosis and Repair Test Assessment Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 171L	Climate Control Systems Diagnosis and Repair Laboratory	1
AUTO 171T	Climate Control Systems Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
AUTO 263	Advanced Electronics	1
AUTO 263L	Advanced Electronics Laboratory	1
AUTO 263T	Advanced Electronics Assessment Test Out	0.5
AUTO 264	Hybrid and Electric Vehicle Operation and Diagnosis	1
AUTO 264L	Hybrid and Electric Vehicle Operation and Diagnosis Laboratory	1
AUTO 264T	Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out	0.5
AUTO 283	Advanced Engine Performance	1
AUTO 283L	Advanced Engine Performance Laboratory	1
AUTO 283T	Advanced Engine Performance Assessment Test Out	0.5

*AUTO 212	Automotive Technology Work Experience	12
	Total Required	48

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology Electronics and Electric Vehicle Specialist. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VI. AUTOMOTIVE TECHNOLOGY ENGINE PERFORMANCE SPECIALIST

Many businesses need technicians with very specific skills to repair emission system failures or complex problems relating to the fuel, ignition, and/or engine systems. This specialized degree includes hybrid and electric vehicle, and gasoline and diesel fuel systems training. Successful students will qualify to take the California Bureau of Automotive Licensing exams for Smog Inspector and Repair licensing. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all courses and general education courses will receive an Associates of Science during Commencement. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Accurately describe and demonstrate knowledge of various automotive emission control systems.
- Diagnose and repair automotive emission control systems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
AUTO 111	Engine Diagnosis and Repair	2
AUTO 111L	Engine Diagnosis and Repair Laboratory	1
AUTO 111T	Engine Diagnosis and Repair Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
AUTO 194	Diesel Engine Performance and Diagnosis	2
AUTO 194L	Diesel Engine Performance and Diagnosis Laboratory	1
AUTO 194T	Diesel Engine Performance and Diagnosis Assessment Test Out	0.5
AUTO 283	Advanced Engine Performance	1
AUTO 283L	Advanced Engine Performance Laboratory	1
AUTO 283T	Advanced Engine Performance Assessment Test Out	0.5
AUTO 284	Level I Smog Inspector Training	2
AUTO 284L	Level I Smog Inspector Training Laboratory	1
AUTO 284T	Level I Smog Inspector Training Assessment Test Out	0.5
AUTO 285	Level II Smog Inspector Training	1
AUTO 285L	Level II Smog Inspector Training Laboratory	1
AUTO 285T	Level II Smog Inspector Training Assessment Test Out	0.5
AUTO 263	Advanced Electronics	1
AUTO 263L	Advanced Electronics Laboratory	1
AUTO 263T	Advanced Electronics Assessment Test Out	0.5
AUTO 264	Hybrid and Electric Vehicle Operation and Diagnosis	1
AUTO 264L	Hybrid and Electric Vehicle Operation and Diagnosis Laboratory	1
AUTO 264T	Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out	0.5
*AUTO 212	Automotive Technology Work Experience	12
	Total Required	46.5

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Automotive Technology Engine Performance Specialist. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VII. AUTOMOTIVE TECHNOLOGY ENGINE REPAIR SPECIALIST

Many businesses need technicians with very specific skills to diagnose and repair complex problems in the diesel and gasoline engine specialty. Engines have very complex electro mechanical controls, and use hydraulic oil systems. This specialized degree includes variable cam timing, in-vehicle engine repair, diagnosis strategies, and related systems. Successful students will obtain a highly desired specialty set of skills. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all courses and general education courses will receive and Associates of Science during Commencement. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon completion of this program, students will be able to:
- Accurately describe and demonstrate knowledge of various mechanical, electronic, and hydraulic, vehicle engine systems.
- Diagnose and repair advanced diesel and gasoline automotive engine systems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
AUTO 111	Engine Diagnosis and Repair	2
AUTO 111L	Engine Diagnosis and Repair Laboratory	1
AUTO 111T	Engine Diagnosis and Repair Assessment Test Out	0.5
AUTO 144	Noise Vibration and Harshness Diagnosis	0.5
AUTO 144L	Noise Vibration and Harshness Diagnosis Laboratory	1
AUTO 144T	Noise Vibration and Harshness Diagnosis Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 171L	Climate Control Systems Diagnosis and Repair Laboratory	1
AUTO 171T	Climate Control Systems Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
AUTO 194	Diesel Engine Performance and Diagnosis	2
AUTO 194L	Diesel Engine Performance and Diagnosis Laboratory	1
AUTO 194T	Diesel Engine Performance and Diagnosis Assessment Test Out	0.5
*AUTO 212	Automotive Technology Work Experience	12
	Total Required	37.5

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology Engine Repair Specialist. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VIII. AUTOMOTIVE TECHNOLOGY– FORD ASSET

The Ford sponsored Automotive Student Service Education Training (ASSET) degree program offers a unique job training opportunity to students sponsored by a Ford dealership. The training includes all major content areas of Ford automotive systems. Students will demonstrate competency by efficiently performing prescribed tasks for Ford certification through laboratory or work experience assessments. Students who have previous college credit or an associate degree or higher may be exempt from all or part of the general education and Ford ASSET major credit requirements. Furthermore, students may use previous military training, automotive classes from accredited colleges, trade schools, or manufacturers training for credit by examination. Please contact the department coordinator for more details.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Accurately describe and demonstrate knowledge of Ford automotive system operations and interrelationships.
- Diagnose and repair Ford automotive system problems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
AUTO 111	Engine Diagnosis and Repair	2
AUTO 111L	Engine Diagnosis and Repair Laboratory	1
AUTO 111T	Engine Diagnosis and Repair Assessment Test Out	0.5
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 121L	Automatic Transmission Theory and Operation Laboratory	1
AUTO 121T	Automatic Transmission Theory and Operation Assessment Test Out	0.5
AUTO 126	Automatic Transmission Diagnosis and Testing	2
AUTO 126L	Automatic Transmission Diagnosis and Testing Laboratory	1
AUTO 126T	Automatic Transmission Diagnosis and Testing Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 144	Noise Vibration and Harshness Diagnosis	0.5
AUTO 144L	Noise Vibration and Harshness Diagnosis Laboratory	1
AUTO 144T	Noise Vibration and Harshness Diagnosis Assessment Test Out	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 151L	Brake System Diagnosis and Repair Laboratory	1
AUTO 151T	Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 153	Advanced Brake System Diagnosis and Repair	2
AUTO 153L	Advanced Brake System Diagnosis and Repair Laboratory	1
AUTO 153T	Advanced Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 171L	Climate Control Systems Diagnosis and Repair Laboratory	1
AUTO 171T	Climate Control Systems Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
*AUTO 215	Ford ASSET Work Experience	12
	Total Required	53
	Plus General Education Requirements	

*Must be taken for a total of 12 units.

IX. AUTOMOTIVE TECHNOLOGY – GENERAL MOTORS ASEP

The General Motors sponsored Automotive Service Education Program (ASEP) degree program offers a unique job training opportunity to those students who are accepted. Training includes all systems of GM automobiles. In addition, students will be required to further their studies in a sponsoring dealership as a paid GM student technician. Students who have previous college credit or an associate degree or higher may be exempt from all or part of the general education requirements; please see a counselor or coordinator.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Accurately describe and demonstrate knowledge of General Motors automotive system operations and interrelationships.
- Diagnose and repair General Motors automotive system problems by performing necessary actions.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
AUTO 111	Engine Diagnosis and Repair	2
AUTO 111L	Engine Diagnosis and Repair Laboratory	1
AUTO 111T	Engine Diagnosis and Repair Assessment Test Out	0.5
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 121L	Automatic Transmission Theory and Operation Laboratory	1
AUTO 121T	Automatic Transmission Theory and Operation Assessment Test Out	0.5
AUTO 126	Automatic Transmission Diagnosis and Testing	2
AUTO 126L	Automatic Transmission Diagnosis and Testing Laboratory	1
AUTO 126T	Automatic Transmission Diagnosis and Testing Assessment Test Out	0.5
AUTO 132	Differential and 4WD System Diagnosis and Repair	1
AUTO 132L	Differential and 4WD System Diagnosis and Repair Laboratory	1
AUTO 132T	Differential and 4WD System Diagnosis and Repair Assessment Test Out	0.5
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 143L	Steering and Suspension Diagnosis and Repair Laboratory	1
AUTO 143T	Steering and Suspension Diagnosis and Repair Assessment Test Out	0.5
AUTO 144	Noise Vibration and Harshness Diagnosis	0.5
AUTO 144L	Noise Vibration and Harshness Diagnosis Laboratory	1
AUTO 144T	Noise Vibration and Harshness Diagnosis Assessment Test Out	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 151L	Brake System Diagnosis and Repair Laboratory	1
AUTO 151T	Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 153	Advanced Brake System Diagnosis and Repair	2
AUTO 153L	Advanced Brake System Diagnosis and Repair Laboratory	1
AUTO 153T	Advanced Brake System Diagnosis and Repair Assessment Test Out	0.5
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 161L	Electrical Diagnosis and Repair Laboratory	1
AUTO 161T	Electrical Diagnosis and Repair Assessment Test Out	0.5
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 162L	Electronics Diagnosis and Repair Laboratory	1
AUTO 162T	Electronics Diagnosis and Repair Assessment Test Out	0.5
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 171L	Climate Control Systems Diagnosis and Repair Laboratory	1
AUTO 171T	Climate Control Systems Diagnosis and Repair Assessment Test Out	0.5
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 181L	Engine Performance I Ignition and Fuel Systems Laboratory	1
AUTO 181T	Engine Performance I Ignition and Fuel Systems Assessment Test Out	0.5
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 183L	Engine Performance II Intake Exhaust and Emission Systems Laboratory	1
AUTO 183T	Engine Performance II Intake Exhaust and Emission Systems Assessment Test Out	0.5
*AUTO 214	General Motors ASEP Work Experience	12
	Total Required	53

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology – General Motors ASEP. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

X. AUTOMOTIVE TECHNOLOGY SERVICE MANAGEMENT

Many businesses need technicians with very specific skills to communicate with customers, management, and technicians about complex problems in all vehicle specialties. This specialized program emphasizes effective and equitable communication skills, and additionally includes specific compliance standards training and business management training unique to the automotive industry. Successful students will obtain highly desired skills in professional communication and industry compliance. Work experience is a requirement for this major, which ensures student competency and success. All students are required to complete a digital portfolio resume used for assessment and practicum. Students completing all courses and general education courses will receive and Associates of Science during Commencement. Students completing all automotive course requirements will receive a Certificate of Achievement during Commencement.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Accurately describe and demonstrate knowledge of various automotive systems.
- Apply knowledge of the repair systems process by describing necessary actions by order of priority to a customer, manager, or technician.
- Communicate effectively and professionally in a diverse setting that includes colleagues, clients, and supervisors.
- Comply with environmental health and safety regulations at the state and federal levels.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
Required Core:		
AUTO 111	Engine Diagnosis and Repair	2
AUTO 121	Automatic Transmission Theory and Operation	2
AUTO 143	Steering and Suspension Diagnosis and Repair	1
AUTO 144	Noise Vibration and Harshness Diagnosis	0.5
AUTO 151	Brake System Diagnosis and Repair	2
AUTO 161	Electrical Diagnosis and Repair	2
AUTO 162	Electronics Diagnosis and Repair	2
AUTO 171	Climate Control Systems Diagnosis and Repair	1
AUTO 181	Engine Performance I Ignition and Fuel Systems	2
AUTO 183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO 194	Diesel Engine Performance and Diagnosis	2
AUTO 210	Automotive Service Management	3
AUTO 211	Automotive Customer Service	2
*AUTO 212	Automotive Technology Work Experience	12
	Total Required	35.5
	Plus General Education Requirements	

*Must be taken for a total of 12 units.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Automotive Technology Service Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CADD TECHNOLOGY

Occupational preparation in Computer-Aided Drafting and Design is the primary purpose of the CADD Technology degree program. Students are required to complete two core courses and to select from two potential career paths: Building Design Industry or Manufacturing Industry. Adherence to industrial practices and standards is stressed, including problem solving in a simulated industrial environment.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Create 3D modeling objects of various orientations including sections and elevations of objects, and identify the relationships of objects or object features to demonstrate visualization proficiency.
- Identify or describe the typical characteristics and uses of common construction or manufacturing materials, products and systems, document them in drawings, and make appropriate selections based on design project requirements.
- Use the latest version of 2D/3D CADD and Solid Modeling software programs (AutoCAD and SolidWorks) to create industry standard architectural or engineering drawings.
- Model the habits and attitudes for success in professional employment as a CADD technician including the preparation and presentation of a professional portfolio.
- Demonstrate computation, communication, critical thinking, and problem-solving skills to perform effectively as a CADD technician in the field of architecture and/or the civil, electronic, mechanical, structural, and surveying engineering fields.

CAREER OPPORTUNITIES
CAD Technician in the field of Architecture and Civil, Electronic, Mechanical, Structural, and Surveying Engineering

Associate in Science Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
CADD 115	Engineering Graphics	3
CADD 120	Introduction to Computer-Aided Drafting and Design	3
		6

Areas of Emphasis:

A. BUILDING DESIGN INDUSTRY

CADD/SURV 127	Survey Drafting Technology	3
CADD 131	Architectural Computer-Aided Drafting and Design	3
CADD 133	Advanced Architectural Computer-Aided Drafting and Design	3
CADD/OH 200	Introduction to Computer-Aided Landscape Design	3
		12

Select two of the following:

CADD 126	Electronic Drafting	3
CADD 128	Geometric Dimensioning and Tolerancing (GDT)	3
CADD 132	Advanced Computer-Aided Drafting and Design in 3D Modeling	3
CADD/OH 201	Advanced Computer-Aided Landscape Design	3
		6
	Total Required Including Core Classes	24
	Plus General Education Requirement	

B. MANUFACTURING INDUSTRY

Select four of the following:

CADD/ENGR 125	Solid Modeling Design	3
CADD 126	Electronic Drafting	3
CADD 128	Geometric Dimensioning and Tolerancing (GDT)	3
CADD/ENGR 129	Engineering Solid Modeling	3
CADD 132	Advanced Computer-Aided Drafting and Design in 3D Modeling	3
		12

Select two of the following:

CADD/SURV 127	Survey Drafting Technology	3
CADD 131	Architectural Computer-Aided Drafting and Design	3
CADD 133	Advanced Architectural Computer-Aided Drafting and Design	3
CADD/OH 200	Introduction to Computer-Aided Landscape Design	3
		6
	Total Required Including Core Classes	24
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the courses required for the major including an area of emphasis qualify for a Certificate in CADD Technology in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATE OF SPECIALIZATION

CADD/MANUFACTURING TECHNOLOGY

This Certificate-program is designed to introduce the various technologies used in manufacturing/advanced manufacturing, including new manufacturing technologies. This program is well-balanced between theoretical and practical aspects of manufacturing/advanced manufacturing.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Understand principles of the current technology used in manufacturing.
- Apply the appropriate technology in manufacturing.
- Define the advantages and disadvantages of the application of "AI" in manufacturing.
- Work at an entry level in the metal-work industry.
- Perform their jobs in a safe manner.

Certificate Requirements

Course	*Title*	*Units*
CADD 115	Engineering Graphics	3
CADD/ENGR 125	Solid Modeling Design (SW)*	3
CADD 140	Introduction to Advanced CADD/ Manufacturing	2
CADD 141	Introduction to Technology of Machine Tools	2
CADD 150	Occupational Work Experience in CADD Technology/Manufacturing	4
	Total Required	14

* Students have also the opportunity to attain a certificate of "Certified SolidWorks Associate (CSWA)"

CENTER FOR WATER STUDIES

I. BACKFLOW & CROSS-CONNECTION CONTROL

Students will study the technical processes, procedures, and methods used in the production, use, and distribution of recycled and reclaimed wastewater, including backflow protection, legal, administrative and permitting issues, the treatment process, health and safety concerns, and the cross-connection control (shut down) test as performed in San Diego County. The courses consist of both classroom and demonstration sessions which cover all aspects of cross-connection control and recycled water shut down testing.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Differentiate between different backflow devices and methods.
- Compare and contrast the effective uses of backflow devices and explain their limitations.
- Describe the specifications, installation, and operation of typical devices used in backflow prevention and testing and explain their proper installation.
- Perform accurate backflow prevention tests using proper test equipment.
- Analyze backflow prevention test results using standardized test reporting forms.
- Evaluate backflow testing device malfunctions.
- Articulate the importance of proper backflow testing equipment selection and use.
- Cite specific laws pertaining to cross-connection control programs.
- Complete basic backflow testing device repairs requiring breakdown and reassembly.
- Articulate the AWWA and ABPA testing standards.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 130	Water Distribution Systems	3
CWS 204	Applied Hydraulics	3
CWS 280	Backflow Tester Training	2
CWS 282	Cross-Connection Control Specialist	3
CWS 284	Cross-Connection Control Specialist–Recycled Water	3
		20

Select at least nine units from the following:

CWS 103	Water Resources Management	3
CWS 105	Water Conservation	3
CWS 106	Electrical & Instrumentation Processes	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 115	Wastewater Reclamation and Reuse	3
CWS 132	Wastewater Collection Systems	3
CWS 134	Pumps, Motors, & Valves	3
CWS 290	Cooperative Work Experience	2
		9-11
	Total Required	29-31
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Backflow & Cross-Connection Control. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. WATER DISTRIBUTION OPERATIONS

Students in this major learn the methods, processes, technology, and current practices involved in operating and maintaining modern, complex water distribution systems. Students who satisfactorily complete the required courses for this certificate and/or degree program will qualify to take the CDPH Grade D-1 through D-5 Water Distribution Operator examinations required to obtain certification and employment with a water district.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify sources and characteristics of water common to water distribution systems.
- Compare and contrast the different types of water distribution systems currently used in the United States.
- Identify drinking water public health hazards and water quality standards common to the industry.
- Using calculations and conversions, determine water flow, pressure, volume, velocity and force, and chemical dosage used in water distribution systems.
- Identify and compare methods used to handle, install and repair water distribution pipe.
- Explain principles of pump operation for the types of pumps used in water distribution systems, including common problems, necessary adjustments, and typical packing gland problems.
- Explain the electrical principles involved in control circuits common to water distribution systems.
- Explain the required safe handling and storage of chlorine used in water distribution systems.
- Check and utilize water maps and drawings to determine location, type and characteristics of water distribution systems.
- Specify necessary procedures needed to safely complete field work in a water distribution system.
- Compare and contrast factors considered in the selection of pipe and different types of water meters.
- Demonstrate the ability to read meters and calculate the meter accuracy.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 106	Electrical & Instrumentation Processes	3
CWS 107	Safety in Water & Wastewater	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 130	Water Distribution Systems	3
CWS 134	Pumps, Motors, & Valves	3
CWS 204	Applied Hydraulics	3
CWS 230	Advanced Water Distribution Systems	3
		30

Select at least six units from the following:

CWS 103	Water Resources Management	3
CWS 105	Water Conservation	3
CWS 112	Water Treatment Plant Operations	3
CWS 115	Wastewater Reclamation and Reuse	3
CWS 132	Wastewater Collection Systems	3
CWS 206	Advanced Electrical & Instrumentation Processes	3
CWS 207	Practical Skills in Water & Wastewater Systems	2
CWS 210	Advanced Laboratory Analysis for Water & Wastewater	3
CWS 212	Advanced Water Treatment Plant Operations	3
CWS 232	Advanced Wastewater Collection Systems	3
CWS 270	Public Works Supervision	3
CWS 280	Backflow Tester Training	2
CWS 282	Cross-Connection Control Specialist	3
CWS 284	Cross-Connection Control Specialist–Recycled Water	3
CWS 290	Cooperative Work Experience	2
		6-7
	Total Required	36-37
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Water Distribution Operations. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. WATER RESOURCES MANAGEMENT

This major prepares students to design, implement and evaluate water conservation/water resources management programs and to assist in developing more diversified water resource portfolios in the water and wastewater sector or in the landscape and property management field. Emphasis is on emerging technologies and methods that lead to long-term sustainability of our water and wastewater resources. Attaining a certificate or degree in this major will prepare students to enter careers in water conservation, watershed management, water resources and groundwater, public information, and community education. Careers in landscape and facilities maintenance, irrigation system design, urban water management, and landscape design are also options. Students successfully completing the core requirements for this major will qualify to take the American Water Works Association's Water Use Efficiency Practitioner certification examination, the Landscape Water Management certification offered by the California Landscape Contractor's Association, and the Certified Landscape Water Manager certification offered by the Irrigation Association. In addition to preparing students for entry level jobs in the water and wastewater field, courses in this major prepare students to transfer to a number of four-year college or university degree programs, including Water Resources, Environmental Sciences, and Natural Resources Management.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe the essential uses of water, the infrastructure that has been developed to meet demand, and the problems the water industry faces.
- Identify a specified number of legal and financial constraints which complicate efficient and effective water resource management.
- Explain the concept and importance of water portfolio diversification.
- Describe the political/organizational structures and list the major agencies involved in providing water in the greater San Diego region.
- Compare and contrast the sources of wastewater, the major collection/transportation networks, and the major wastewater treatment/reclamation facilities operating in San Diego County.
- Identify the major regulatory agencies that monitor and regulate the water/wastewater industry.
- Explain how the current carbon footprint of the water and wastewater infrastructure

significantly impacts California's energy and power demands.
- Compare and contrast a specified number of resource recovery/alternative treatment methods.

Associate in Science Degree Requirements:

Course	Title	Units
CWS 101	Fundamentals of Water & Wastewater	3
CWS 103	Water Resources Management	3
CWS 105	Water Conservation	3
CWS 115	Wastewater Reclamation and Reuse	3
OH 120	Fundamentals of Ornamental Horticulture	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 250	Landscape Water Management	2
CWS 290	Cooperative Work Experience	2
or		
OH 290	Cooperative Work Experience Education	2
		25

Select two of the following:

CWS 102	Calculations in Water & Wastewater	3
CWS 112	Water Treatment Plant Operations	3
CWS 114	Wastewater Treatment Plant Operations	3
CWS 130	Water Distribution Systems	3
CWS 132	Wastewater Collection Systems	3
CWS 280	Backflow Tester Training	2
CWS 282	Cross-Connection Control Specialist	3
CWS 284	Cross-Connection Control Specialist–Recycled Water	3
		5-6

Select two of the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 140	Soils	3
OH 174	Turf and Ground Cover Management	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 235	Principles of Landscape Irrigation	4
OH 238	Irrigation System Design	3
OH 255	Sustainable Urban Landscape Principles and Practices	2
		4-7
	Total Required	34-38
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Water Resources Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

IV. WATER TREATMENT PLANT OPERATIONS

Students enrolled in this major learn the key steps, processes, and current technology involved in operating modern water treatment plants. Students who satisfactorily complete the required courses in this certificate and/or degree program will qualify to take the California Department of Public Health (CDPH) Grade T-1 and T-2 Water Treatment Plant Operator examinations required for certification and employment at water treatment plants.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:
- Identify in detail characteristics and sources of ground water and surface water supplies including the chemical, physical and bacterial characteristics, and explain the effects on quality of geological formations, stratifications, and watershed management.
- Compare the basic principles of each water treatment process and list them in order performed.
- Identify and classify water distribution system components.
- Explain pump cavitation, corrosion, cross-connection, air valves, head loss and main flushing in relation to water and wastewater collection, distribution, and treatment.
- Compare and contrast the basic principles of each water treatment process and list them in order performed.
- Explain and prepare a plan for the use of chlorine including the characteristics of and methods for storing, feeding and measuring chlorine including the effects of moisture, pH and temperature on feed rate, and the health and safety effects, procedures and personal protective requirements.
- Determine the methods used for coagulation, flocculation and sedimentation including common chemicals used, feed systems, effects of time temperature, turbidity and pH, and the measurement of turbidity and color.
- Compare and contrast the six basic water quality parameters and explain in detail microbiological and chemical components, including sampling requirements and properties.
- Demonstrate through testing basic knowledge of the regulations for monitoring water quality and performing water treatment.
- Perform basic mathematical calculations and conversions relating to water flow, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Determine appropriate safety procedures applicable to service and operation of water treatment and distribution systems including potential problems.

Associate in Science Degree Requirements:

Course	Title	Units
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 106	Electrical & Instrumentation Processes	3
CWS 107	Safety in Water & Wastewater	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 112	Water Treatment Plant Operations	3
CWS 134	Pumps, Motors & Valves	3
CWS 204	Applied Hydraulics	3
CWS 212	Advanced Water Treatment Plant Operations	3
		30

Select at least six units from the following:

CWS 103	Water Resources Management	3
CWS 105	Water Conservation	3
CWS 114	Wastewater Treatment Plant Operations	3
CWS 115	Wastewater Reclamation and Reuse	3
CWS 130	Water Distribution Systems	3
CWS 206	Advanced Electrical & Instrumentation Processes	3
CWS 207	Practical Skills in Water & Wastewater Systems	2
CWS 210	Advanced Laboratory Analysis for Water & Wastewater	3
CWS 214	Advanced Wastewater Treatment Plant Operations	3
CWS 230	Advanced Water Distribution Systems	3
CWS 268	Membrane Plant Operation	3
CWS 270	Public Works Supervision	3
CWS 280	Backflow Tester Training	2
CWS 282	Cross-Connection Control Specialist	3
CWS 290	Cooperative Work Experience	2
		6-7
	Total Required	36-37
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Water Treatment Plant Operations. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

V. WASTEWATER COLLECTION SYSTEMS

Students completing the required courses for this major will qualify to take nearly a dozen wastewater related certification examinations offered by the California Water Environment Association (CWEA). Although current State regulations do not require certification of wastewater collection system personnel, many public sector employers either require or prefer job applicants who have obtained the CWEA Wastewater Collection and Maintenance certifications.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:
- Define common terminology pertaining to collections system components, design, and management as well as inspection and quality control.
- Identify the types and functions of pipes and fittings used in wastewater collection system design and management.
- Given a wastewater collection map book, identify pipeline dimensions, pipe construction materials, direction of flow, and location of valves, services and lift stations.
- Describe in detail basic underground location and leak detection, trenching and shoring, and backfill and compaction methods of construction used in the field.
- Describe the nine basic cleaning methods and basic principles involved in hydraulic and mechanical cleaning methods.
- List and describe the operation of common valves used in a wastewater collection system.
- Perform basic mathematical computations and conversions relating to wastewater collection systems, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.

Associate in Science Degree Requirements:

Course	Title	Units
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 106	Electrical & Instrumentation Processes	3
CWS 107	Safety in Water & Wastewater	3
CWS 132	Wastewater Collection Systems	3
CWS 134	Pumps, Motors & Valves	3
CWS 204	Applied Hydraulics	3
CWS 232	Advanced Wastewater Collection Systems	3
CWS 282	Cross-Connection Control Specialist	3
		30

Select at least six units from the following:

CWS 103	Water Resources Management	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 112	Water Treatment Plant Operations	3
CWS 114	Wastewater Treatment Plant Operations	3
CWS 115	Wastewater Reclamation and Reuse	3
CWS 130	Water Distribution Systems	3
CWS 206	Advanced Electrical & Instrumentation Processes	3
CWS 207	Practical Skills in Water & Wastewater Systems	2
CWS 210	Advanced Laboratory Analysis for Water & Wastewater	3
CWS 214	Advanced Wastewater Treatment Plant Operations	3
CWS 230	Advanced Water Distribution Systems	3
CWS 270	Public Works Supervision	3
CWS 280	Backflow Tester Training	2
CWS 284	Cross-Connection Control Specialist–Recycled Water	3
CWS 290	Cooperative Work Experience	2
		6-7
	Total Required	36-37
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Wastewater Collection Systems. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VI. WASTEWATER TREATMENT OPERATIONS

Students who complete the required courses for this certificate and/or degree program will qualify to take the SWRCB certification examination for the Grade I Wastewater Plant Operator as well as nearly a dozen wastewater related certification examinations offered by CWEA. There are over 80 wastewater treatment and reclamation facilities in San Diego County that are currently licensed and regulated by the SWRCB.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Describe wastewater collection system components.
- Identify the characteristics and sources of municipal sewage.
- Define wastewater collection system and wastewater treatment plant terminology.
- Describe the basic principles of conventional wastewater treatment.
- Compare and contrast wastewater treatment unit processes including preliminary, primary, secondary and tertiary treatment.
- Explain the basic principles of preliminary, primary, secondary and tertiary treatment.
- Perform basic mathematical calculations and conversions relating to water flow, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Recognize and comment on safety procedures applicable to service and operation of wastewater collection and treatment systems, including potential problems.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 106	Electrical & Instrumentation Processes	3
CWS 107	Safety in Water & Wastewater	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 114	Wastewater Treatment Plant Operations	3
CWS 134	Pumps, Motors & Valves	3
CWS 204	Applied Hydraulics	3
CWS 214	Advanced Wastewater Treatment Plant Operations	3
		30

Select at least six units from the following:

CWS 103	Water Resources Management	3
CWS 112	Water Treatment Plant Operations	3
CWS 115	Wastewater Reclamation and Reuse	3
CWS 130	Water Distribution Systems	3
CWS 132	Wastewater Collection Systems	3
CWS 206	Advanced Electrical & Instrumentation Processes	3
CWS 207	Practical Skills in Water & Wastewater Systems	2
CWS 210	Advanced Laboratory Analysis for Water & Wastewater	3
CWS 212	Advanced Water Treatment Plant Operations	3
CWS 232	Advanced Wastewater Collection Systems	3
CWS 268	Membrane Plant Operation	3
CWS 270	Public Works Supervision	3
CWS 280	Backflow Tester Training	2
CWS 282	Cross-Connection Control Specialist	3
CWS 284	Cross-Connection Control Specialist–Recycled Water	3
CWS 290	Cooperative Work Experience	2
		6-7
	Total Required	36-37
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Wastewater Treatment Operations. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATES OF SPECIALIZATION

Students who complete the requirements below qualify for a certificate in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

WATER DISTRIBUTION OPERATIONS, STACKABLE CERTIFICATES OF SPECIALIZATION

WATER & WASTEWATER FUNDAMENTALS

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Water Distribution System Operations-1 – Identify sources and characteristics of water common to water distribution systems.
- Water Distribution System Operations-4 – Using calculations and conversions, determine water flow, pressure, volume, velocity and force, and chemical dosage used in water distribution systems.
- Water Distribution System Operations-10 – Specify necessary procedures needed to safely complete field work in a water distribution system.

Certificate Requirements:

Course	*Title*	*Units*
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 107	Safety in Water & Wastewater	3
	Total Required	12

WATER DISTRIBUTION OPERATIONS

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Water Distribution System Operations-3 – Identify drinking water public health hazards and water quality standards common to the industry.
- Water Distribution System Operations-4 – Using calculations and conversions, determine water flow, pressure, volume, velocity and force, and chemical dosage used in water distribution systems.
- Water Distribution System Operations-6 – Explain principles of pump operation for the types of pumps used in water distribution systems including common problems, necessary adjustments, and typical packing gland problems.

Certificate Requirements:

Course	*Title*	*Units*
CWS 106	Electrical & Instrumentation Processes	3
CWS 130	Water Distribution Systems	3
CWS 134	Pumps, Motors & Valves	3
	Total Required	9

ADVANCED WATER DISTRIBUTION OPERATIONS

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Water Distribution System Operations-5 – Identify and compare methods used to handle, install and repair water distribution pipe.
- Water Distribution System Operations-7 – Explain the electrical principles involved in control circuits common to water distribution systems.
- Water Distribution System Operations-8 – Explain the required safe handling and storage of chlorine used in water distribution systems.
- Water Distribution System Operations-11 – Compare and contrast factors considered in the selection of pipe and different types of water meters.

Certificate Requirements:

Course	*Title*	*Units*
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 204	Applied Hydraulics	3
CWS 230	Advanced Water Distribution Systems	3
	Total Required	9

WATER TREATMENT PLANT OPERATIONS, STACKABLE CERTIFICATES OF SPECIALIZATION

WATER & WASTEWATER FUNDAMENTALS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Water Treatment Plant Operator-1 – Identify in detail characteristics and sources of ground water and surface water supplies including the chemical, physical and bacterial characteristics, and explain the effects on quality of geological formations, stratifications, and watershed management.
- Water Treatment Plant Operator-10 – Perform basic mathematical calculations and conversions relating to water flow, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Water Treatment Plant Operator-11 – Determine appropriate safety procedures applicable to service and operation of water treatment and distribution systems including potential problems.

Certificate Requirements:

Course	*Title*	*Units*
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 107	Safety in Water & Wastewater	3
	Total Required	12

WATER TREATMENT PLANT OPERATIONS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Water Treatment Plant Operator-2 – Compare the basic principles of each water treatment process and list them in order performed.
- Water Treatment Plant Operator-5 – Compare and contrast the basic principles of each water treatment process and list them in order performed.
- Water Treatment Plant Operator-9 – Demonstrate through testing basic knowledge of the regulations for monitoring water quality and performing water treatment.

Certificate Requirements:

Course	*Title*	*Units*
CWS 106	Electrical & Instrumentation Processes	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 112	Water Treatment Plant Operations	3
	Total Required	9

ADVANCED WATER TREATMENT PLANT OPERATIONS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Water Treatment Plant Operator-5 – Compare and contrast the basic principles of each water treatment process and list them in order performed.
- Water Treatment Plant Operator-6 – Explain and prepare a plan for the use of chlorine including the characteristics of and methods for storing, feeding and measuring chlorine including the effects of moisture, pH and temperature on feed rate, and the health and safety effects, procedures and personal protective requirements.
- Water Treatment Plant Operator-7 – Determine the methods used for coagulation, flocculation and sedimentation including common chemicals used, feed systems, effects of time temperature, turbidity and pH, and the measurement of turbidity and color.
- Water Treatment Plant Operator-9 – Demonstrate through testing basic knowledge of the regulations for monitoring water quality and performing water treatment.

Certificate Requirements:

Course	*Title*	*Units*
CWS 134	Pumps, Motors & Valves	3
CWS 204	Applied Hydraulics	3
CWS 212	Advanced Water Treatment Plant Operations	3
	Total Required	9

WASTEWATER COLLECTION SYSTEMS, STACKABLE CERTIFICATES OF SPECIALIZATION

WATER & WASTEWATER FUNDAMENTALS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Wastewater Collection Systems-1 – Define common terminology pertaining to collections system components, design, and management as well as inspection and quality control.
- Wastewater Collection Systems-3 – Given a wastewater collection map book, identify pipeline dimensions, pipe construction materials, direction of flow, and location of valves, services and lift stations.
- Wastewater Collection Systems-7 – Perform basic mathematical computations and conversions relating to wastewater collection systems, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.

Certificate Requirements:

Course	*Title*	*Units*
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 107	Safety in Water & Wastewater	3
	Total Required	12

WASTEWATER COLLECTION SYSTEMS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Wastewater Collection Systems-4 – Describe in detail basic underground location and leak detection, trenching and shoring, and backfill and compaction methods of construction used in the field.
- Wastewater Collection Systems-5 – Describe the nine basic cleaning methods and basic principles involved in hydraulic and mechanical cleaning methods.
- Wastewater Collection Systems-6 – List and describe the operation of common valves used in a wastewater collection system.

Certificate Requirements:

Course	*Title*	*Units*
CWS 132	Wastewater Collection Systems	3
CWS 134	Pumps, Motors & Valves	3
CWS 282	Cross-Connection Control Specialist	3
	Total Required	9

ADVANCED WASTEWATER COLLECTION SYSTEMS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Wastewater Collection Systems-7 – Perform basic mathematical computations and conversions relating to wastewater collection systems, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Wastewater Collection Systems-5 – Describe the nine basic cleaning methods and basic principles involved in hydraulic and mechanical cleaning methods.
- Wastewater Collection Systems-2 – Identify the types and functions of pipes and fittings used in wastewater collection system design and management.
- Wastewater Collection Systems-4 – Describe in detail basic underground location and leak detection, trenching and shoring, and backfill and compaction methods of construction used in the field.

Certificate Requirements:

Course	*Title*	*Units*
CWS 106	Electrical & Instrumentation Processes	3
CWS 204	Applied Hydraulics	3
CWS 232	Advanced Wastewater Collection Systems	3
	Total Required	9

WASTEWATER TREATMENT OPERATIONS, STACKABLE CERTIFICATES OF SPECIALIZATION

WATER & WASTEWATER FUNDAMENTALS

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Wastewater Treatment Operator-1 – Identify in detail characteristics and sources of ground water and surface water supplies including the chemical, physical and bacterial characteristics, and explain the effects on quality of geological formations, stratifications, and watershed management.
- Wastewater Treatment Operator-7 – Perform basic mathematical calculations and conversions relating to water flow, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Wastewater Treatment Operator-8 – Recognize and comment on safety procedures applicable to service and operation of wastewater collection and treatment systems, including potential problems.

Certificate Requirements:

Course	Title	Units
CWS 100	Career Pathways in Water & Wastewater	3
CWS 101	Fundamentals of Water & Wastewater	3
CWS 102	Calculations in Water & Wastewater	3
CWS 107	Safety in Water & Wastewater	3
	Total Required	12

WASTEWATER TREATMENT OPERATIONS

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Wastewater Treatment Operator-2 – Identify the characteristics and sources of municipal sewage.
- Wastewater Treatment Operator-4 – Describe the basic principles of conventional wastewater treatment.
- Wastewater Treatment Operator-8 – Recognize and comment on safety procedures applicable to service and operation of wastewater collection and treatment systems, including potential problems.

Certificate Requirements:

Course	Title	Units
CWS 106	Electrical & Instrumentation Processes	3
CWS 110	Laboratory Analysis for Water & Wastewater	3
CWS 114	Wastewater Treatment Plant Operations	3
	Total Required	9

ADVANCED WASTEWATER TREATMENT OPERATIONS

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Wastewater Treatment Operator-7 – Perform basic mathematical calculations and conversions relating to water flow, pressure, volume, velocity, chemical dosage, and hydraulic and organic loading.
- Wastewater Treatment Operator-3 – Describe the specifications, installation, and operation of typical devices used in backflow prevention and testing and explain their proper installation.
- Wastewater Treatment Operator-6 – Explain the basic principles of preliminary, primary, secondary and tertiary treatment.
- Wastewater Treatment Operator-5 – Compare and contrast wastewater treatment unit processes including preliminary, primary, secondary and tertiary treatment.

Certificate Requirements:

Course	Title	Units
CWS 134	Pumps, Motors & Valves	3
CWS 204	Applied Hydraulics	3
CWS 214	Advanced Wastewater Treatment Plant Operations	3
	Total Required	9

COMPUTER AND INFORMATION SCIENCE

See Business Office Technology for specific Microsoft applications (Word, Excel, PowerPoint, etc.).

CAREER OPPORTUNITIES

Communications Specialist
Computer Game Programmer
Computer Hardware Specialist
Computer Help Desk Technician
Computer Maintenance Technician
Computer Software Technician
Computer Support Specialist
*Computer Systems Analyst
*Computing Analyst
Cyber Security Specialist
*Database Manager
Information Specialist
*Information Systems Programmer
LAN/WAN Manager
Manufacturer's Representative
Network Administrator
*Network Analyst
Network Consultant
Network Control Technician
Network Training and Support Specialist
*Programmer Analyst
Sales and Service
*Scientific Programmer
Software Consultant
*Software Developer
*Systems Analyst
*Systems Programmer
Technical Support Representative
*Telecommunications Programmer
Telecommunications Technician
*Telecommunications Technical Engineer
Training Specialist
Web Designer
Web Developer
*Bachelor Degree or higher required

Similar Course List:

The following Cuyamaca and Grossmont College courses are considered similar enough to be accepted in the major for local computer science degrees in the district. Modification of Major forms are not required.

Cuyamaca Course	Similar Grossmont Course
CIS 105	CSIS 172
CIS 140	CSIS 180
CIS 190	CSIS 112
CIS 191	CSIS 113
CIS 211	CSIS 132
CIS 213	CSIS 133
CIS 215	CSIS 135
CIS 267	CSIS 282
CS 119	CSIS 119
CS 181	CSIS 296
CS 182	CSIS 293
CS 281	CSIS 297
CS 282	CSIS 294

I. NETWORKING, SECURITY AND SYSTEM ADMINISTRATION

These degree programs prepare students for careers in computer networking or system administration and related fields. Upon completion, students may find entry level positions as computer support technicians, junior network administrators, junior system administrators, hardware technicians, data/voice/video cabling technicians, network project managers, designers/estimators or technical support personnel. The major prepares students to work as team members in an information technology group which designs, evaluates, tests, installs and maintains corporate networks. Preparation for the following industry certifications: A+, Network+, Security+, Linux+, Microsoft Certified Technician (MCT) in Windows and Windows Server (active directory, network infrastructure and applications infrastructure), Linux Profession Institute Certification Level 2, Certified Wireless Network Administrator (CWNA), Cisco Certified Network Associate (CCNA), Certified Ethical Hacking (CEH).

A. NETWORKING, SECURITY AND SYSTEM ADMINISTRATION - ENTERPRISE NETWORKING

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Install, configure, upgrade, diagnose and troubleshoot a personal computer and its associated networking hardware and software in accordance with industry standards.

Associate in Science Degree Requirements:
Core Curriculum:

Course	Title	Units
CIS 120	Computer Maintenance and A+ Certification	3
CIS 121	Network Cabling Systems	3
CIS 125	Network+ Certification	3
CS 119	Program Design and Development	3
CS 119L	Program Design and Development Lab	1
		13

Area of Emphasis:

CIS 190	Windows Operating System	3
or		
CIS 191	Linux Operating System	3
CIS 201	Cisco Academy – Introduction to Networking	3
CIS 202	Cisco Academy – Routing, Switching, and Wireless Essentials	3
CIS 203	Cisco Academy – Enterprise Networking, Security, and Automation	3
CIS 209	Cisco CyberOps	3
or		
CIS 263	Fundamentals of Network Security	3
		15

Select three of the following:

CIS 101	Fundamentals of Information Technology	1.5
CIS 210	Cisco Networking Academy–Voice	4
CIS 261	NSSA Degree Capstone	2
CIS 262	Wireless Networking	3
CIS 264	Ethical Cybersecurity Hacking	3
CIS 265	Computer Forensics	3
CIS 271	Palo Alto Networks - Certified Network Security Administrator (PCNSA)	3
CIS 272	Palo Alto Networks Firewall Configuration, Management, and Thread Prevention	3
		6.5-10
	Total Required Including Core Classes	34.5-38
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the courses required for the major including an area of emphasis qualify for a Certificate in Networking, Security and System Administration - Enterprise Networking. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

B. NETWORKING, SECURITY AND SYSTEM ADMINISTRATION - ENTERPRISE SYSTEM ADMINISTRATION

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Install, configure, upgrade, test, and troubleshoot a personal computer (hardware, system software, and networking hardware and software) and Linux and Windows servers (directory services, networking, print services, server security, remote access, DNS, DHCP, web server, file server, mail server, FTP server, file systems, partitions, logical volumes, server/network performance, and data backup and recovery).

Associate in Science Degree Requirements:
Core Curriculum:

Course	*Title*	*Units*
CIS 120	Computer Maintenance and A+ Certification	3
CIS 121	Network Cabling Systems	3
CIS 125	Network+ Certification	3
CS 119	Program Design and Development	3
CS 119L	Program Design and Development Lab	1
		13

Area of Emphasis:

CIS 190	Windows Operating System	3
CIS 191	Linux Operating System	3
CIS 290	Windows Server–Installing and Configuring	2
CIS 291	Linux System Administration	3
CIS 293	Windows Server–Administering	2
CIS 294	Windows Server–Advanced Configuration	2
		15

Select four of the following:

CIS 140	Databases	3
CIS 162	Technical Diagramming Using Microsoft Visio	2
CIS 170	Internet of Things (IoT) - Connecting Things	3
CIS 172	Internet of Things- Security	3
CIS 261	NSSA Degree Capstone	2
CIS 263	Fundamentals of Network Security	3
CIS 264	Ethical Cybersecurity Hacking	3
CIS 265	Computer Forensics	3
CIS 295	VMware Certified Professional	3
		10-12
	Total Required Including Core Classes	38-40
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the courses required for the major including an area of emphasis qualify for a Certificate in Networking, Security and System Administration - Enterprise System Administration. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. WEB DEVELOPMENT

This degree program equips students with the essential coding, programming, and design skills needed to build websites and applications for desktop and mobile platforms. Students gain practical experience using state of the art web development technology to prepare for entry-level positions as web developers. The curriculum is continually updated to respond to rapidly changing industry trends.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Develop attractive, usable, mobile-friendly websites using current development technologies such as HTML/CSS, JavaScript, PHP/MySQL, frameworks, and content management systems.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
CIS 140	Databases	3
CIS 211	Web Development I	3
CIS 213	Web Development II	3
CIS 215	JavaScript Web Programming	3
CIS 219	PHP/MySQL Dynamic Web-Based Applications	3
CS 119	Program Design and Development	3
CS 119L	Program Design and Development Lab	1
GD 105	Fundamentals of Digital Media	3
		22

Select one of the following:

CIS 225	Web Development Capstone	3
CIS 267	Directed Work Experience in CIS	1-4
		1-4

Select two of the following:

CIS 110	Principles of Information Systems	4
CIS 191	Linux Operating System	3
CS 182	Introduction to Java Programming	4
GD 126	Adobe Photoshop Digital Imaging	3
GD 130	Professional Business Practices	3
GD 217	Web Graphics	3
GD 222	Web Animation	3
		6-8
	Total Required	29-34
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Web Development. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATES OF SPECIALIZATION:

These certificates offer specific training for either entry-level positions or to augment related programs such as Network Administration, Web Development, Business Office Technology or Graphic Design. The certificates are designed to demonstrate a relatively narrow expertise or skill area that may be used to attain a computer industry "niche" job.

Students who complete the requirements below qualify for a certificate in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

I. CISCO CERTIFIED NETWORK ASSOCIATE

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Plan, design, configure, test, and troubleshoot network topologies consisting of routers, switches, wireless routers, and PCs using: the Cisco IOS CLI; ip addressing; interior gateway protocols; HDLC, PPP and Frame-Relay WAN protocols; VLANs; NAT; DHCP; router and switch security techniques.

Certificate Requirements:

Course	*Title*	*Units*
CIS 201	Cisco Networking Academy I	3
CIS 202	Cisco Networking Academy II	3
CIS 203	Cisco Networking Academy III	3
CIS 204	Cisco Networking Academy IV	3
CIS 209	Cisco CCNA Security	3
	Total Required	15

II. CISCO NETWORK PROFESSIONAL

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Configure, diagnose, and troubleshoot complex enterprise router and switch networking solutions including: network performance; advanced routing protocols; VPNs; IPv6; advanced VLAN topologies; high availability and redundancy protocols; and LAN security.

Certificate Requirements:

Course	*Title*	*Units*
CIS 205	Implementing Cisco IP Routing (Route)	3
CIS 206	Cisco Networking Academy VI	3
CIS 207	Cisco Networking Academy VII	3
CIS 208	Cisco Networking Academy VIII	3
	Total Required	12

III. COMPUTER PROGRAMMING

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Be proficient in at least one high-level programming language and an ability to use that language to implement software solutions in a variety of settings following the systems development life cycle (SDLC).

Certificate Requirements:

Course	*Title*	*Units*
CS 119	Program Design and Development	3
CS 119L	Program Design and Development Lab	1
CS 181	Introduction to C++ Programming	4
or		
CS 182	Introduction to Java Programming	4
CS 281	Intermediate C++ Programming and Fundamental Data Structures	4
or		
CS 282	Intermediate Java Programming and Fundamental Data Structures	4
	Total Required	12

IV. COMPUTER SUPPORT TECHNICIAN

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Describe and demonstrate the ability to install, configure, upgrade, diagnose and troubleshoot a personal computer and its associated networking hardware and system software.

Certificate Requirements:

Course	Title	Units
CIS 120	Computer Maintenance and A+ Certification	3
CIS 121	Network Cabling Systems	3
CIS 125	Network+ Certification	3
CIS 190	Windows Operating System	3
CIS 191	Linux Operating System	3
	Total Required	15

V. CYBER SECURITY SPECIALIST

Program Learning Outcomes

Upon completion of this certificate, students will be able to:

- Perform system scan and reconnaissance to determine vulnerabilities, then create a report showing vulnerabilities and recommendations for rectifying the cited weaknesses.

Certificate Requirements

Course	Title	Units
CIS 125	Network+ Certification	3
CIS 190	Windows Operating System	3
or		
CIS 191	Linux Operating System	3
CIS 209	Cisco CCNA Security	3
or		
CIS 263	Fundamentals of Network Security	3
CIS 264	Ethical Cybersecurity Hacking	3
CIS 265	Computer Forensics Fundamentals	3
	Total Required	15

VI. WEB DESIGN

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Develop attractive, usable, mobile-friendly websites using current development technologies such as HTML/CSS, frameworks, and content management systems.

Certificate Requirements:

Course	Title	Units
CIS 211	Web Development I	3
CIS 213	Web Development II	3
CIS 225	Web Development Capstone	3
GD 126	Adobe Photoshop Digital Imaging	3
GD 217	Web Graphics	3
	Total Required	15

VII. WEB PROGRAMMING

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Develop attractive, usable, mobile-friendly websites using current development technologies such as HTML/CSS, JavaScript, PHP/MySQL, frameworks, and content management systems.

Certificate Requirements:

Course	Title	Units
CIS 211	Web Development I	3
CIS 213	Web Development II	3
CIS 215	JavaScript Web Programming	3
CIS 219	PHP/MySQL Dynamic Web-Based Applications	3
CS 119	Program Design and Development	3
	Total Required	15

COMPUTER SCIENCE

Associate Degree for Transfer℠

I. COMPUTER SCIENCE FOR TRANSFER (AS-T)

This program is designed to prepare students for transfer to a California State University (CSU) with the intent of earning a B.S. degree in Computer Science. The coursework provides a strong foundation in programming methodology, programming skills, and computer organization.

Most careers in computer science require a bachelor's degree, and some require a graduate-level degree. Computer science careers include software engineering, computer engineering, computer systems analysis, systems programming, mobile application development, artificial intelligence, robotics, and simulation. Computing technology now is used in most fields. Because of this, a wide range of jobs are open to people trained in Computer Science. Employment opportunities are expected to remain very strong.

A total of 33 units are required to fulfill the major portion of this degree. Students must also complete the Intersegmental General Education Transfer Curriculum (IGETC) for CSU admission requirements (see the "General Education Requirements and Transfer Information" section of the catalog). Students should speak with a counselor to verify that the requirements for this degree have been met. In addition, students planning to transfer to San Diego State University should consult with a counselor.

The following is required for the AS-T in Computer Science for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Define and apply current Software Engineering design patterns, algorithms, and data structures to produce efficient, well-engineered software applications.
- Apply problem-solving skills and the knowledge of computer science to solve real-world problems.
- Define and demonstrate the concept of object oriented programming and object oriented design.

Associate in Science Degree Requirements:

Core Curriculum:

Course	Title	Units
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
CS 165	Assembly Language and Machine Architecture	4
CS 182	Introduction to Java Programming	4
CS 240	Discrete Structures	3
CS 281	Intermediate C++ Programming and Fundamental Data Structures	4
or		
CS 282	Intermediate Java Programming and Fundamental Data Structures	4
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
PHYC 190	Mechanics and Heat	5
	Total Required	33
	Double-Counted Units	10
	General Education Requirements (IGETC only)	37
	Total Units Required for Degree	60

II. MECHATRONICS

This certificate is designed for students interested in designing automatic electromechanical devices and systems. The curriculum is intended primarily for students interested in working in advanced manufacturing. It also provides the foundation for further studies in the skills required for the Internet of Things (physical computing and control systems)..

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Write computer programs in high-level languages such as C++ and, when appropriate, in assembly language to control the operation of a microcontroller. In particular, students will be able to apply the following microcontroller capabilities: memory-mapped I/O (input/output), analog-to-digital (A/D) conversion, and volatile and non-volatile memory.
- Design automatic devices and control systems which can respond to inputs from sensors with appropriate outputs in the form of motion, light, and sound.
- Design mechanical components and devices, and create prototype versions of them.
- Combine the above capabilities to design integrated electro-mechanical devices of arbitrary complexity.

Certificate Requirements:

Course	Title	Units
CADD/ENGR 125	Solid Modeling Design	3
or		
CADD/ENGR 129	Engineering Solid Modeling	3
CS/ENGR 175	Mechatronics: Introduction to Microcontrollers and Robotics	3
CS/ENGR 176	Mechatronics: Prototype Design	3
CS 181	Introduction to C++ Programming	4
CIS 267	Directed Work Experience in CIS	1-4
or		
ENGR 182	Work Experience in Engineering Technology	1-3
ENGR 100	Introduction to Engineering and Design	4
ET 110	Introduction to Electricity and Electronics	4
	Total Required	22-25

Certificate of Achievement

Students who complete the requirements above qualify for a Certificate in Mechatronics. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT

This degree and certificate program provides entry level skills as well as upgrading and/or refining of existing skills of individuals employed in the field of Environmental Health and Safety Management. The curriculum prepares students for transfer to four-year institutions in an environmental technology or related major. Courses are designed for students pursuing careers in Environmental Management and Occupational Safety and Health with an emphasis on training, regulatory compliance and program development, consulting, pollution prevention, recycling, remediation, conservation, and program management.

CAREER OPPORTUNITIES

*Air Quality Engineer
Asbestos Materials Building Remover
Associate Toxic Waste Specialist
Chemical Handler
*Environmental Engineer
Environmental Hazardous Material Technician
Environmental Health and Safety Specialist
*Environmental Journalist
*Environmental Lawyer
Environmental Manager
*Environmental Protection Specialist
Environmental Research – Test Technician
Game or Fishery Technician
*Geologist
Health and Safety Technician
Industrial Hygiene Technician
Land Use and Planning Technician
Mold Remediation Technician
Occupational Health and Safety Technician
Pollution Control Technician
Recycling Coordinator
Risk Management Officer
Risk Management Technician
Safety Officer
Safety Specialist
*Soils Analyst
Solar Energy Installer
Wastewater Treatment Operator
Water Treatment Operator

*Bachelor Degree or higher required

I. ENVIRONMENTAL MANAGEMENT

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and interpret Federal, State and local regulations related to Environmental Health and Safety Management.
- Understand and analyze historical environmental laws and regulations which impact hazardous material management and their effect on the environment.
- Identify and Interpret Federal, state and local regulations related to air pollution.
- Define and describe the components of the Hazard Communication Standards required "Hazardous Communication Plan."
- Identify and describe components of Storm Water Pollution Prevention Plans in accordance with the Clean Water Act.
- Describe and define Regional Water Quality Control Board role in Clean Water Act over site and enforcement of National Pollution Discharge Elimination System (NPDES) permitting and inspections.
- Understand and analyze historical environmental laws and regulations which impact hazardous material management and their effect on the environment.
- Describe and apply terms common to the hazardous materials industry.
- Describe agencies that regulate specific hazardous materials.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 112	Contemporary Issues in Environmental Resources	3
BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1
CHEM 115	Fundamentals of Chemistry	4
EHSM 100	Introduction to Environmental and Occupational Safety and Health (OSH) Technology	4
EHSM 110	Pollution Prevention	3
EHSM 150	Hazardous Waste Management Applications	4
EHSM 200	Hazardous Materials Management (HMM) Applications	4
EHSM 210	Industrial Wastewater and Stormwater Management	4
EHSM 215	Air Quality Management	3
EHSM 230	Hazwoper Certification	3
EHSM 240	Cooperative Work Experience	1-4
		37-40

Select one of the following:

CIS 110	Principles of Information Systems	4
COMM 122	Public Speaking	3
SPAN 120	Spanish I	5
		3-5
	Total Required	40-45
	Plus General Education Requirements	

II. ENVIRONMENTAL TECHNICIAN

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Identify and interpret Federal, State and local regulations related to Environmental Health and Safety Management.
- Understand and analyze historical environmental laws and regulations which impact hazardous material management and their effect on the environment.
- Identify and Interpret Federal, state and local regulations related to air pollution.
- Define and describe the components of the Hazard Communication Standards required "Hazardous Communication Plan."
- Identify and describe components of Storm Water Pollution Prevention Plans in accordance with the Clean Water Act.
- Describe and define Regional Water Quality Control Board role in Clean Water Act over site and enforcement of National Pollution Discharge Elimination System (NPDES) permitting and inspections.
- Understand and analyze historical environmental laws and regulations which impact hazardous material management and their effect on the environment.
- Describe and apply terms common to the hazardous materials industry.
- Describe agencies that regulate specific hazardous materials.

Certificate Requirements:

Course	*Title*	*Units*
EHSM 100	Introduction to Environmental and Occupational Safety and Health (OSH) Technology	4
EHSM 110	Pollution Prevention	3
EHSM 150	Hazardous Waste Management Applications	4
EHSM 200	Hazardous Materials Management (HMM) Applications	4
EHSM 210	Industrial Wastewater and Stormwater Management	4
EHSM 215	Air Quality Management	3
EHSM 230	Safety and Emergency Response	4
EHSM 240	Cooperative Work Experience	1-3
	Total Required	27-29

Certificate of Achievement

Students who complete the requirements above qualify for a Certificate in Environmental Technician. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. OCCUPATIONAL SAFETY AND HEALTH (OSH) MANAGEMENT

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Identify and evaluated hazardous material routes of entry, toxic effect, risk evaluation and control measures to reduce their exposure and effects.
- Describe and apply terms common to the hazardous materials industry.
- Apply California and Federal safety standards to assess worksites and recognize hazardous conditions and/or noncompliance.
- Assess and evaluate job processes to identify and implement appropriate risk management strategies.
- Describe agencies that regulate specific hazardous materials.
- Interpret Federal, State and Local regulations governing Construction Safety.
- Define and apply "safe work practices", "worker Right to Know" and Community Right to Know" requirements.
- Identify and evaluated hazardous material routes of entry, toxic effect, risk evaluation and control measures to reduce their exposure and effects.
- Identify key mandatory components of an Injury Illness Prevention Plan (IIPP) in compliance with SB198.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1
CHEM 115	Fundamentals of Chemistry	4
EHSM 100	Introduction to Environmental and Occupational Safety and Health (OSH) Technology	4
EHSM 130	Environmental/Occupational Health Effects of Hazardous Materials	3
EHSM 135	General Industry Safety Standards	3
EHSM 145	Construction Safety Standards	3
EHSM 200	Hazardous Materials Management (HMM) Applications	4
EHSM 201	Introduction to Industrial Hygiene and Occupational Health	4
EHSM 205	Safety and Risk Management Administration	4
EHSM 230	Hazwoper Certification	3
EHSM 240	Cooperative Work Experience	1-4
		37-40

Select one of the following:

CIS 110	Principles of Information Systems	4
COMM 122	Public Speaking	3
SPAN 120	Spanish I	5
		3-5
	Total Required	40-45
	Plus General Education Requirements	

IV. OCCUPATIONAL SAFETY AND HEALTH (OSH) TECHNICIAN

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Identify and evaluated hazardous material routes of entry, toxic effect, risk evaluation and control measures to reduce their exposure and effects.
- Describe and apply terms common to the hazardous materials industry.
- Apply California and Federal safety standards to assess worksites and recognize hazardous conditions and/or noncompliance.
- Assess and evaluate job processes to identify and implement appropriate risk management strategies.
- Describe agencies that regulate specific hazardous materials.
- Interpret Federal, State and Local regulations governing Construction Safety.
- Define and apply "safe work practices", "worker Right to Know" and Community Right to Know" requirements.
- Identify and evaluated hazardous material routes of entry, toxic effect, risk evaluation and control measures to reduce their exposure and effects.
- Identify key mandatory components of an Injury Illness Prevention Plan (IIPP) in compliance with SB198.

Certificate Requirements:

Course	*Title*	*Units*
EHSM 100	Introduction to Environmental and Occupational Safety and Health (OSH) Technology	4
EHSM 130	Environmental/Occupational Health Effects of Hazardous Materials	3
EHSM 135	General Industry Safety Standards	3
EHSM 200	Hazardous Materials Management (HMM) Applications	4
EHSM 201	Introduction to Industrial Hygiene and Occupational Health	4
EHSM 240	Cooperative Work Experience	1-4
		19-22

Select two of the following:

EHSM 145	Construction Safety Standards	3
EHSM 205	Safety and Risk Management Administration	4
EHSM 230	Hazwoper Certification	3
		6-7
	Total Required	25-29

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in Occupational Safety and Health (OSH) Technician. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

ORNAMENTAL HORTICULTURE

This degree program provides students with entry level skills, upgrading of existing skills, and preparation for further training. It is designed for those interested in careers in nursery and greenhouse management, landscape design and construction, grounds management, retail nursery operations, irrigation system design, installation and maintenance of interior plantscaping, arboriculture and other related fields. Students will learn modern horticultural methods and procedures as well as the use of tools and equipment common to the field.

CAREER OPPORTUNITIES
†Agricultural Inspector
*Agricultural Researcher
†Arboretum/Park Director
Arboriculture Technician
Botanical Illustrator
†County/State Agricultural Advisor
*Environmental Designer
Floral Designer
Flower Shop Manager
Golf Course Superintendent
Golf Course Worker
Greenhouse Manager
Grounds Maintenance Manager
Grower/Production Manager
†Horticultural Journalist
Irrigation Consultant
†Landscape Architect
Landscape Contractor
Landscape Designer
Landscape Technician
Nursery/Garden Center Manager
†Park Planner/Manager
Plant Breeder/Propagator
Sports Field Manager
Turf Manager
Urban Forester
Water Auditor
†Water Conservationist

*Bachelor Degree or higher required.
†Bachelor Degree normally recommended.

I. ARBORICULTURE

This major encompasses urban forestry, professional tree care, and tree trimming. Students will learn care and pruning of landscape trees, palms and related plants as well as common fruit trees. Course work includes skill development in tree climbing and pruning techniques, basic tree maintenance, and principles of urban forestry. Graduates are employed by private tree care companies, public agencies, landscape contractors, wholesale and retail nurseries, or may be self-employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Describe proper and safe principles and practices of tree climbing.
- Describe the principles of tree biology and physiology for growth management.
- Demonstrate proper tree pruning procedures per industry standards.
- Identify common biotic and abiotic problems for trees common to Southern California landscapes and list appropriate control measures.
- Conduct a visual tree assessment for tree risk or value appraisal.
- Draft a tree preservation plan for a construction site.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
OH 120	Fundamentals of Ornamental Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 260	Arboriculture	3
OH 290*	Cooperative Work Experience Education	3
		18

Select two of the following:

OH 263	Urban Forestry	1
OH 264	Safe Work Practices in Tree Climbing and Arboriculture	1
OH 266	Science in Practice for Arboriculture	1
		2

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select nine units from the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 150	Landscape Architecture I	3
OH 174	Turf and Ground Cover Management	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 235	Principles of Landscape Irrigation	4
OH 250	Landscape Water Management	2
OH 255	Sustainable Urban Landscapes Principles and Practices	2
OH 275	Diagnosing Horticultural Problems	3
SPAN 120	Spanish I	5
		9
	Total Required	32
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Arboriculture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

II. FLORAL DESIGN

This degree program is designed for those individuals seeking careers in the floral industry, or for those seeking to upgrade their existing skills and prepare for further training. Course work is directed toward skills, concepts and practices used in the commercial floral industry with an emphasis in hands-on training. There is also an emphasis on the business skills needed to succeed as a floral industry entrepreneur.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Identify and explain the principles and elements of design common to the retail floral industry and utilize these guidelines in the reproduction and construction of independent floral arrangements, events and décor.
- Identify, evaluate and discuss in correct industry vocabulary fresh floral product and permanent botanical materials, hard goods, and trends in European and Asian design influence.
- Prepare an original event proposal based on site analysis for a special occasion to include an appropriate wholesale budget, estimate design recipes, fresh and hard goods product.
- Compare and contrast retail florist businesses in shop operations, workstations, sales and consultation areas, visual displays, customer relations, and typical business practices including labor relations, insurance, advertising, accounting and license requirements.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
OH 114	Floral Design I	3
OH 116	Floral Design II	3
OH 117	Wedding Design I	3
OH 118	Special Occasion Floral Design	3
OH 120	Fundamentals of Ornamental Horticulture	3
OH 180	Plant Materials: Annuals and Perennials	3

OH 290*	Cooperative Work Experience Education	3
		21

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select nine units from the following:

ART 120	Two-Dimensional Design	3
ART 124	Drawing I	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 128	Business Communication	3
OH 121	Plant Propagation	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 240	Greenhouse Plant Production	3
		9
	Total Required	33
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Floral Design. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

III. GOLF COURSE AND SPORTS TURF MANAGEMENT

Students in this major pursue careers as golf course superintendents or sports turf managers. The program is intended for those individuals wishing to enter the field as well as those who desire to upgrade their existing skills. Students may also transfer to a four-year degree program in agronomy, turf management, or related field. Course work is designed to study environmentally sound solutions for the efficient production and management of golf and sports turf.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Demonstrate and practice standardized safety procedures as they apply to golf and sports turf management.
- Identify warm and cool season turf cultivars common to Southern California.
- Identify and manage primary and secondary noxious weeds.
- Identify and manage common biotic and abiotic problems associated with turf management in Southern California.
- Demonstrate knowledge of appropriate use and maintenance of equipment common to golf and sports turf management.
- Identify 88 trees and shrubs common to Southern California.
- Identify water quality impact on turfgrass and plant material species and the relationship to soil conditions.
- Demonstrate the impact of various water sources on golf course maintenance budgets.
- Using principles of irrigation hydraulics, calculate friction loss in pipe, determine proper pipe sizing using the friction factor and velocity limit method, and determine appropriate component sizing.
- Identify and describe the proper installation of irrigation system components.
- Using standard industry practices, develop guidelines and demonstrate the ability to perform proper fertilizing, pruning, mulch application and irrigation of Southern California landscapes.
- Identify and explain labor relations, business plans, and licensure requirements for the golf and sports turf industry.
- Demonstrate the ability to install concrete, masonry and plant material.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
OH 120	Fundamentals of Ornamental Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 174	Turf and Ground Cover Management	3
OH 235	Principles of Landscape Irrigation	4
OH 290*	Cooperative Work Experience Education	3
	Total Required	22

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select seven units from the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 250	Landscape Water Management	2
OH 265	Golf Course and Sports Turf Management	3
OH 275	Diagnosing Horticultural Problems	3
SPAN 120	Spanish I	5
		7
	Total Required	32
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Golf Course and Sports Turf Management. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

IV. IRRIGATION TECHNOLOGY

This specialized field focuses on the design, installation and management of landscape irrigation systems. The program is designed for entry level students, those seeking to upgrade existing skills, or those wishing to transfer to a four-year degree program at Cal Poly or other institution. The use of current design theory, installation techniques, and management programs form the heart of the curriculum. Graduates are employed by landscape architects, irrigation consultants, landscape contractors, public agencies or may be self-employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Explain the relationships between plants and their soil and water environment including the use of recycled water.
- Demonstrate an understanding of landscape irrigation hydraulics.
- Identify irrigation system components and demonstrate their proper installation.
- Demonstrate a basic understanding of irrigation design principles.
- Demonstrate the ability to calculate an irrigation schedule.
- Demonstrate the ability to diagnose irrigation system problems related to valves, wiring and hydraulics.
- Explain the importance of, and best practices for, water conservation in regards to water sources, water quality and regulations.
- Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 120	Fundamentals of Ornamental Horticulture	3
OH 140	Soils	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 235	Principles of Landscape Irrigation	4
OH 250	Landscape Water Management	2
OH 290*	Cooperative Work Experience Education	3
		20

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select nine units from the following:

OH 130	Plant Pest Control	3
OH 150	Landscape Architecture I	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 174	Turf and Ground Cover Management	3
OH/CADD 200**	Introduction to Computer-Aided Landscape Design	3
OH 225	Landscape Contracting	3
OH 238	Irrigation System Design	3
SPAN 120	Spanish I	5
		9
	Total Required	32
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.
**May also be offered at Southwestern College as *LA 200*.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Irrigation Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

V. LANDSCAPE ARCHITECTURE

The Landscape Architecture major provides students with a multi-disciplined, project-based approach to landscape architecture for residential, public, and commercial sites. The curriculum covers the current trends in design and technologies in construction of the projects. Course work is designed to provide employable technical skill training in the field and provides foundation for students who plan to transfer to four-year degree programs in Landscape Architecture. Students earning an associate degree in Landscape Architecture are eligible to take the Landscape Architecture Registration Exam to achieve state licensure after completing requisite apprenticeship. Graduates may be employed by landscape architects, landscape contractors, public agencies, or may be self-employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Use hand-drawn and computer-generated graphics that are industry standards to produce accurate landscape plans that reflect sustainable, functional and aesthetic principles.
- Communicate design ideas with clients and contractors 1) verbally, 2) with hand drawings, and 3) computer-generated drawings.
- Integrate plants as well as construction methods and materials indicative of the Southern California region.

Associate in Science Degree Requirements:

Course	Title	Units
CADD 120	Introduction to Computer-Aided Drafting and Design	3
OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 120	Fundamentals of Ornamental Horticulture	3
OH 150	Landscape Architecture I	3
OH 151	Landscape Architecture II	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 235	Principles of Landscape Irrigation	4
OH 290*	Cooperative Work Experience Education	3
		27

Select one of the following:

ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaisssance through Modern	3
ART 144	Architecture of the 20th Century	3
		3

Select four units (minimum) from the following:

OH 180	Plant Materials: Annuals and Perennials	3
OH/CADD 201	Advanced Computer-Aided Landscape Design	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 222	Japanese Garden Design and Construction	1
OH 225	Landscape Contracting	3
OH 255	Sustainable Urban Landscape Principles and Practices	2
OH 263	Urban Forestry	1
		4-6
	Total Required	34-36
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Landscape Architecture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VI. LANDSCAPE TECHNOLOGY

Landscape installation and management forms the focus of this program. Students will learn the latest methods, materials and techniques in the landscape industry. Those seeking careers in landscape technology are entering a challenging career field that requires knowledge of plant material, turfgrass, landscape and irrigation design, soils, pest control and landscape construction. A professional in the field has the opportunity to be involved in working with people as well as plants as the manager must direct and supervise employees, deal with clients and suppliers, and may become involved in professional organizations. Students entering the landscape industry, those already employed but seeking to upgrade their skills, and those wishing to transfer to Cal Poly or other four-year degree programs will benefit from the curriculum. Graduates are employed by landscape contractors, public agencies or may be self-employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Understand the principles of plant structure function and plant growth.
- Identify 175 trees, shrubs, annuals, perennials and turf grass species commonly used in Southern California landscapes.
- Using standard industry practices, develop guidelines and demonstrate the ability to perform proper fertilizing, pruning, mulch application and irrigation of Southern California landscapes.
- Understand the elements of water management of a large landscape site.
- Identify common biotic and abiotic problems common to Southern California landscapes and list appropriate control measures.
- Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	Title	Units
OH 120	Fundamentals of Ornamental Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 180	Plant Materials: Annuals and Perennials	3
OH 235	Principles of Landscape Irrigation	4
OH 250	Landscape Water Management	2
OH 290*	Cooperative Work Experience Education	3
		24

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select five units from the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 105	Edibles in Urban Landscapes	1.5
OH 150	Landscape Architecture I	3
OH 151	Landscape Architecture II	3
OH 174	Turf and Ground Cover Management	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 222	Japanese Garden Design and Construction	1
OH 225	Landscape Contracting	3
OH 255	Sustainable Urban Landscapes Principles and Practices	2
OH 260	Arboriculture	3
OH 275	Diagnosing Horticultural Problems#	3
SPAN 120	Spanish I	5
		5-5.5
	Total Required	32-32.5
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Landscape Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VII. NURSERY TECHNOLOGY

Students enrolled in this major pursue careers in the wholesale production and retail sales of horticultural crops. Course work will focus on plant propagation, greenhouse plant production, and horticultural practices related to production and sales of landscape and greenhouse plant material. Students entering the nursery industry, those already employed but seeking upgraded skills, and those wishing to transfer to Cal Poly or other four-year degree programs will benefit from the curriculum. Graduates are employed by wholesale and retail nurseries, public agencies or may be self employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Identify 250 trees, shrubs, annuals, perennials and turf grass species commonly used in Southern California landscapes.
- Explain the principles of plant structure function and plant growth.
- Demonstrate an understanding of common plant propagation practices.
- Cultivate horticultural crops in both natural and artificial environments common in the horticulture industry.
- Demonstrate an understanding of soil principles.
- Explain how to produce a business plan for the nursery industry.
- Gain practical experience working in the landscape industry.

Associate in Science Degree Requirements:

Course	Title	Units
OH 120	Fundamentals of Ornamental Horticulture	3
OH 121	Plant Propagation	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 180	Plant Materials: Annuals and Perennials	3
OH 290*	Cooperative Work Experience Education	3
		21

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select eight units from the following:

BIO 122	The Secret Life of Plants	4
OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 114	Floral Design I	3
OH 150	Landscape Architecture I	3
OH 240	Greenhouse Plant Production	3
SPAN 120	Spanish I	5
		8-9
	Total Required	32-33
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Nursery Technology. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

VIII. SUSTAINABLE URBAN LANDSCAPES
This curriculum is designed to investigate the current trends and provide practical experience in sustainable landscape design, construction and maintenance. Students will use technology, materials and methods that enhance the urban landscape with minimal input of labor and materials while reducing negative environmental impacts. Students entering the landscape industry, those already employed but seeking upgraded skills, and those wishing to transfer to four-year degree programs will benefit from the curriculum. Graduates are employed by landscape contractors, landscape architects and designers, public agencies, or are self-employed.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Use industry accepted standards to conduct site evaluations and determine site assets and constraints for the development of aesthetically pleasing and sustainable landscapes.
- Identify common biotic and abiotic problems common to Southern California landscapes and list appropriate control measures.
- Utilize standard industry practices and principles of plant structure, function and plant growth to develop guidelines for the proper maintenance of Southern California landscapes.
- Demonstrate the ability to calculate an irrigation schedule.
- Explain the elements of water management of a large landscape site.
- Gain practical experience working in the landscape industry.

CAREER OPPORTUNITIES
Irrigation Manager
Landscape Design Consultant
Landscape Maintenance Supervisor
Landscape Manager
Landscape Water Auditor
Water Conservation Specialist

Associate in Science Degree Requirements:

Course	*Title*	*Units*
OH 120	Fundamentals of Ornamental Horticulture	3
OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 170	Plant Materials: Trees and Shrubs	3
OH 250	Landscape Water Management	2
OH 255	Sustainable Urban Landscape Principles and Practices	2
OH 263	Urban Forestry	1
OH 290*	Cooperative Work Experience Education	3
		20

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select a minimum of eight units from the following:

OH 102	Xeriscape: Water Conservation in the Landscape	2
OH 105	Edibles in Urban Landscapes	1.5
OH 150	Landscape Architecture I	3
OH 180	Plant Materials: Annuals and Perennials	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 235	Principles of Landscape Irrigation	4
OH 260	Arboriculture	3
OH 266	Science in Practice for Arboriculture	1
		8
	Total Required	31-31.5
	Plus General Education Requirements	

*Student must complete six units within the major at Cuyamaca College to be eligible for this course.

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Sustainable Urban Landscapes. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATE OF SPECIALIZATION:

BASIC ORNAMENTAL HORTICULTURE
This certificate prepares students to work in the horticulture industry at an entry or intermediate level by providing them with basic knowledge of horticultural principles and practices. Upon completion, students will be prepared to work in one of many fields of horticulture, or choose to continue their studies and apply their earned credits to a degree or certificate of achievement.

Program Learning Outcomes
Upon successful completion of this certificate, students will be able to:
- Understand the basic principles of plant growth.
- Identify 125 trees and shrub species commonly used in Southern California landscapes.
- Understand the basic principles of soil science as they relate to plant growth and plant nutrition.
- Apply basic horticultural knowledge to specific field of study in ornamental horticulture.
- Understand business principles as they apply to working in ornamental horticulture.

Certificate Requirements:

Course	*Title*	*Units*
OH 120	Fundamentals of Ornamental Horticulture	3
OH 170	Plant Materials: Trees and Shrubs	3
		6

Select one of the following:

OH 130	Plant Pest Control	3
OH 140	Soils	3
OH 180	Plant Materials: Annuals and Perennials	3
		3

Select one of the following:

BUS 110	Introduction to Business	3
BUS 111	Entrepreneurship: Starting and Developing a Business	3
BUS 125	Business Law: Legal Environment of Business	3
		3

Select at least three units from the following:

OH 114	Floral Design I	3
OH 121	Plant Propagation	3
OH 150	Landscape Architecture I	3
OH 174	Turf and Ground Cover Management	3
OH 220	Landscape Construction: Concrete and Masonry	3
OH 221	Landscape Construction: Irrigation and Carpentry	3
OH 260	Arboriculture	3
		3
	Total Required	15

Students who complete the requirements above qualify for a Certificate in Basic Ornamental Horticulture. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

SURVEYING

This degree program prepares students to enter the civil engineering field. Competency in care and operation of field instruments, solution of problems in the laboratory, drafting of land survey maps and civil engineering plans, and application of studies to field practice are thoroughly explored.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Measure angles and distances using electronic total stations and distance meters.
- Compile field data, adjusting for error from horizontal and vertical traverses.
- Create typical drawing title blocks accepted by local municipalities such as the City of San Diego.
- Calculate and plot contours and other features found on a topographic map.
- Plot easements using bearings, distances and curve information.
- Recognize and apply the appropriate vocabulary of boundary law in discussion, reading, and writing legal descriptions of boundary.
- Describe and solve advanced private boundary and public lands boundary problems.
- Solve introductory property boundaries using title reports and record maps.

CAREER OPPORTUNITIES
Geodetic Surveyor
Geophysical Prospecting Surveyor
Instruments Surveyor Assistant
Land Surveyor
Marine Surveyor
Mine Surveyor
Oil-Well Directional Surveyor

Associate in Science Degree Requirements:

Course	*Title*	*Units*
CADD 115	Engineering Graphics	3
or		
ENGR 100	Introduction to Engineering and Design	4
CADD 120	Introduction to Computer-Aided Drafting and Design	3
SURV/CADD 127	Survey Drafting Technology	3
MATH 170	Analytic Trigonometry	3
PHYC 110	Introductory Physics	4
SURV/ENGR 218	Plane Surveying	4
SURV 220	Boundary Control and Legal Principles	3
SURV 240	Advanced Surveying	4
	Total Required	27-28
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Surveying. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

HEALTH SCIENCE

BIOLOGICAL SCIENCES: PRE-ALLIED HEALTH

This program provides students with a pathway into allied health programs at baccalaureate institutions. Required science courses provide training in the methods of scientific inquiry, the fundamental principles of natural science, and the principle laws and theories governing the physical and life sciences. Recommended general education courses expose students to the necessary base of knowledge that will serve them well in any of the allied health fields. This degree prepares students for transfer to a baccalaureate institution or for advanced studies in an allied health major. Prior to enrolling in several courses in this major, students must take general biology and general biology laboratory as prerequisites. *It is recommended that students check with transfer institutions for specific program requirements.*

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Explain the principles and laws of living systems with particular reference to human disease and human performance, including the role of scientific inquiry in life/medical science, cell theory, the hierarchy of structure and function in living organisms and principles of heredity.
- Describe the normal relationships between structure and function relationships of humans, alterations in normal structure/function that characterize disease; the structure, function, classification and epidemiology of pathogenic microorganisms; and normal cellular and nutritional biochemistry.
- Exhibit competency in the methods used to study living systems, with a focus on human biology including applying principles and procedures of research and experimental design, and gathering, organizing interpreting, evaluating and communicating data.
- Exhibit confidence and ability to function as a health care professional including the ability to conduct independent and collaborative investigation skills, communicate scientific information effectively in oral and written form, and utilize technology effectively and appropriately.
- Exhibit the ability to integrate the content, skills and abilities gained in courses and practice independent, self-directed learning.

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 140	Human Anatomy	5
BIO 141	Human Physiology	3
BIO 141L	Laboratory in Human Physiology	1
BIO 152	Paramedical Microbiology	5
CHEM 102	Introduction to General, Organic and Biological Chemistry	5
or		
CHEM 115 **&**	Fundamentals of Chemistry	4
CHEM 116	Introductory Organic and Biochemistry	4
COMM 122	Public Speaking	3
PSY 120	Introductory Psychology	3
SOC 120	Introductory Sociology	3
	Total Required	28-31
	Plus General Education Requirements	

Recommended Electives: CD 125 or PSY 165; MATH 160

GENERAL STUDIES: LIFELONG HEALTH, WELL-BEING AND SELF-DEVELOPMENT

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS
To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)

AND

II. Choose a minimum of 18 units from one Area of Emphasis:

- Lifelong Health, Well-Being and Self-Development

The Associate in Arts in General Studies with an Emphasis in Lifelong Health, Well-Being and Self-Development will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses focus on the improvement of health and well-being and are designed to provide knowledge and tools of how to obtain optimal physical, psychological and emotional health and well-being throughout the lifespan. Potential entry-level positions of employment that students will be prepared for upon completion include those in recreation, education, and health fields. Students must take a minimum of three units in Health, three units in Exercise Science, three units in Nutrition, and three units in Self-Development. The remaining six units may be taken from any category. A maximum of one course may be earned from any combination of ES 206, 209, 213, 218, 224, 227, 230 and 249.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Demonstrate an understanding of optimal health and fitness in daily life through informed decision-making.
- Describe basic principles of nutrition.
- Value the importance of physical activity through the lifespan.

Health
BIO 115
HED 105, 120, 201, 202, 203, 204, 251

Exercise Science
ES 206, 209, 213, 218, 224, 227, 230, 248, 249, 250, 253, 255, 270, 271, 272

Nutrition
NUTR 155, 158, 255

Self-Development
COUN 110, 120, 130, 140, 150

KINESIOLOGY

Associate Degree for Transfer℠

I. KINESIOLOGY FOR TRANSFER (AA-T)
The Associate in Arts in Kinesiology for Transfer degree is designed to prepare students for transfer to a California State University (CSU) by fulfilling lower-division requirements for the disciplines of Kinesiology, Exercise Science and Physical Education. This major provides preparation for careers in physical therapy, coaching, personal training, and other allied health professions by including classes oriented toward fitness, wellness, and health promotion throughout the lifespan.

The following is required for the AA-T in Kinesiology for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- List and define the five basic components of physical fitness.
- Describe the concepts of frequency, intensity, and time and how they relate to personal fitness goals.
- Outline a basic strategy for achieving fitness through the lifespan.
- List options within the community for continued lifelong physical activity.
- List benefits of daily physical activity.
- Demonstrate competence in acquiring sound nutritional information.
- Demonstrate improvement in sport skills.
- Outline appropriate goals and activities for increasing the fitness of children.
- Describe appropriate preventive measures as well as treatments for various sport injuries.
- List and describe opportunities for employment in the field.
- Describe their field of interest and a course of instruction that will meet their professional needs.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
BIO 140	Human Anatomy	5
BIO 141	Human Physiology	3
BIO 141L	Laboratory in Human Physiology	1
ES 250	Introduction to Kinesiology	3

Movement Based Courses: Select one course from three different areas for a minimum of three units:

Combatives:

ES 180	Self Defense for Women	1

Fitness:

ES 009ABC	Beginning, Intermediate, Advanced Aerobic Dance Exercise	1
ES 014ABC	Beginning, Intermediate, Advanced Body Building	1.5
ES 019ABC	Beginning, Intermediate, Advanced Physical Fitness	1.5

Individual Sports:

ES 060ABC	Beginning, Intermediate, Advanced Badminton	1
ES 076ABC	Beginning, Intermediate, Advanced Tennis	1
ES 125A	Beginning Golf	1
ES 125BC	Intermediate, Advanced Golf	1.5

Team Sports:

ES 155ABC	Beginning, Intermediate, Advanced Basketball	1
ES 170ABC	Beginning, Intermediate, Advanced Soccer	1
ES 171ABC	Beginning, Intermediate, Advanced Softball	1
ES 175ABC	Beginning, Intermediate, Advanced Volleyball	1
		15-16

List A: Select one Chemistry course:

CHEM 102	Introduction to General, Organic and Biological Chemistry	5
MATH 160	Elementary Statistics	4
		9

Total Units for Major (10-11.5 units may be double-counted with GE)	24-25
Total Units for CSU GE or IGETC-CSU	37-39
Total Transferable Elective Units	7.5-9
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Exercise Science Generalist.

II. EXERCISE SCIENCE

This degree program is designed to prepare students for a variety of careers including education, physical therapy, coaching, personal training and other allied health professions by providing classes oriented toward fitness, wellness and health promotion throughout the lifespan. The major also provides preparation for transfer to a four-year college in physical education, exercise physiology, kinesiology, nutrition or athletic training, as well as teacher credentialing programs.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- List and define the five basic components of physical fitness.
- Describe the concepts of frequency, intensity and time, and how they relate to personal fitness goals.
- Outline a basic strategy for achieving fitness through the lifespan.
- List options within the community for continued lifelong physical activity.
- List benefits of daily physical activity.
- Demonstrate competence in acquiring sound nutritional information.
- Demonstrate improvement in sport skills.
- Outline appropriate goals and activities for increasing the fitness of children.
- Describe appropriate preventive measures as well as treatments for various sport injuries.
- List and describe opportunities for employment in the field.
- Describe their field of interest and a course of instruction that will meet their professional needs.

CAREER OPPORTUNITIES

Aerobics Instructor
Athletics Coach
*Athletics Trainer
*Cardiovascular Rehabilitation
*College Professor
*Elementary School Teacher
*Exercise Physiologist
*Health Club Manager
Personal Trainer
*Physical Therapist/ Assistant
*Registered Dietician
*Secondary School Teacher
*Teaching
*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 130	General Biology I	3
BIO 131	General Biology I Laboratory	1
BIO 140	Human Anatomy	5
CHEM 102	Introduction to General, Organic and Biological Chemistry	5
or		
CHEM 115	Fundamentals of Chemistry	4
or		
CHEM 120	Preparation for General Chemistry	4
or		
CHEM 141	General Chemistry I	5
COMM 122	Public Speaking	3
ES 014ABC	Body Building	1.5
or		
ES 019ABC	Physical Fitness	1.5
ES 250	Introduction to Kinesiology	3
ES 255	Care and Prevention of Athletic Injuries	3
NUTR 158	Nutrition for Fitness and Sports	3
or		
NUTR 255*	Science of Nutrition	3
PSY 120	Introductory Psychology	3
SOC 120	Introductory Sociology	3
		32.5-33.5

Select one of the following:

BIO 215	Statistics for Life Sciences	3
MATH 160	Elementary Statistics	4
PSY 215	Statistics for the Behavioral Sciences	4
		3-4

Select two of the following *(fulfills the activity requirement for the associate degree):*

ES 001	Adapted Physical Exercise	1
ES 009ABC	Aerobic Dance Exercise	1
ES 019ABC	Physical Fitness	1.5
ES 028ABC	Yoga	1.5
ES 060ABC	Badminton	1
ES 076ABC	Tennis	1
ES 125ABC	Golf	1-1.5
ES 155ABC	Basketball	1
ES 170ABC	Soccer	1
ES 171ABC	Softball	1
ES 175ABC	Volleyball	1
		2-3

Total Required	37.5-40.5
Plus General Education Requirements	

*Students planning to transfer to SDSU must take NUTR 255.

CERTIFICATE OF SPECIALIZATION:

RECREATIONAL LEADERSHIP–SCHOOL-BASED PROGRAMS

This certificate offers specific training for entry-level positions or for advancement in child care and outdoor programs for children and families. It is designed to demonstrate an area of expertise that may be used to attain employment in areas of school-based recreation and fitness programs.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Describe and or demonstrate an hour of cooperative activity for children.
- Describe how principles learned in class may be applied to improve cardiovascular endurance, muscle strength, muscle endurance, and flexibility and body composition, (the five basic components of fitness) in children using walking as a primary conditioning activity.
- Investigate and list causes and risk factor associated with childhood obesity.
- Describe and prepare appropriate snacks for children.
- Demonstrate appropriate classroom organizational and management techniques.
- Demonstrate the ability to plan school-based recreational programs which deliberately intend to advance, stimulate or otherwise enhance children's physical, emotional and social development in ways which are appropriate to their developmental level.
- Describe tested and proven teaching approaches to analyze and enhance movement competencies.

Career Opportunities

Students may find positions in an elementary or middle school, YMCA, recreation center, day or residential camp, or after school day care program. This is a great "stepping-stone" training for those who want to major in exercise science, recreation, elementary education or child development. Provides students with the expertise to enter the entry-level job market with knowledge of sound principles of fitness and developmentally appropriate recreation.

Students who complete the requirements below and hold a current First Aid/CPR certification qualify for a Certificate in Recreational Leadership–School-Based Programs. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

Certificate Requirements:

Course	*Title*	*Units*
CD 125	Child Growth and Development	3
CD 134	Health, Safety and Nutrition of Young Children	3
ES 253	Physical Education in Elementary Schools	3
ES 270	Cooperative Games	1
ES 271	Fitness Walking with Children	1
ES 272	Issues in Childhood Obesity	1
	Total Required	12

Associate Degree for Transfer℠

PUBLIC HEALTH SCIENCE FOR TRANSFER (AS-T)

The Associate in Science in Public Health Science for Transfer provides a broad exposure to the field of public health and related disciplines. Upon completion of this degree, students will be able to recognize effective strategies aimed at reducing threats to the health of our communities and the public at large. The program lays the foundation for student preparation in development, implementation, and evaluation of public health services in various settings and with diverse populations.

The following is required for the AS-T in Public Health Science for Transfer degree:

1. 60 semester or 90 quarter CSU-transferable units;
2. California State University General Education Breadth pattern (CSU GE Breadth); or the Intersegmental General Education Transfer Curriculum (IGETC) pattern for the CSU;
3. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
4. Minimum grade point average (GPA) of 2.0;
5. Grade of "C" or better in all courses required for the major or area of emphasis.

Program Learning Outcomes

Upon completion of this certificate, students will be able to:

- Outline strategies for prevention, detection and control of infectious and chronic disease.
- Describe the organization, financing and delivery of various medical and population-based services in the United States health care system.
- Explain the role of Public Health in addressing the following issues: disparities among different populations, aging, injuries, obesity, control of emerging diseases and epidemics, and emergency preparedness.
- Analyze reliable public data sources to find statistical and epidemiologic data on incidence, prevalence, and trends in drug, tobacco and alcohol use.
- Review recent public health literature detailing ways that race, socioeconomic status and gender become embodied in disparate health outcomes.
- Analyze the contribution of environmental conditions to disparate health outcomes, using case studies.

Career Opportunities

Career opportunities in Public Health are varied, but consist primarily of *administration,*teaching, *research, *program planning, *health promotion, outreach, and administrative assistance duties in the following contexts:

Government agencies
Private Volunteer agencies
Hospitals
Clinics
International Relief programs
Environmental Health programs
Occupational Health programs

*Bachelor degree or higher recommended

Associate in Science for Transfer Degree Requirements:

Core Curriculum Requirements: (33 units):

Course	*Title*	*Units*
BIO 130	General Biology I	3
BIO 131	General Biology I Lab	1
BIO 140	Human Anatomy	5
BIO 141	Human Physiology	3
BIO 141L	Lab in Human Physiology	1
CHEM 115	Fundamentals of Chemistry	4
HED 120	Personal Health and Lifestyles	3
HED 201	Introduction to Public Health	3
MATH 160	Elementary Statistics	4
PSY 120	Introductory Psychology	3
		30

List A: Select one course from the following: (3 units):

ECON 120	Principles of Macroeconomics	3
ECON 121	Principles of Microeconomics	3
HED 202	Health Professions and Organizations	3
HED 203	Substance Abuse and Public Health	3
HED 204	Health and Social Justice	3
PSY 134	Human Sexuality	3
SOC 120	Introductory Sociology	3
		33

Total Units for Major (15-18 units may be double-counted with GE)	18
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	3-6
Total Units for Degree	60

LANGUAGE AND COMMUNICATION

AMERICAN SIGN LANGUAGE

The Associate in Arts in American Sign Language is designed for students who want to acquire advanced expressive and receptive signing skills, as well as develop a greater awareness of the Deaf community and Deaf culture. The emphasis is on paraprofessional vocations and preparation for continued study in the subject. Upon completion, students may wish to transfer to an Interpreter Certification, American Sign Language, or Deaf Studies program or a four year university to continue their studies.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate conversational fluency. Students will be able to engage in rich dialogue exchanges and share advanced narratives and complex concepts using ASL.
- Comprehend and use grammar structures and conventions as they apply to dialogue exchanges.
- Demonstrate an understanding of Deaf culture, cultural behaviors, values and norms; clearly explain cultural tenets and interact comfortably and appropriately with Deaf people and the cultural community in a wide range of settings, from personal to professional.
- Demonstrate an understanding of Deaf history, and the significant accomplishments and shifts over time related to the cultural community, medical, technology and education domains.

CAREER OPPORTUNITIES

Case Worker
Child Care Worker
Communication Disorders Aide
Early Childhood Education Intervention Aide
Educational Classroom Aide
+Educational Counselor
*Interpreter
Preschool Aide
+Program Coordinator
+Rehabilitation Counselor
+Social Work
Social Work Aide
Special Education Classroom Aide
+Teacher

+Bachelor degree or higher required
*Certification required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ASL 120	American Sign Language I	4
ASL 121	American Sign Language II	4
ASL 130	American Sign Language: Fingerspelling	3
ASL 140	Inside Deaf Culture	3
ASL 220	American Sign Language III	4
ASL 221	American Sign Language IV	4
		22

Select one unit from the following:

ASL 125	American Sign Language with Infants and Toddlers	1
ASL 126	American Sign Language with School Age Children	1
		1

Total Required	23
Plus General Education Requirements	

Certificate of Achievement

This certificate is designed for students who want to acquire advanced expressive and receptive signing skills, as well as develop a greater awareness of the Deaf community and Deaf culture. The emphasis is on paraprofessional vocations and preparation for continued study in the subject. Upon completion, students may wish to transfer to an Interpreter Certification, American Sign Language, or Deaf Studies program or a four year university to continue their studies. It is recommended that students interested in this certificate contact the department faculty.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Demonstrate the acquisition of expressive skills by translating and performing a five-minute song or story in American Sign Language.
- Demonstrate the acquisition of receptive skills by answering comprehension questions based on a three minute signed presentation with 80 percent accuracy.

- Compare and contrast American Deaf cultural traditions with American hearing cultural traditions.
- Describe the evolution of medical technology in the Deaf community.
- Demonstrate the use of current communication technology as used by the Deaf Community, e.g., videophones.

Certificate Requirements:

Course	*Title*	*Units*
ASL 120	American Sign Language I	4
ASL 121	American Sign Language II	4
ASL 220	American Sign Language III	4
ASL 221	American Sign Language IV	4
		16

Select five to six units from the following:

ASL 125	American Sign Language with Infants and Toddlers	1
ASL 126	American Sign Language with School Age Children	1
ASL 130	American Sign Language: Fingerspelling	3
ASL 140	Inside Deaf Culture	3
		5-6
	Total Required	21-22

Certificate of Achievement
Students who complete the requirements above qualify for a Certificate in American Sign Language. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

ARABIC STUDIES

The Associate in Arts in Arabic Studies is designed to provide a greater understanding of Arabic language, history, culture and heritage, with particular emphasis on reading, writing and speaking the Arabic language. The Arabic Studies degree prepares students for career opportunities that require competency in the Arabic language. Through specific coursework for this degree, students will have a deeper appreciation and understanding of Arabic heritage and civilization.

Program Outcomes
Upon successful completion of this program, students will be able to:
- Communicate in the Arabic language at the intermediate level in a variety of settings.
- Acquire an understanding of Arabic civilization and heritage.
- Gain sensitivity, globalism and cultural competence.

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ARBC 120	Arabic I	5
ARBC 121	Arabic II	5
ARBC 130	Arabic Literature and Culture	3
ARBC 145	Arabic Civilizations	3
ARBC 122	Arabic for the Arabic Speaker I	5
or		
ARBC 220	Arabic III	5
ARBC/BOT 180	Basic Computer Skills for Arabic Learners	1
ARBC 123	Arabic for the Arabic Speaker II	5
or		
ARBC 221	Arabic IV	5
ARBC 250	Conversational Arabic I	3
or		
ARBC 254	Conversational Iraqi Dialect	3
ARBC 251	Conversational Arabic II	3
	Total Required	33
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Arabic Studies. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

COMMUNICATION

Associate Degree for Transfer℠

I. COMMUNICATION STUDIES FOR TRANSFER (AA-T)
This degree program is designed to provide students with a broad base of communication courses that provide training for entry into occupations in which public contact and verbal skills are important. Students will explore and analyze verbal communication methods, as well as develop and advance their oral communication skills. Students completing this degree may be interested in pursuing careers in community service, sales, performing arts, teaching, and other communication professions.

The following is required for the AA-T in Communication Studies for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Research, write and deliver an effective public speech.
- Analyze, critique, and improve interpersonal relationships in both personal and professional contexts.
- Describe and apply specific skills to the communication process, including perception, emotion, listening and conflict management.
- Describe and interpret communication similarities and differences between people from varying cultural backgrounds.
- Interact with others in group settings to collect, analyze, and synthesize information.
- Interact respectfully with others who hold divergent perspectives.
- Critically analyze, critique and synthesize arguments and information.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
COMM 122	Public Speaking	3

List A: Select two of the following:

COMM 120	Interpersonal Communication	3
COMM 137	Critical Thinking in Group Communication	3
COMM 145	Argumentation	3
		6

List B: Select two of the following:

COMM 110	Introduction to Mass Communication	3
COMM 124	Intercultural Communication	3
COMM 240	Speech and Debate Competition III	3
Any course from List A not selected above		3
		6

List C: Select one of the following:

ANTH 120	Cultural Anthropology	3
ENGL 122	Introduction to Literature	3
ENGL 124	Advanced Composition: Critical Reasoning and Writing	3
SOC 120	Introductory Sociology	3
Any course from Lists A or B not selected above		3
		3

Total Units for Major	18
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	3
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into the Health Communication Major and the Communication Major in Applied Arts and Sciences emphases.

II. COMMUNICATION
This degree program is designed to provide students with a broad base of communication classes that provide training for entry into occupations in which verbal skills are important. Major requirements for the four-year degree in Communication vary from institution to institution. It is recommended that students check with transfer institutions for specific requirements.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Research, write and deliver an effective public speech.
- Analyze, critique, and improve interpersonal relationships in both personal and professional contexts.
- Describe and apply specific skills to the communication process, including perception, emotion, listening and conflict management.
- Describe and interpret communication similarities and differences between people from varying cultural backgrounds.
- Interact with others in group settings to collect, analyze, and synthesize information.
- Interact respectfully with others who hold divergent perspectives.
- Critically analyze, critique and synthesize arguments and information.

CAREER OPPORTUNITIES
Advertising Assistant
Announcer
Arts Administrator
Communication Consultant
Journalist
Lawyer
Lobbyist
Narrator
Politician
Public Information Officer
Public Relations Assistant
Teacher/Instructor/College Professor

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
COMM 120	Interpersonal Communication	3
COMM 122	Public Speaking	3
COMM 123	Advanced Public Speaking	3
COMM 145	Argumentation	3
		12

Select six units from the following:

COMM 110	Introduction to Mass Communication	3
COMM 124	Intercultural Communication	3
COMM 137	Critical Thinking in Group Communication	3
		6
	Total Required	18
	Plus General Education Requirements	

ENGLISH

Associate Degree for Transfer℠

I. ENGLISH FOR TRANSFER (AA-T)

The English Department at Cuyamaca College provides students in the local community an opportunity to develop the skills a wide range of employers seek: strong communication, analytical reading, critical thinking, attention to detail, and the ability to work in diverse teams. The department encourages students to engage deeply with literature and nonfiction texts as well as other forms of cultural production, and to account for how those texts inform our ideologies, norms, and values.

The following is required for the AA-T in English for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to express themselves effectively in largely error-free writing in multiple modes and genres.
- Demonstrate the ability to analyze a variety of texts including fiction and non-fiction.
- Utilize the writing process to approach, complete and refine writing projects.
- Demonstrate familiarity with major British, American, and world authors and literary movements.
- Locate, evaluate, and effectively integrate outside research into their writing to support their explicit theses while avoiding plagiarism and adhering to scholarly standards for citation of information.

Associate in Arts Degree Requirements:
Core Curriculum:

Course	*Title*	*Units*
ENGL 122	Introduction to Literature	3
ENGL 124	Advanced Composition: Critical Reasoning and Writing	3
		6

List A: Select two of the following:

ENGL 221	British Literature I	3
ENGL 222	British Literature II	3
ENGL 231	American Literature I	3
ENGL 232	American Literature II	3
ENGL 270	World Literature I	3
ENGL 271	World Literature II	3
		6

List B: Select one of the following:

ENGL 126	Creative Writing	3
ENGL 201	Images of Women in Literature	3
ENGL 202	Introduction to Film as Literature	3
ENGL 214	Masterpieces of Drama	3
ENGL 217	Fantasy and Science Fiction	3
Any course from List A not selected above		3
		3

List C: Select one of the following:

ENGL 236	Chicana/o Literature	3
ENGL 238	Black Literature	3
ARAM 120	Aramaic I	5
ARAM 121	Aramaic II	5
ARAM 220	Aramaic III	5
ARBC 120	Arabic I	5
ARBC 121	Arabic II	5
ARBC 220	Arabic III	5
ARBC 221	Arabic IV	5
ASL 120	American Sign Language I	4
ASL 121	American Sign Language II	4
ASL 220	American Sign Language III	4
ASL 221	American Sign Language IV	4
BUS 128	Business Communication	3
FREN 120	French I	5
FREN 121	French II	5
FREN 220	French III	5
FREN 221	French IV	5
HUM 110	Principles of the Humanities	3
ITAL 120	Italian I	5
ITAL 121	Italian II	5
ITAL 220	Italian III	5
SPAN 120	Spanish I	5
SPAN 121	Spanish II	5
SPAN 220	Spanish III	5
SPAN 221	Spanish IV	5
THTR 110	Introduction to the Theatre	3
Any course from Lists A or B not selected above		3
		3-5

Total Units for Major (6 units may double counted with GE)	18-20
Total Units for IGETC-CSU or CSU GE Breadth	37-39
Total Transferable Elective Units	13-15/15-17
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into English-Applied Arts and Sciences major.

II. ENGLISH

This major fulfills lower division requirements at most four-year colleges and universities and thus provides a broad-based foundation for transfer. For particular requirements, transfer students should consult the appropriate four-year college or university catalog.

The English Department at Cuyamaca College provides students in the local community an opportunity to develop the skills a wide range of employers seek: strong communication, analytical reading, critical thinking, attention to detail, and the ability to work in diverse teams. The department encourages students to engage deeply with literature and nonfiction texts as well as other forms of cultural production, and to account for how those texts inform our ideologies, norms, and values.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to express themselves effectively in largely error-free writing in multiple modes and genres.
- Demonstrate the ability to analyze a variety of texts including fiction and non-fiction.
- Utilize the writing process to approach, complete and refine writing projects.
- Demonstrate familiarity with major British, American, and world authors and literary movements.
- Locate, evaluate, and effectively integrate outside research into their own writing to support their explicit theses while avoiding plagiarism and adhering to scholarly standards for citation of information.

CAREER OPPORTUNITIES

English majors have gone on to work in a variety of fields, including communications and publishing. In fact, English majors work in virtually every profession there is. Many English majors enter the following careers:

Advertising Manager
Announcer
Editor
Freelance Writer
Interpreter & Translator
Lawyer
Librarian
News Reporter
Paralegal
Public Relations Manager
Public Relations Specialist
Teacher
Technical Writer
Writer & Author

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ENGL 120	College Composition and Reading	3
ENGL 122	Introduction to Literature	3
ENGL 124	Advanced Composition: Critical Reasoning and Writing	3
ENGL 126	Creative Writing	3
ENGL 200	Cooperative Work Experience in English	1-4
		13-16

Select two of the following:

ENGL 221	British Literature I	3
ENGL 222	British Literature II	3
ENGL 231	American Literature I	3
ENGL 232	American Literature II	3
ENGL 270	World Literature I	3
ENGL 271	World Literature II	3
		6

Select one of the following:

ENGL 201	Images of Women in Literature	3
ENGL 202	Introduction to Film as Literature	3
ENGL 214	Masterpieces of Drama	3
ENGL 217	Fantasy and Science Fiction	3
ENGL 236	Chicana/o Literature	3
ENGL 238	Black Literature	3
		3

Select one of the following:

ANTH 120	Cultural Anthropology	3
HIST 100	Early World History	3
HIST 101	Modern World History	3
HIST 105	Early Western Civilization	3
HIST 106	Modern Western Civilization	3
HUM 115	Arts and Culture in San Diego	3
HUM 120	European Humanities	3
HUM 140	Humanities of the Americas	3
HUM 155	World Mythology Through the Humanities	3

PHIL 115	History of Philosophy I: Ancient	3
PHIL 117	History of Philosophy II: Modern and Contemporary	3
RELG 170	Introduction to the New Testament	3
		3
	Total Required	25-28
	Plus General Education Requirements	

Recommended Electives: Students planning to transfer to four-year institutions to complete a bachelor's degree in English are STRONGLY urged to take the following courses, depending on the requirements at those schools: Two sequential semesters of a single foreign language (10 units).

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in English. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

GENERAL STUDIES: COMMUNICATION AND LANGUAGE ARTS

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS
To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)

AND

II. Choose a minimum of 18 units from one Area of Emphasis:

- Communication and Language Arts

The Associate in Arts in General Studies with an Emphasis in Communication and Language Arts will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of how language works to express human ideas and feelings. Students will explore and analyze written and verbal communication methods, as well as develop and advance their oral and written communication skills. Students must complete a minimum of three units in Communication and three units in Language Arts. The remaining twelve units may be taken from either category.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Demonstrate the ability to write effectively.
- Demonstrate the ability to locate relevant, reliable information and read it effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

Communication
BUS 128
COMM 110, 120, 122, 123, 124, 130, 135, 137, 145

Language Arts
ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 220, 221, 250, 251, 254
ASL 120, 121, 220, 221
BUS 128
ENGL 122, 124, 126, 201, 202, 217, 221, 222, 231, 232, 236, 238, 270, 271
ETHN 236, 238
NAKY 120, 121, 220
SPAN 120, 121, 220, 221, 250, 251

SPANISH

Associate Degree for Transfer℠

I. SPANISH FOR TRANSFER (AA-T)
The Associate in Arts in Spanish for Transfer degree is designed to provide students with communicative skills in Spanish, as well as a greater understanding of Spanish culture and civilization. This degree prepares students to transfer to a California State University.

The following is required for the AA-T in Spanish for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health and well-being, professions and occupations, the arts, current events, and politics.
- Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city life, health and well-being, professions and occupations, the arts, current events, and politics.
- Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
SPAN 120	Spanish I	5
SPAN 121	Spanish II	5
SPAN 220	Spanish III	5
SPAN 221	Spanish IV	5
		20

List A: Select one of the following:

HIST 118	U.S. History: Chicano/Chicana Perspectives I	3
HIST 119	U.S. History: Chicano/Chicana Perspectives II	3
SPAN 141	Spanish and Latin American Cultures	3
SPAN 145	Hispanic Civilizations	3
SPAN 250*	Conversational Spanish I	3
SPAN 251*	Conversational Spanish II	3
		3
	Total Units for Major (9 units may be double-counted with GE)	23
	Total Units for CSU GE Breadth or IGETC-CSU	37-39
	Total Transferable Elective Units	7-9
	Total Units for Degree	60

*Substitution Courses:
SPAN 250 may be substituted for SPAN I for students placing at the level of SPAN II.
SPAN 251 may be substituted for SPAN II for students placing into SPAN III.

Please note: SDSU accepts this degree for students transferring into Spanish B.A.

II. SPANISH
This degree program is designed to provide students with communicative skills in understanding, speaking, reading, and writing Spanish. It also gives students a greater understanding of Spanish culture and civilization, and prepares them for greater international and domestic career opportunities. For the suggested sequence of courses to be taken and/or assistance in transferring to a four-year institution, contact the Counseling Center or the Department of World Languages.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:
- Utilize more complex vocabulary and grammatical structures to communicate and discuss hypothetical situations dealing with nature, city, life, health, and well-being, professions and occupations, the arts, current events, and politics.
- Utilize more complex vocabulary and grammatical structures to write about situations dealing with nature, city life, health and well-being, profession, and occupations, the arts, current events, and politics.
- Use language and vocabulary skills developed in class to read, analyze, and interpret authentic texts.

CAREER OPPORTUNITIES
Bilingual Aide
Border Patrol Officer
Buyer
Court Interpreter
Counseling
Customs Agent/Inspector
Foreign Exchange Clerk
*Foreign Student Advisor
Interpreter
*Journalist
*Museum Curator
*Physician
*Scientific Linguist
Tour Guide
Tutor

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
SPAN 120	Spanish I	5
SPAN 121	Spanish II	5
SPAN 220	Spanish III	5
SPAN 221	Spanish IV	5
SPAN 250	Conversational Spanish I	3
SPAN 251	Conversational Spanish II	3
		26

Select one of the following:

HIST 118	U.S. History: Chicano/Chicana Perspectives I	3
HIST 119	U.S. History: Chicano/Chicana Perspectives II	3
SPAN 141	Spanish and Latin American Cultures	3
SPAN 145	Hispanic Civilizations	3
		3
	Total Required	29
	Plus General Education Requirements	

Certificate of Achievement
Students who complete only the major requirements above qualify for a Certificate in Spanish. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

UNIVERSITY STUDIES: COMMUNICATION AND LANGUAGE ARTS

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

REQUIREMENTS:

I. California State University (CSU) General Education Breadth

1. Complete CSU General Education Breadth (see Degree Requirements and Transfer Information section).
2. Earn a grade of "C" or better in 30 of the required 39 semester units of general education to include all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Credit earned through external examinations, i.e., AP, will be applied towards general education in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on a CSU certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable CSU transferable semester units.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

OR

II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Degree Requirements and Transfer Information section.
2. Earn a grade of "C" or better in all IGETC courses.
3. Credit earned through external examinations, i.e., AP, will be applied in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on an IGETC certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable UC transferable semester units for UC University Studies.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

AND

III. Area of Emphasis

A. Business and Economics
B. Communication and Language Arts
C. Humanities and Fine Arts
D. Science and Mathematics
E. Social and Behavioral Sciences

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the associate degree. Courses that are not UC-transferable will not be used in the UC University Studies Area of Emphasis Degrees. Completion of the University Studies degree does not guarantee admission to a four-year institution.

Courses for the Associate in Arts in University Studies with an Emphasis in Communication and Language Arts focus on the study of how language works to express human ideas and feelings. Students will explore and analyze written and verbal communication methods, as well as develop and advance their oral and written communication skills. Students completing this area may be interested in the following baccalaureate majors: communication, English, foreign language, literature, journalism, and linguistics. Students must complete a minimum of six units in Communication and six units in Language Arts. The remaining six units may be taken from either category.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Demonstrate the ability to write effectively.
- Demonstrate the ability to locate relevant, reliable information and read it effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

Communication
BUS 128*
COMM 110, 120, 122, 123, 124, 130, 137, 145

Language Arts
ARAM 120, 121, 220
ARBC 120, 121, 122, 123, 220, 221, 254
ASL 120, 121, 220, 221
BUS 128*
ENGL 122, 124, 126, 201, 202, 214, 221, 222, 231, 232, 270, 271
NAKY 120, 121, 220
SPAN 120, 121, 220, 221, 250, 251

* Course not UC transferable

STEM

BIOLOGICAL SCIENCES

Associate Degree for Transfer℠

I. BIOLOGY FOR TRANSFER (AS-T)
The Associate in Science in Biology for Transfer presents the diverse, dynamic study of life through a required core of biology and supporting courses. This degree is specifically designed to prepare students for transfer to a California State University, where a baccalaureate degree may be earned in Biological Sciences or a closely related field.

The following is required for the AS-T in Biology for Transfer degree:

1. 60 semester or 90 quarter CSU-transferable units;
2. The Intersegmental General Education Transfer Curriculum (IGETC) for Science, Technology, Engineering and Mathematics (STEM) pattern for the CSU;*
3. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
4. Minimum grade point average (GPA) of 2.0;
5. Grade of "C" or better in all courses required for the major or area of emphasis.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Explain the basic structures and fundamental processes of life at the molecular, cellular, and organismal levels.
- Identify the evolutionary processes that lead to adaptation and biological diversity.
- Describe the relationship between life forms and their environment and ecosystems.
- Collect, organize, analyze, interpret and present quantitative and qualitative data and incorporate them into the broader context of biological knowledge.
- Effectively apply current technology and scientific methodologies for problem solving.
- Find, select and evaluate various types of scientific information including primary research articles, mass media sources and World Wide Web information.
- Communicate effectively in written and oral formats.

Associate in Science for Transfer Degree Requirements:

Course	*Title*	*Units*
Required Core:		
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO 240	Principles of Ecology, Evolution and Organismal Biology	5
		9
List A:		
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
MATH 180	Analytic Geometry and Calculus I	5
Choose one sequence:		
PHYC 130	Fundamentals of Physics	4
PHYC 131	Fundamentals of Physics	4
or		
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
List B:		
MATH 160	Elementary Statistics	4
	Total Required	36-38
	Double-Counted Units	10
	General Education Requirements (IGETC-CSU for STEM)*	31
	Electives	1-3
	Total Degree Units	60

*Completion of IGETC-CSU for STEM allows for completion of 6 units of non-STEM GE work after transfer. One Area 3 course (Fine Arts and Humanities) and one Area 4 course (Social and Behavioral Sciences) may be deferred until after transfer.

II. BIOLOGICAL SCIENCES

This degree program is designed to provide a two-year transfer program with emphasis on the uniformity and diversity of life. The curriculum fulfills the lower division requirements for majors in biology, dentistry, medicine, nursing, pharmacy, environmental health, microbiology and ecology.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the basic structures and fundamental processes of life at the molecular, cellular, and organismal levels.
- Identify the evolutionary processes that lead to adaptation and biological diversity.
- Describe the relationship between life forms and their environment and ecosystems.
- Collect, organize, analyze, interpret and present quantitative and qualitative data and incorporate them into the broader context of biological knowledge.
- Effectively apply current technology and scientific methodologies for problem solving.
- Find, select and evaluate various types of scientific information including primary research articles, mass media sources and World Wide Web information.
- Communicate effectively in written and oral formats.

CAREER OPPORTUNITIES

*Aquatic Biologist
*Athletic Trainer
*Biologist
*Biochemical Engineer
Biological Technician
Biomedical Equipment Technician
Biotechnologist
*Botanist
Clinical Lab Technologist
*Cytologist
*Ecologist
*Environmental Engineer
Environmental Technician
*Environmental Microbiologist
Genetic Engineering Technician
Greenhouse Assistant
Laboratory Technician
*Physical Therapist
*Public Health Biologist
Purification Technician
Research Assistant
Safety Specialist
*Teacher
Technical Writer
Waste Management Technician

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	*Title*	*Units*
BIO 215	Statistics for Life Sciences	3
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO 240	Principles of Ecology, Evolution and Organismal Biology	5
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
CHEM 231	Organic Chemistry I	5
MATH 180	Analytic Geometry and Calculus I	5
PHYC 130	Fundamentals of Physics	4
PHYC 131	Fundamentals of Physics	4
	Total Required	40
	Plus General Education Requirements	

III. MARINE BIOLOGY

The Marine Biology degree is designed to provide a two-year transfer program leading to a B.S. degree in Marine Biology with emphasis on the diversity of organisms and the biological and physical processes that affect these organisms, their populations and their coastal and oceanic ecosystems. This major requires a strong foundation in natural sciences that is provided in this two-year transfer degree that can lead to UC or CSU Marine Biology programs.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Explain the basic structures and fundamental processes of life at the molecular, cellular, and organismal levels.
- Identify the evolutionary processes that lead to adaptation and biological diversity.
- Describe the relationship between life forms and their environment and ecosystems.
- Collect, organize, analyze, interpret and present quantitative and qualitative data and incorporate them into the broader context of biological knowledge.
- Effectively apply current technology and scientific methodologies for problem solving.
- Find, select and evaluate various types of scientific information including primary research articles, mass media sources and Internet information.
- Communicate effectively in written and oral formats.

Associate in Science for Transfer Degree Requirements:

Course	*Title*	*Units*
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO 240	Principles of Ecology, Evolution and Organismal Biology	5
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
PHYC 190	Mechanics and Heat	5
and		
PHYC 200	Electricity and Magnetism	5
and		
PHYC 210	Wave Motion and Modern Physics	5
or		
PHYC 130	Fundamentals of Physics	4
and		
PHYC 131	Fundamentals of Physics	4
	Total Required	40-47
	Plus General Education Requirements	

*Completion of IGETC-CSU for STEM allows for completion of 6 units of non-STEM GE work after transfer. One Area 3 course (Fine Arts and Humanities) and one Area 4 course (Social and Behavioral Sciences) may be deferred until after transfer.

CHEMISTRY

The chemistry curriculum is designed to provide students who choose to work toward a bachelor's degree a well-balanced, lower division program with a strong emphasis on fundamentals and problem solving. This major fulfills the lower division requirements (except for analytical chemistry) for chemistry majors and is typical of the requirements at four-year colleges and universities.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Comprehend and describe the nature of matter, including its classification, composition and structure.
- Demonstrate an understanding of the transformations of matter, both physical and chemical.
- Develop critical thinking skills by predicting interactions between different types of matter, both physical and chemical; analyzing matter in the laboratory both qualitatively and quantitatively and effectively communicating experimental results and conclusions; performing mathematical calculations related to the transformation and analysis of matter; and solving qualitative and quantitative problems in connection with the transformation and analysis of matter.

CAREER OPPORTUNITIES

Chemists work in a variety of fields, primarily those of the chemical, biotechnological, environmental, biomedical, pharmaceutical, electronics, forensic, agricultural and food industries. They usually work in analysis, research, development or production of materials. Management, marketing and teaching opportunities are also available.

*Agricultural Chemist
*Air Quality Control
*Analytical Chemist
*Biochemist
*Chemistry Teacher
*Dietician
*Environmental Technologist
Fishery Specialist
*Food And Drug Inspector
*Forensic Specialist
Laboratory Technician
*Materials Scientist
Medical Technologist
*Microbiologist
*Organic Chemist
*Physician
*Polymer Chemist
Sales Representative
Sanitarian Technician

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	Title	Units
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
CHEM 231	Organic Chemistry I	5
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
PHYC 210	Wave Motion and Modern Physics	5
	Total Required	43
	Plus General Education Requirements	

Note:

1. Students pursuing an emphasis in biochemistry should also take the following courses: BIO 230, 240.
2. Students who intend to enroll at UCSD should take MATH 285 and check with the Counseling Center regarding program options.

ENGINEERING

This degree program is designed to cover the first two years of a four-year program leading to the bachelor's degree in engineering at most four-year colleges and universities. While the bachelor's degree is usually the minimum needed to practice as an engineer, the associate degree will permit an individual to find work in most engineering firms as an engineering aide.

CAREER OPPORTUNITIES

*Aerospace Engineer
*Agricultural Engineer
*Architectural Engineer
*Biomedical Engineer
*CAD/CAM Engineer
*Chemical Engineer
*Civil Engineer
Civil Engineering Technician
*Computer Engineer
*Electrical Engineer
Electrical Engineering Technician
*Environmental Engineer
*Geological Engineer
*Industrial Engineer
Industrial Engineering Technician
*Manufacturing Engineer
*Marine Engineer
*Materials Engineer
*Mechanical Engineer
Mechanical Engineering Technician
*Mining Engineer
*Nuclear Engineer
*Petroleum Engineer
*Structural Engineer
*Systems Engineer
*Robotics Engineer

*Bachelor's degree or higher required

I. CIVIL ENGINEERING

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Visualize 3D objects and draw them in 2D, both by sketching and through the use of computer-aided drafting software; produce a complete set of drawings sufficient to manufacture a part, including dimensions and tolerances.
- Solve engineering problems through computer modeling, employing an engineering computer language such as Matlab.
- Design a rigid structure such as a bridge, determining forces in each part of the structure. Determine the weight and location of the center of gravity of the structure.
- Design a dynamic system such as a piston or linkage, and compute forces, accelerations, and speeds of all components of the system.
- Apply the tools of surveying, including total station instruments, to analyze the topography of land, construction staking, and setting property boundaries.
- Model vibrating systems using systems of 2nd order differential equations.
- Analyze experimental data to determine summary statistics (e.g., mean, variance), apply appropriate statistical tests to data sets, and design statistical experiments.

Associate in Science Degree Requirements:

Course	Title	Units
CHEM 141	General Chemistry I	5
ENGR 100	Introduction to Engineering and Design	4
ENGR 119	Basic Engineering CAD	3
or		
CADD 120	Introduction to Computer-Aided Drafting and Design	3
ENGR 120	Engineering Computer Applications	3
ENGR 200	Engineering Mechanics–Statics	3
ENGR/SURV 218	Plane Surveying	4
ENGR 220	Engineering Mechanics–Dynamics	3
ENGR 260	Engineering Materials	3
MATH 160	Elementary Statistics	4
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
MATH 285	Differential Equations	3
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
	Total Required	58
	Plus General Education Requirements	

II. ELECTRICAL AND COMPUTER ENGINEERING

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Visualize 3D objects and sketch them accurately in 2D.
- Solve engineering problems through computer modeling, employing a computer language such as C or Java.
- Design and write computer programs that employ linked list memory management, stacks, tree data structures, and searching and sorting algorithms.
- Determine the DC and steady-state AC voltages and currents everywhere in an electric circuit composed of passive components.
- Model linear systems of arbitrary size and complexity using linear algebra.
- Model transient and steady-state electrical systems using systems of 2nd order differential equations.
- Apply Green's theorem, Stokes' theorem, and Maxwell's equations to solve simple problems in electrostatics and electromagnetism.
- Analyze and design combinational and sequential digital logic systems of arbitrary complexity, including (for example) Moore and Mealy sequential machines.

Associate in Science Degree Requirements:

Course	Title	Units
CHEM 141	General Chemistry I	5
CS 181	Introduction to C++ Programming	4
or		
CS 182	Introduction to Java Programming	4
CS 281	Intermediate C++ Programming	4
or		
CS 282	Intermediate Java Programming and Fundamental Data Structures	4
ENGR 100	Introduction to Engineering and Design	4
ENGR 210	Electric Circuits	4
ENGR 270	Digital Design	4
MATH 180	Analytic Geometry and Calculus I	5
MATH 245	Discrete Mathematics	3
or		
MATH 281	Multivariable Calculus	4
MATH 280	Analytic Geometry and Calculus II	4
MATH 284	Linear Algebra	3
MATH 285	Differential Equations	3
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
	Total Required	53-54
	Plus General Education Requirements	

III. MECHANICAL AND AEROSPACE ENGINEERING

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Visualize 3D objects and draw them in 2D, both by sketching and through the use of computer-aided drafting software; produce a complete set of drawings sufficient to manufacture a part, including dimensions and tolerances.
- Solve engineering problems through computer modeling, employing an engineering computer language such as Matlab.
- Design a rigid structure such as a bridge, determining forces in each part of the structure. Determine the weight and location of the structure's center of gravity.
- Design a dynamic system such as a piston or linkage and compute forces, accelerations, and speeds of all components of the system.
- Select an appropriate material for manufacturing a part or product and determine the appropriate material processing techniques to produce the part. Justify the choice of material on the basis of macroscopic mechanical properties as well as microstructure.
- Determine the DC and steady-state AC voltages and currents everywhere in an electric circuit composed of passive components.
- Model vibrating systems using systems of 2nd order differential equations.

Associate in Science Degree Requirements:

Course	Title	Units
CHEM 141	General Chemistry I	5
ENGR 100	Introduction to Engineering and Design	4
ENGR 120	Engineering Computer Applications	3
ENGR 200	Engineering Mechanics–Statics	3
ENGR 210	Electric Circuits	4
ENGR 220	Engineering Mechanics–Dynamics	3
ENGR 260	Engineering Materials	3
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
MATH 285	Differential Equations	3
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
PHYC 210	Wave Motion and Modern Physics	5
	Total Required	56
	Plus General Education Requirements	

Associate Degree for Transfer℠

ENVIRONMENTAL SCIENCE FOR TRANSFER (AS-T)

The AS-T in Environmental Science for Transfer is an inter-disciplinary program that presents the student with a rigorous and broad foundation in the sciences most relevant to environmental issues including biology, chemistry, physics, earth science, statistics and mathematics. The AS-T in Environmental Sciences is specifically designed to prepare students for transfer to California State University, where a baccalaureate degree may be earned in Environmental Science or a closely related field.

The following is required for the AS-T in Environmental Science for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Ability to utilize knowledge attained from a broad foundation in the sciences to think critically about human impact on the environment and the environmental issues confronting Society.
- Describe the relationship between life forms and their impact on environment and ecosystems.
- Collect, organize, analyze, interpret and present quantitative and qualitative date and incorporate them into the broader context of scientific knowledge.
- Effectively apply current technology and scientific methodologies for problem solving.
- Find, select evaluate and utilize various types of scientific information including primary research articles, mass media sources and Internet information.
- Communicate effectively in written and oral formats.

CAREER OPPORTUNITIES

Environmental Scientist
Environmental Technician
Ecologist
Chemical Technician
Water Chemistry Technician
Geologist
Geographer
Water Wastewater Technician
Environmental Health and Safety Technician
Technical Writer
Waste Management Technician

Associate in Science Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO 240	Principles of Ecology, Evolution and Organismal Biology	5
CHEM 141	General Chemistry I	5
or		
BIO 230	Principles of Cellular, Molecular and Evolutionary Biology	4
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
		14

List A:

BIO 112	Contemporary Issues in Environmental Resources	3
GEOL 110	Planet Earth	3
GEOL 111	Planet Earth Laboratory	1
or		
GEOG 120	Physical Geography: Earth Systems	3
GEOG 121	Physical Geography: Earth Systems Laboratory	1
MATH 160	Elementary Statistics	4
MATH 180	Analytic Geometry and Calculus I	5
or		
MATH 178	Calculus for Business, Social and Behavioral Sciences	4
		15-16

List B:

ECON 121	Principles of Microeconomics	3
PHYC 130	Fundamental of Physics	4
PHYC 131	Fundamentals of Physics	4
		11
	Total Units for the major	40-41
	Double-Counted Units	13
	General Education Requirements (IGETC-CSU for STEM)	31-33
	Total Units Required for Degree	60

GENERAL STUDIES: SCIENCE AND MATHEMATICS

The Associate Degree in General Studies with an Area of Emphasis provides an opportunity for students to design a program of study meaningful and appropriate to their own needs and academic interests. The degree includes general education and a focused area of study. Students may choose to earn this degree for preparation for employment or for personal development.

REQUIREMENTS

To meet the General Studies degree requirements, a student must complete the following:

I. AS or AA General Education Requirements (see Degree Requirements and Transfer Information section)

AND

II. Choose a minimum of 18 units from one Area of Emphasis:

- Science and Mathematics

The Associate in Science in General Studies with an Emphasis in Science and Mathematics will be awarded to students upon completion of general education degree requirements and 18 units in this area. These courses emphasize the study of mathematical and quantitative reasoning skills and apply the facts and principles that form the foundations of living and non-living systems. Students will recognize and utilize the methodologies of science as investigative tools, as well as the limitations of science. Students will use mathematical skills to solve numerical problems encountered in daily life, and more advanced skills for applications in the physical and life sciences. Students must complete a minimum of three units in Science and three units in Mathematics (limitation of one statistics course). The remaining twelve units may be taken from any category.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use algebraic methods to solve problems.
- Interpret basic mathematical models and draw inferences from them.
- Represent mathematical information symbolically, visually, numerically and verbally.
- Use the scientific method of inquiry and techniques to answer questions about physical and biological processes.
- Analyze basic concepts of physical and biological science to evaluate scientific information and solve scientific problems.

Science

ANTH 130
ASTR 110, 112
BIO 112, 115, 122, 130, 131, 133, 134, 135, 140, 141, 141L, 152, 230, 240, 251
CHEM 102, 115, 116, 120, 141, 142, 231, 232
ET 110
GEOG 120, 121
GEOL 104, 110, 111
OCEA 112, 113
PHYC 110, 130, 131, 190, 200, 201, 202, 203, 210

Mathematics

BIO 215
MATH 160, 170, 175, 176, 178, 180, 245, 280, 281, 284, 285
PSY 215

CADD and Engineering

CADD 115, 120, 125, 129, 131
ENGR 100, 119, 120, 125, 129, 175, 176, 218, 270

Computer Science

CS 119, 119L, 181, 182, 281, 282

MATHEMATICS

Associate Degree for Transfer℠

I. MATHEMATICS FOR TRANSFER (AS-T)

This program is designed to prepare students for transfer to a California State University (CSU) with the intent of earning a B.S. degree in Mathematics. Since jobs requiring mathematical skills such as data analysis, problem solving, pattern recognition, statistics, and probability are in high demand, the mathematics major may benefit both educationally and economically from developing and pursuing an interest in mathematics. Mathematical skills and statistical methods are employed regularly by researchers testing hypotheses, by workers applying quality control in manufacturing, and by informed citizens who must evaluate information from the media in tabular, graphical, and report form in order to reach solutions. This major offers a foundation in these necessary skills. The emphasis is to prepare students for transfer to a four-year institution and/or for career preparation in a vocational or professional field.

The following is required for the AS-T in Mathematics for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:
- Apply mathematical reasoning and problem solving strategies to analyze, interpret, and model applications from degree and transfer-level courses and programs in math, science, engineering, business, and technology.
- Select and apply appropriate definitions, postulates, and theorems to prove mathematical statements.

Associate in Science Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
		13

List A: Select one of the following:

MATH 284	Linear Algebra	3
MATH 285	Differential Equations	3
		3

List B: Select one of the following:

CS 181	Intro to C++ Programing	4
MATH 160	Elementary Statistics	4
MATH 245	Discrete Mathematics	3
PHYC 190	Mechanics and Heat	5
Any course from List A not selected above		3
		3-5

Total Units for Major (3-6 units may be double-counted with GE)	19-21
Total Units for CSU GE Breadth or IGETC-CSU	37-39
Total Transferable Elective Units	3-5
Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Mathematics (Science Emphasis) B.S.

II. MATHEMATICS

Since jobs requiring mathematical skills such as data analysis, problem solving, pattern recognition, statistics, and probability are in high demand, the mathematics major may benefit both educationally and economically from developing and pursuing an interest in mathematics. Mathematical skills and statistical methods are employed regularly by researchers testing hypotheses, by workers applying quality control in manufacturing, and by informed citizens who must evaluate information from the media in tabular, graphical, and report form in order to reach solutions. This major offers a foundation in these necessary skills. The emphasis is to prepare students for transfer to a four-year institution and/or for career preparation in a vocational or professional field.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:
- Apply mathematical reasoning and problem solving strategies to analyze, interpret, and model applications in STEM or business programs.
- Select and apply appropriate definitions, postulates, and theorems to prove mathematical statements.

CAREER OPPORTUNITIES

*Accountant
*Actuary
Air Traffic Controller
*Auditor
†Bank Officer
*Budget Analyst
Computer Operator
*Computer Programmer
†Cost Estimator
†Credit and Collection Manager
Data Processing Manager
*Economist
*Engineer
*Financial Planner
Insurance Agent/Broker
Insurance Claim Examiner
Laboratory Examiner
Loan Officer
*Market Research Analyst
*Mathematician
*Mathematics Teacher
*Securities Trader
Semiconductor Technician
*Statistician
Surveyor
*Systems Analyst

*Bachelor Degree or higher required
†Bachelor Degree normally recommended

Associate in Science Degree Requirements:

Course	*Title*	*Units*
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
		13

List A: Select one of the following:

MATH 284	Linear Algebra	3
MATH 285	Differential Equations	3
		3

List B: Select one of the following:

CS 181	Introduction to C++ Programming	3
ENGR 120	Engineering Computer Applications	3
MATH 160	Elementary Statistics	4
MATH 245	Discrete Math	3
PHYC 201	Mechanics and Waves	5
Any course from list A not selected:		3
		3-5

Total Required	19-21
Plus General Education Requirements	

Recommended Electives: Students planning to transfer to four-year institutions to complete a bachelor's degree in Pure Mathematics, Applied Mathematics, or Statistics should select an emphasis in an applied discipline such as accounting, chemistry, computer science, economics, engineering, or physics. In particular, transfer students are strongly urged to elect the following physics courses: PHYC 201, 202, 203. Students preparing for a vocational or professional career are strongly encouraged to select an emphasis in a vocational/professional discipline such as business, computer and information science, CADD technology, electronics technology, or environmental health and safety management.

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Mathematics. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

PHYSICS

Associate Degree for Transfer℠

I. PHYSICS FOR TRANSFER (AS-T)

Physics is the study of the relationship between matter and energy in the universe. The AS-T in Physics for Transfer degree is designed to prepare students to transfer to a California State University (CSU) with the intent of earning a baccalaureate degree in physics. The curriculum is designed to provide students working toward a bachelor's degree a well-balanced, lower division program by emphasizing fundamental concepts and problem solving. The degree requirements are typical of what baccalaureate institutions require.

The following is required for the AS-T in Physics for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC-CSU) pattern; see Degree Requirements and Transfer Information section for more information.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:
- Evaluate derivatives of algebraic, trigonometric, logarithmic and exponential functions.
- Evaluate integrals using appropriate techniques (such as: by parts, trig substitution, etc.)
- Apply Green's, Stokes' and Gauss' Theorems.
- Use conservation of energy and conservation of momentum concepts.
- Use Maxwell's Equations to solve problems in electricity and magnetism.
- Use the basic concepts of modern physics: special relativity, photon behavior, matter waves, the uncertainty principles, and quantum mechanics in one and three dimensions, statistical physics and nuclear physics.

Associate in Science Degree Requirements:

Course	Title	Units
MATH 180	Analytic Geometry and Calculus I	5
MATH 280	Analytic Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
PHYC 210	Wave Motion and Modern Physics	5
	Total Units for Major (7 units may be double-counted with GE)	28
	Total Units for IGETC-CSU	37
	Total Transferable Elective Units	2
	Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into the B.S. Physics (General) or B.S. Physics (Modern Optics Emphasis).

II. PHYSICS

Physics is the study of the relationship between matter and energy in the universe. The curriculum is designed to provide students working toward a bachelor's degree a well-balanced, lower division program by emphasizing fundamental concepts and problem solving. The degree requirements are typical of what four-year colleges and universities require; see www.assist.org for requirements of specific transfer institution.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Predict periodic trends in ionization energy, atomic size, electron affinity and acid-base properties.
- Calculate changes in enthalpy, entropy, and free energy for chemical reactions, phase changes, solution processes, and elementary molecular processes using tables of thermodynamic data.
- Write systematic names for carbon based compounds.
- Evaluate derivatives of algebraic, trigonometric, logarithmic and exponential functions.
- Evaluate integrals using appropriate techniques (such as: by parts, trig substitution, etc.)
- Apply Green's, Stokes' and Gauss' Theorems.
- Use conservation of energy and conservation of momentum concepts.
- Use Maxwell's Equations to solve problems in electricity and magnetism.
- Use the basic concepts of modern physics: special relativity, photon behavior, matter waves, the uncertainty principle, quantum mechanics in one and three dimensions, statistical physics and nuclear physics.

CAREER OPPORTUNITIES

Air Pollution Operating Specialist
*Astronomer
*Astrophysicist
*Biomedical Engineer
*Biophysicist
*Chemical Physicist
Consumer Safety Officer
*Cryogenic Engineer
Electrician
Food and Drug Inspector
*Fusion Engineer
*Geophysicist
Government Claims Representative
Health Program Representative
*High Energy Physicist
Laser Specialist
*Metallurgist
*Meteorologist
*Nuclear Physicist
*Physical Oceanographer
*Physicist
*Plasma Physicist
Quality Control Technician
*Quantum Physicist
*Seismologist

*Bachelor Degree or higher required

Associate in Science Degree Requirements:

Course	Title	Units
CHEM 141	General Chemistry I	5
CHEM 142	General Chemistry II	5
MATH 180	Analytical Geometry and Calculus I	5
MATH 280	Analytical Geometry and Calculus II	4
MATH 281	Multivariable Calculus	4
PHYC 190	Mechanics and Heat	5
PHYC 200	Electricity and Magnetism	5
PHYC 210	Wave Motion and Modern Physics	5
	Total Required	38
	Plus General Education Requirements	

UNIVERSITY STUDIES: SCIENCE AND MATHEMATICS

The Associate Degree in University Studies with an Area of Emphasis is intended to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each four-year transfer institution, courses used to complete this degree should be selected with the assistance of a counselor. The completion of the University Studies Degree does not guarantee acceptance into either a baccalaureate major or a four-year institution.

REQUIREMENTS:

I. California State University (CSU) General Education Breadth

1. Complete CSU General Education Breadth (see Degree Requirements and Transfer Information section).
2. Earn a grade of "C" or better in 30 of the required 39 semester units of general education to include all courses in Area A and the Mathematical/Quantitative Reasoning courses in Area B.
3. Credit earned through external examinations, i.e., AP, will be applied towards general education in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on a CSU certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable CSU transferable semester units.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

OR

II. Intersegmental General Education Transfer Curriculum (IGETC) for CSU or UC

1. Complete IGETC Certification (see Degree Requirements and Transfer Information section.
2. Earn a grade of "C" or better in all IGETC courses.
3. Credit earned through external examinations, i.e., AP, will be applied in accordance with Cuyamaca College policies. Please note: This may be different than how the external exam is used on an IGETC certification.
4. Complete a minimum of 18 units in an Area of Emphasis (listed below).
5. Complete a minimum of 60 degree applicable UC transferable semester units for UC University Studies.
6. Earn a cumulative GPA of 2.0 in all college course work completed.
7. Meet Cuyamaca College residence requirements for graduation (see Admission Information).

AND

III. Area of Emphasis

A. Business and Economics
B. Communication and Language Arts
C. Humanities and Fine Arts
D. Science and Mathematics
E. Social and Behavioral Sciences

While 18 units are required in a specific area to meet the requirements of the degree, it is strongly recommended that as many lower division preparation for the major courses as possible be completed at the community college prior to transfer. Some baccalaureate majors and four-year institutions require a higher GPA than is necessary for the associate degree. Courses that are not UC-transferable will not be used in the UC University Studies Area of Emphasis Degrees. Completion of the University Studies degree does not guarantee admission to a four-year institution.

Courses for the Associate in Science in University Studies with an Emphasis in Science and Mathematics focus on the study of mathematical and quantitative reasoning skills and the application of facts and principles that form the foundations of living and non-living systems. Students will recognize and utilize the methodologies of science as investigative tools, as well as the limitations of science. Students will use mathematical skills to solve numerical problems encountered in daily life, as well as more advanced skills for applications in the physical and life sciences. Students completing this area may be interested in the following baccalaureate majors: astronomy, biological sciences, chemistry, computer science, engineering, geography, geology, mathematics, oceanography, physical science, and physics. Students must complete a minimum of six units in Science and six units in Mathematics (limitation of one statistics course). The remaining six units may be taken from either category.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use arithmetical, algebraic, geometric and statistical methods to solve problems.
- Interpret mathematical models such as formulas, graphs, tables and schematics, and draw inferences from them.
- Represent mathematical information symbolically, visually, numerically and verbally.
- Use the scientific method of inquiry and techniques to answer questions about physical and biological processes.
- Analyze basic concepts of physical and biological science to evaluate scientific information and solve scientific problems.

Science
ANTH 130
ASTR 110, 112
BIO 115, 122, 130, 131, 133, 134, 135*, 140,141, 141L, 152*, 230, 240, 251
CHEM 102, 115, 116, 120, 141, 142, 231, 232
CS 119, 119L, 181, 182, 281, 282
GEOG 120, 121
GEOL 104, 110, 111
OCEA 112, 113
PHYC 110, 130, 131, 190, 200, 210

Mathematics
BIO 215
MATH 160, 170*, 175, 176, 178, 180, 245, 280, 281, 284, 285
PSY 215

* Course not UC transferable

VISUAL & PERFORMING ARTS

ART

Associate Degree for Transfer℠

I. ART HISTORY FOR TRANSFER (AA-T)

The Associate in Arts in Art History for Transfer degree is designed to provide students with an understanding and an appreciation of the arts in a variety of cultures and civilizations throughout history. This degree prepares students to transfer to a California State University where a baccalaureate degree may be earned in art, art history, or a related field.
The following is required for the Associate in Arts in Art History for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and the artists.
- Analyze and derive meaning from works of art according to the elements of art, the principles of design and aesthetic qualities.
- Demonstrate how the arts help to understand the past.
- Define artistic historical periods and transitions.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
ART 124	Drawing I	3
		9

List A: Select one:

ART 146	Asian Art	3

List B: Select one:

ART 120	Two-Dimensional Design	3
ART 121	Painting I	3
ART 129	Three-Dimensional Design	3
ART 135	Watercolor I	3
ART 230	Figure Drawing I	3
		3

List C: Select one:

Any List B course not already used		3
ART 143	Modern Art	3
ART 144	Architecture of the 20th Century	3
ART 145	Contemporary Art History: 1945-Present	3
HUM 110	Principles of the Humanities	3
HUM 115	Arts and Culture in Local Context-San Diego	3
HUM 116	Kumeyaay Arts and Culture	3
		3
	Total Units for Major (6-9 units may be double-counted with GE)	18
	Total Units for CSU GE or IGETC-CSU	37-39
	Total Transferable Elective Units	9-14
	Total Units for Degree	60

Associate Degree for Transfer℠

II. STUDIO ARTS FOR TRANSFER (AA-T)

The AA-T in Studio Arts is designed to prepare students to transfer to a California State University (CSU) with the intent of earning a B.A. degree in an area such as Fine Arts or Studio Arts. Students who earn this degree will have the techniques necessary to create a variety of two- and three-dimensional art projects while demonstrating an increased aesthetic awareness. They will have the ability to use visual media to generate ideas, solve visual problems, enhance perception, think and respond critically to visual information in their lives, identify and describe the historical and cultural contexts of artwork, and assess the role of the visual arts in culture as a vehicle of human expression.

The following is required for the AA-T in Studio Arts for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the California State University General Education (CSU GE) Breadth pattern OR the Intersegmental General Education Transfer Curriculum (IGETC) pattern; see Degree Requirements and Transfer Information section for more information. Note: If following IGETC, IGETC-CSU must be followed for admission to a CSU.

Program Learning Outcomes
Upon successful completion of this program, students will be able to:

- Use the vocabulary of the visual arts to express their observations as they perceive and respond to works of art, objects in nature, events, and the environment.
- Apply artistic processes and skills using a variety of media to communicate meaning and intent in original works of art.
- Analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and the artists.
- Analyze and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities.
- Apply what they have learned in the visual arts across subject areas by developing competencies and creative skills in problem solving, communication, management of time, and identifying resources that contribute to lifelong learning, career skills, and careers in and related to the visual arts.

Associate in Arts Degree Requirements:

Core Curriculum:

Course	*Title*	*Units*
ART 120	Two-Dimensional Design	3
ART 124	Drawing I	3
ART 129	Three-Dimensional Design	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
		12

List A: Select one of the following:

ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 143	Modern Art	3
ART 144	Architecture of the 20th Century	3
ART 145	Contemporary Art	3
ART 146	Asian Art	3
		3

List B: Select three of the following:

ART 121	Painting I	3
ART 125	Drawing II	3
ART 135	Watercolor I	3
ART 148	Applied Design and Crafts	3
ART 230	Figure Drawing I	3
		9
	Total Units for Major (6 units may be double-counted with GE)	24
	Total Units for CSU GE Breadth or IGETC-CSU	37-39
	Total Transferable Elective Units	3-5
	Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Art (Studio Arts emphasis).

III. ART AND DESIGN

This degree program emphasizes aesthetics, design and craft using manual and digital mediums. Students will develop their ability to think spatially in two and three dimensions and to use creative problem-solving techniques using images and letter forms. Students will develop a professional portfolio for placement at a four-year university. *Designed for students interested in pursuing a bachelor's degree in Graphic Design; please consult the catalog of the transfer institution for specific requirements. Students interested in pursuing the entry level, two-year associate degree or certificate in graphic design should refer to the Graphic Design program.*

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use the vocabulary of the visual arts to express their observations as they perceive and respond to works of art, objects in nature, events, and the environment;
- Apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art;
- Analyze the role and development of the visual arts in past and present cultures throughout the world, noting human diversity as it relates to the visual arts and artists;
- Analyze, assess, and derive meaning from works of art, including their own, according to the elements of art, the principles of design, and aesthetic qualities;
- Apply what they learn in the visual arts across subject areas; develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills; and identify careers in and related to the visual arts.

CAREER OPPORTUNITIES

*Advertising Director
Advertising
*Art Director
Desktop Publishing
Display Designer
Graphic Designer
Illustrator
*Marketing Director
Multimedia
Package Designer
Web Page Designer

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ART 120	Two-Dimensional Design	3
ART 124	Drawing I	3
ART 129	Three-Dimensional Design	3
ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
ART 149	History of Graphic Design	3
ART 177	Digital Drawing and Painting	3
ART 230	Figure Drawing I	3
ART 241	Illustration I	3
GD 105	Fundamentals of Digital Media	3
GD 110	Graphic Design Principles	3
GD 125	Typography	3
GD 126	Adobe Photoshop Digital Imaging	3
		39

Select one of the following:

ART 121	Painting I	3
ART 242	Illustration II	3
GD 130	Professional Business Practices	3
GD 210	Professional Digital Photography I	3
GD 217	WEB Graphics	3
GD 222	WEB Animation	3
GD 225	Digital Illustration	3
		3
	Total Required	42
	Plus General Education Requirements	

Recommended Electives: ART 135, BUS 110, GD 230

IV. ART–DRAWING AND PAINTING

This degree program is designed to provide a fundamental background in two-dimensional studio arts, emphasizing both technique and aesthetic awareness. The curriculum consists of courses in both studio techniques and art history. Students will develop their ability to control line, value, shape, color, perspective and composition in various mediums. The major provides preparation for transfer to a four-year college in fine art or a vocational area related to art.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Use the vocabulary of the visual arts to express their observations as they perceive and respond to works of art, objects in nature, events and the environment.
- Apply artistic processes and skills, using a variety of media to communicate meaning and intent in original works of art.
- Analyze the role and development of the visual arts in the past and present cultures throughout the world, noting human diversity as it relates to the visual arts and the artists.
- Analyze, access and derive meaning from works of art, including their own, according to the elements of art, the principles of design and aesthetic qualities.
- Apply what they learned in the visual arts across subject areas, develop competencies and creative skills in problem solving, communication, and management of time and resources that contribute to lifelong learning and career skills, and identify careers in and related to the visual arts.

CAREER OPPORTUNITIES

*Advertising Specialist
Antique Dealer
*Art Conservator
*Art Therapist
Arts Administration
Cartoonist
*Curator
Display Manager
*Fashion Designer
Gallery Owner
Illustrator
Independent Artist
*Interior Design
Jewelry Designer
Museum Technician
Painter
Police Artist
Set Designer
*Teacher/Professor

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
ART 120	Two-Dimensional Design	3
ART 121	Painting I	3
ART 124	Drawing I	3
ART 125	Drawing II	3
ART 140	Survey of Western Art I: Prehistory through Middle Ages	3
ART 141	Survey of Western Art II: Renaissance through Modern	3
ART 230	Figure Drawing I	3
GD 105	Fundamentals of Digital Media	3
		24

Select six units from the following:

ART 129	Three-Dimensional Design	3
ART 135	Watercolor I	3
ART 143	Modern Art	3
ART 145	Contemporary Art	3
ART 220	Painting II	3
ART 231	Figure Drawing II	3
ART 241	Illustration I	3
ART 242	Illustration II	3
GD 225	Digital Illustration	3
		6
	Total Required	30
	Plus General Education Requirements	

Recommended Electives: HIST 105, HUM 155, RELG 120

GRAPHIC DESIGN

Students in this degree program develop entry level skills in design aesthetics, typography, illustration, digital imaging, page layout, web design and professional business practices. The course work provides training with state of the art computer hardware and software used in the graphic design profession. Students develop a professional portfolio for job interviews. *Designed for a two-year degree or certificate only. Students interested in pursuing a bachelor's degree should refer to the Art–Graphic Design degree; please consult the catalog of the transfer institution for specific requirements.*

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Clarify design objectives and then apply design principles, communication skills, and production techniques to develop effective designs using industry standard software.

CAREER OPPORTUNITIES

*Advertising Director
*Art Director
Cartoonist
Desktop Publisher
Display Designer
Graphic Designer
Illustrator
*Marketing Director
Multimedia Designer
Package Designer
Technical Illustrator
Web Designer

*Bachelor Degree or higher required

Course Equivalencies:

The following Cuyamaca and Grossmont College courses are considered similar enough to be treated as equivalent. Modification of Major forms are not required.

Cuyamaca Course	*Similar Grossmont Course*
GD 105	ART 171

Associate in Science Degree Requirements:

Course	Title	Units
ART 124	Drawing I	3
CIS 211	Web Development I	3
GD 105	Fundamentals of Digital Media	3
GD 110	Graphic Design Principles	3
GD 125	Typography	3
GD 126	Adobe Photoshop Digital Imaging	3
GD 129	Page Layout	3
GD 130	Professional Business Practices	3
GD 225	Digital Illustration	3
		27

Select three of the following:

ART 230	Figure Drawing I	3
GD 115	Introduction to Multimedia	3
GD 210	Professional Digital Photography I	3
GD 211	Professional Digital Photography II	3
GD 212	Professional Digital Photography III	3
GD 217	Web Graphics	3
GD 222	Web Animation	3
GD 223	Advanced Web Animation	3
GD 230	Graphic Design Work Experience	1-4
		7-10
	Total Required	34-37
	Plus General Education Requirements	

Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Graphic Design. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

CERTIFICATES OF SPECIALIZATION:

These certificates offer specific training either for entry-level positions or to augment related programs such as Web Development or Graphic Design. They are designed to demonstrate a relatively narrow expertise or skill area that may be used to attain a graphic design "niche" job.

Students who complete the requirements below qualify for a certificate in that area of emphasis. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

I. DIGITAL PHOTOGRAPHY

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Clarify design objectives and then apply design principles and production techniques to develop effective photographic images using industry standard equipment and software.

Certificate Requirements:

Course	Title	Units
GD 126	Adobe Photoshop Digital Imaging	3
GD 130	Professional Business Practices	3
GD 210	Professional Digital Photography I	3
GD 211	Professional Digital Photography II	3
GD 212	Professional Digital Photography III	3
	Total Required	15

II. WEB GRAPHICS

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Clarify design objectives and then apply design principles, communication skills, and production techniques to develop effective web designs using industry standard software.

Certificate Requirements:

Course	Title	Units
CIS 211	Web Development I	3
GD 110	Graphic Design Principles	3
GD 210	Professional Digital Photography I	3
GD 217	Web Graphics	3
GD 222	Web Animation	3
	Total Required	15

MUSIC

Associate Degree for Transfer℠

I. MUSIC FOR TRANSFER (AA-T)

The AA-T in Music for Transfer is designed to prepare students to transfer to a California State University (CSU) with the intent of earning a B.A. in music. Students who earn this degree will have the fundamental knowledge and skills necessary to succeed in a music degree at the baccalaureate level. The curriculum combines music theory, applied studies, and performance at the lower division level.

The following is required for the AA-T in Music for Transfer degree:

1. Minimum of 60 semester or 90 quarter CSU-transferable units.
2. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework.
3. Minimum of 18 semester or 27 quarter units in the major.
4. A grade of "C" or better in all courses required for the major.
5. Certified completion of the Intersegmental General Education Transfer Curriculum (IGETC-CSU); see Degree Requirements and Transfer Information section for more information.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a musical score to determine its key, harmonic structure, musical style, and form.
- Identify musical elements in performances and relate them to their cultural and historical contexts.
- Use either the voice or a musical instrument to perform an intermediate level work with reliable technique and appropriate stylistic interpretation.
- Perform musical works in a large vocal or instrumental ensemble.
- Demonstrate proficiency on either a musical instrument or with the voice.

Associate in Arts Degree Requirements:

Course	Title	Units
MUS 105	Music Theory and Practice I	4
MUS 106	Music Theory and Practice II	4
MUS 205	Music Theory and Practice III	4
MUS 206	Music Theory and Practice IV	4
MUS 190	Performance Studies	.5
MUS 191	Performance Studies	.5
MUS 290	Performance Studies	.5
MUS 291	Performance Studies	.5

Choose four units from the following large ensemble courses:

MUS 152	Concert Band	1
MUS 153	Concert Band	1
MUS 252	Concert Band	1
MUS 253	Concert Band	1
MUS 158	Chorus	1
MUS 159	Chorus	1
MUS 258	Chorus	1
MUS 259	Chorus	1
	Total Units for Major	22
	Total Units for IGETC-CSU	37
	Total Transferable Elective Units	1
	Total Units for Degree	60

Please note: SDSU accepts this degree for students transferring into Music B.A.

II. MUSIC EDUCATION

This degree program offers lower division preparation for students who want to pursue a bachelor's degree in music education and a California teaching credential in music. The primary emphasis is to prepare students for transfer to four-year music education programs.

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a musical score to determine its key, harmonic structure, musical style, and form.
- Use the piano keyboard to demonstrate musical concepts and play intermediate level compositions.
- Use a digital audio workstation to record and edit digital audio files and notate musical ideas.
- Identify musical elements in performances and relate them to their cultural and historical contexts.
- Describe the typical duties of a secondary school music teacher.
- Use either the voice or a musical instrument to perform an intermediate level work with reliable technique and appropriate stylistic interpretation.
- Perform musical works in a large vocal or instrumental ensemble.

CAREER OPPORTUNITIES

*Arranger
*Choral Director
*Composer
*Conductor
Copyist
*Critic
Instrumentalist
*Music Instructor/Professor
*Music Librarian
*Music Therapist
Music Typographer
Performer, Vocalist
Radio Programmer
Recording Company Representative
*Teacher

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	Title	Units
MUS 105	Music Theory and Practice I	4
MUS 106	Music Theory and Practice II	4
MUS 110	Great Music Listening	3
MUS 116	Introduction to World Music	3
MUS 119	Cooperative Work Experience in Music Education	1
MUS 120	Introduction to Music Technology	3
MUS 126	Class Guitar I	2
MUS 132	Class Piano I	3
MUS 133	Class Piano II	3
MUS 170	Class Voice	2
MUS 190	Performance Studies	.5
MUS 191	Performance Studies	.5
MUS 232	Class Piano III	3
MUS 233	Class Piano IV	3
MUS 290	Performance Studies	.5
MUS 291	Performance Studies	.5
		36

Select four of the following:

MUS 108	Rock, Pop and Soul Ensemble	1
MUS 109	Rock, Pop and Soul Ensemble	1
MUS 152	Concert Band	1
MUS 153	Concert Band	1
MUS 158	Chorus	1
MUS 159	Chorus	1
MUS 208	Rock, Pop and Soul Ensemble	1
MUS 209	Rock, Pop and Soul Ensemble	1
MUS 252	Concert Band	1
MUS 253	Concert Band	1
MUS 258	Chorus	1
MUS 259	Chorus	1
		4
	Total Required	40
	Plus General Education Requirements	

III. MUSIC INDUSTRY STUDIES

This degree program provides lower division preparation for students wishing to transfer to a four-year program in Music Industry Studies. The curriculum combines training in music theory, literature and performance with studies in music technology and business. Transfer students should select the CSU GE Breadth or the IGETC transfer pattern (see Degree Requirements and Transfer Information section).

Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Analyze a musical score to determine its key, harmonic structure, musical style, and form.
- Use the piano keyboard to demonstrate musical concepts and play beginning level compositions.
- Use a digital audio workstation to record and edit digital audio files and notate musical ideas.
- Identify musical elements in performances and relate them to their cultural and historical contexts.
- Describe the structure, components, and various career paths of the music industry.
- Demonstrate proficiency on either a musical instrument or with the voice.

CAREER OPPORTUNITIES

*Advertising Jingle Writer
*Arranger
*Artist and Repertoire Manager
Artist Representative
*Arts Administrator
*Attorney specializing in Performing Arts
*Composer
*Concert Producer
Copyist
Instrumentalist
Musical Instrument Manufacturer Representative
*Music Publisher
Music Retail Manager
*Professional Songwriter
Publicist
Radio Programmer
*Record Company representative
*Record Producer
*Recording Studio Engineer
*Teacher
Video Game Composer
Vocalist

*Bachelor Degree or higher required

Associate in Arts Degree Requirements:

Course	*Title*	*Units*
MUS 104	Introduction to the Music Industry	3
MUS 105	Music Theory and Practice I	4
MUS 106	Music Theory and Practice II	4
MUS 120	Introduction to Music Technology	3
MUS 121	Music Industry Seminar	1
MUS 122	Music Industry Seminar	1
MUS 132	Class Piano I	3
MUS 133	Class Piano II	3
MUS 161	Cooperative Work Experience in Music Industry	1
MUS 221	Music Industry Seminar	1
MUS 222	Music Industry Seminar	1
		25

Select two of the following:

MUS 110	Great Music Listening	3
MUS 111	History of Jazz	3
MUS 115	History of Rock Music	3
MUS 116	Introduction to World Music	3
MUS 184	Digital Audio Recording and Production	3
		6

Select one of the following:

BUS 120	Financial Accounting	4
BUS 125	Business Law: Legal Environment of Business	3
		3-4

Select four of the following:

MUS 108	Rock, Pop and Soul Ensemble	1
MUS 109	Rock, Pop and Soul Ensemble	1
MUS 152	Concert Band	1
MUS 153	Concert Band	1
MUS 158	Chorus	1
MUS 159	Chorus	1
MUS 190	Performance Studies	.5
MUS 191	Performance Studies	.5
MUS 208	Rock, Pop and Soul Ensemble	1
MUS 209	Rock, Pop and Soul Ensemble	1
MUS 252	Concert Band	1
MUS 253	Concert Band	1
MUS 258	Chorus	1
MUS 259	Chorus	1
MUS 290	Performance Studies	.5
MUS 291	Performance Studies	.5
		2-4
	Total Required	36-39
	Plus General Education Requirements	

EXPLORATORY

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION BREADTH

Certificate of Achievement

The Certificate of Achievement in California State University General Education Breadth (CSU GE) may be awarded upon completion of the CSU GE Breadth requirements (see Degree Requirements and Transfer Information section). Students must complete a minimum of 39 units, which are distributed among five areas. CSU GE Breadth requirements are designed to be taken with a major area of concentration and elective courses in preparation for transfer to the California State University.

Courses completed at California community colleges and participating institutions will be certified based on approval at the original campus. Courses taken at other colleges and universities; i.e., out-of-state, private, may be used in the certification under certain conditions. Although this certificate recognizes the completion of lower division general education requirements for the CSU, it does not guarantee admission to a four-year institution. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Exhibit proficiency in written communication in English.
- Exhibit proficiency in oral communication in English.
- Analyze, criticize and advocate ideas and reach well-supported conclusions.
- Show skills and understanding beyond the level of intermediate algebra, and apply mathematical concepts to solve problems.
- Analyze and appreciate works of philosophical, historical, literary, aesthetic and cultural importance.
- Reveal an historical understanding of major civilizations and cultures, both Western and non-Western.
- Recognize the contributions to knowledge, civilization, and society that have been made by various ethnic or cultural groups.
- Evaluate the basic concepts of physical and biological sciences.
- Use the scientific method of inquiry and techniques to answer questions about physical and biological processes.
- Cultivate a lifelong understanding and development as an integrated physiological, social, and psychological being.

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM (CSU OR UC)

Certificate of Achievement

The Certificate of Achievement in Intersegmental General Education Transfer Curriculum (IGETC) may be awarded upon completion of the IGETC requirements (see Degree Requirements and Transfer Information section). Students must complete a minimum of 39 units, which are distributed among six areas. IGETC requirements are designed to be taken with a major area of concentration and elective courses in preparation for transfer to the California State University or the University of California.

Courses completed at California Community Colleges and participating institutions will be certified based on approval at the original campus. Courses taken at other colleges and universities; i.e. out-of-state, private, may be used in the certification under certain conditions. Although this certificate recognizes the completion of lower division general education requirements for IGETC, it does not guarantee admission to a four-year institution. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Exhibit proficiency in written communication in English.
- Exhibit proficiency in oral communication in English (IGETC-CSU).
- Analyze, criticize and advocate ideas and reach well-supported conclusions.
- Show skills and understanding beyond the level of intermediate algebra, and apply mathematical concepts to solve problems.
- Analyze and appreciate works of philosophical, historical, literary, aesthetic and cultural importance.
- Reveal an historical understanding of major civilizations and cultures, both Western and non-Western.
- Recognize the contributions to knowledge, civilization, and society that have been made by various ethnic or cultural groups.
- Evaluate the basic concepts of physical and biological sciences.
- Use the scientific method of inquiry and techniques to answer questions about physical and biological processes.
- Demonstrate proficiency in a language other than English equal to two years of high school study (IGETC-UC).

Course Descriptions

EXPLANATION OF ABBREVIATIONS AND COURSE NOTES

Courses which meet the requirements for General Education for the Associate Degree, CSU GE, and the Intersegmental General Education Transfer Curriculum (IGETC) are identified after each course description. The CSU and UC indicators are also included and mean that the courses transfer for at least elective credit to these two public systems of higher education in California.

If you would like more information on how courses meet your specific degree or transfer objectives, please see a counselor.

AA/AS GE = Meets general education for the Associate degree.

CSU = Transfers to the CSU for at least elective credit.

CSU GE = Meets general education requirements for the California State University system.

IGETC = Meets Intersegmental General Education Transfer Curriculum requirements.

UC = Transferable to the University of California campuses.

UC credit limit = Limits the total amount of credit awarded for a series or sequence of courses in the same discipline.

AMERICAN SIGN LANGUAGE (ASL)

120 AMERICAN SIGN LANGUAGE I 4 UNITS
4 hours lecture
Introduction to American Sign Language (ASL) and Deaf culture. The course is designed to give students with little to no experience in or exposure to ASL an emerging conversational and cultural foundation. Students will develop skills in telling about and comprehending common every day activities and asking questions. Students will learn how to use non-manual signs, facial expressions and other culturally appropriate uses of the face and body to interact with, show comprehension, get attention, and form appropriate cultural connections with Deaf people.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 AMERICAN SIGN LANGUAGE II 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in ASL 120 or equivalent
4 hours lecture
The second in a series of four American Sign Language (ASL) courses. Students are provided an opportunity to progress and enhance their ability to communicate in ASL. Students will continue the study of cultural analysis and comparisons, receptive skill comprehension, expressive skill production, and ASL linguistics.
AA/AS GE, CSU, CSU GE, IGETC, UC

125 AMERICAN SIGN LANGUAGE WITH INFANTS AND TODDLERS 1 UNIT
1 hour lecture
Explore the methods and benefits of using American Sign Language (ASL) with hearing infants and toddlers. Areas emphasized will be methods, benefits, and philosophies of teaching infants and toddlers to communicate using ASL. Upon completion, students will be able to introduce these techniques in early childhood classrooms and/or at home.
CSU

126 AMERICAN SIGN LANGUAGE WITH SCHOOL AGE CHILDREN 1 UNIT
1 hour lecture
Explore the methods and benefits of using American Sign Language (ASL) with hearing school age children. Areas emphasized will be methods, benefits, and philosophies of teaching school age children to communicate using ASL. Upon completion, students will be able to introduce these techniques in elementary school classrooms and/or at home.
CSU

130 AMERICAN SIGN LANGUAGE: FINGERSPELLING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ASL 120 or equivalent ability to sign
3 hours lecture
This course is taught using American Sign Language (ASL). The primary focus of this course is to become skilled in use of the American manual alphabet (Fingerspelling). Students will develop an awareness of how and when fingerspelling should be used within ASL. Upon completion of the course, students will demonstrate skilled ability to accurately use and comprehend ASL fingerspelling and numbers within conversational contexts.
CSU, UC

140 INSIDE DEAF CULTURE 3 UNITS
3 hours lecture
This course will introduce students to the Deaf community and American Deaf culture. Deaf heritage, values, behaviors, historical perspectives, and the grammar structure of sign language will be examined. American Sign Language (ASL) literature, Deaf artists, social and political influences, and emerging technology for Deaf people will be studied.
AA/AS GE, CSU, CSU GE, IGETC, UC

220 AMERICAN SIGN LANGUAGE III 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in ASL 121 or equivalent
4 hours lecture
The third in a series of four American Sign Language (ASL) courses. Students are provided an opportunity to increase their receptive skill comprehension and expressive skill production. Cultural analysis and comparisons will focus on American Deaf cultural processes, practices, and products of Deaf culture.
AA/AS GE, CSU, CSU GE, IGETC, UC

221 AMERICAN SIGN LANGUAGE IV 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in ASL 220 or equivalent
4 hours lecture
The fourth in a series of four American Sign Language (ASL) courses. Students are provided an opportunity to increase their receptive skill comprehension and expressive skill production. Cultural analysis and comparisons will focus on American Deaf cultural processes, practices, and products of Deaf culture.
AA/AS GE, CSU, CSU GE, IGETC, UC

ANTHROPOLOGY (ANTH)

120 CULTURAL ANTHROPOLOGY 3 UNITS
C-ID ANTH 120
3 hours lecture
The nature of culture; cultural growth and history; survey of the range of cultural phenomena including material culture, social organization, kinship systems, religion, language and other topics; systematic study of similarities and differences among cultures through investigation of selected societies.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 INTRODUCTION TO PHYSICAL ANTHROPOLOGY 3 UNITS
C-ID ANTH 110
3 hours lecture
People's place in nature; physical and behavioral characteristics of primates; principles of evolution and basic outline of human genetics; description of the record of early humans and explanation of fossils; present day variability among human populations.
AA/AS GE, CSU, CSU GE, IGETC, UC

140 INTRODUCTION TO ARCHAEOLOGY 3 UNITS
C-ID ANTH 150
3 hours lecture
This course is an introduction to the field of archaeology; its concepts, theories, data and models that contribute to our knowledge of the human past. The course will provide an introduction to archaeological field methods of survey and excavation; categories of data and dating techniques; analysis; cultural resource management and professional ethics. Major developments in history will be examined using archaeological evidence. The relevance of archaeological research to contemporary society will also be addressed.
AA/AS GE, CSU, CSU GE, IGETC, UC

150 INTRODUCTION TO CULTURAL RESOURCE MANAGEMENT 3 UNITS
2 hours lecture, 3 hours laboratory
An introduction to cultural resource management. Students will be exposed to archaeological methods, field practices, laws and regulations and learn how to be an effective cultural monitor to ensure the protection and preservation of Kumeyaay resources.
AA/AS GE, CSU, CSU GE, UC

160 INTRODUCTION TO ARCHAEOLOGICAL FIELD WORK 4 UNITS
2 hours lecture, 6 hours laboratory
This course is an introduction to the basic techniques of archaeological field work. Emphasis is placed on site survey, site layout, excavation, artifact identification, laboratory analysis and report writing. Topics also include use of compass and transit, Global Positioning Systems (GPS) and Geographic Information Systems (GIS). Students will be exposed to the techniques of data collection and analysis, cultural reconstruction and interpretation, and cultural resource management work. Through a series of workshops with guest experts on Kumeyaay indigenous knowledge, students will learn about Kumeyaay history, prehistory, traditions, politics, and beliefs while training in archaeological data collection and mapping methods. This course is designed for Anthropology and Kumeyaay Studies majors as well as students interested in prehistoric and/or historic research.
CSU, CSU GE, IGETC, UC

ARABIC (ARBC)

120 ARABIC I 5 UNITS
5 hours lecture
Introduction to the Arabic language and the culture of its speakers. Facilitates the practical application of the language in everyday oral and written communication at the beginning novice level. Since the focus is on basic communication skills, the class will be conducted in modern standard Arabic as much as possible. While becoming familiar with the Arabic speaking world, students will learn structures that will enable them to function in Arabic in everyday contexts.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 ARABIC II 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 120 or two years of high school Arabic or equivalent
5 hours lecture
Continuation of Arabic I. Continues to develop oral and written skills based on practical everyday needs. Students with three years of high school Arabic should enroll in ARBC 220.
AA/AS GE, CSU, CSU GE, IGETC, UC

122 ARABIC FOR THE ARABIC SPEAKER I 5 UNITS
5 hours lecture
Fundamentals of spoken and written Arabic for the bilingual speaker. This course is designed to help Arabic-speaking students further improve their oral and written communication skills. Emphasis on writing, reading comprehension, and vocabulary building at the intermediate level in a cultural context. Exposure to the diversity within the cultures of the Arabic-speaking world. This course is designed to provide the bilingual speaker with the linguistic and learning skills required for successfully completing upper division courses in Arabic. The course will be taught in Arabic.
AA/AS GE, CSU, CSU GE, IGETC, UC

123 ARABIC FOR THE ARABIC SPEAKER II 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 122 or equivalent
5 hours lecture
This course is designed to help Arabic-speaking students further improve their oral and written communication skills. In addition, it provides the bilingual speaker with the linguistic and learning skills required for successfully completing upper division courses in Arabic.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 ARABIC LITERATURE AND CULTURE 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in Arabic 121 or equivalent or "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
This course surveys Arabic Literature masterpieces and/or Arabic literature in translation. The course focuses on the historical, social, religious, socio-political, philosophical, and cultural aspects of Arabic literature. It will be a great choice for Arabic learners, heritage speakers, native and non-native speakers of Arabic. A diverse selection of texts in Arabic and/or English is read and discussed to expand students' cultural horizons. Reading selections include works from the Pre-Islamic period, Islamic, Umayyads, Abbasids, and Modern period. Works of classical and modern writers will be included, in addition to prominent Arab-American and women writers.
AA/AS GE, CSU

145 ARABIC CIVILIZATIONS 3 UNITS
3 hours lecture
Introduction to the major characteristics of Arabic civilization as reflected in literature, philosophy, architecture, and the arts of Arabic countries. This course may have an emphasis on a selected Arabic country or countries. This course will be taught in Arabic.
AA/AS GE, CSU, CSU GE, IGETC, UC

180 BASIC COMPUTER SKILLS FOR ARABIC LEARNERS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Arabic 120 or equivalent
1 hour lecture
Students will be provided with the basic information and skills needed to operate a computer efficiently to support Arabic classes with an emphasis on basic keyboarding techniques and typing in Arabic, editing and formatting text in Arabic, and creating, formatting, and editing PowerPoint presentations in Arabic. Includes an overview of file and folder management to store information, using computer input devices, searching the internet, and sending email with attachments. *Also listed as BOT 180. Not open to students with credit in BOT 180.*
CSU

220 ARABIC III 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 121 or three years of high school Arabic or equivalent
5 hours lecture
Continuation of Arabic II. Continues to develop oral, listening, reading and writing skills in order to acquire proficiency in Arabic. Students with four years of high school Arabic should enroll in ARBC 221.
AA/AS GE, CSU, CSU GE, IGETC, UC

221 ARABIC IV 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 220 or four years of high school Arabic or equivalent
5 hours lecture
Continuation of Arabic III. Continues to develop oral, reading, writing and listening skills in order to improve proficiency in Arabic.
AA/AS GE, CSU, CSU GE, IGETC, UC

250 CONVERSATIONAL ARABIC I 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 121 or 122 or 123 or 220 or 221 or three years of high school Arabic or equivalent
3 hours lecture
Continues to develop oral, reading, writing and listening skills, but with an emphasis in oral proficiency.
AA/AS GE, CSU, CSU GE, IGETC, UC

251 CONVERSATIONAL ARABIC II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARBC 250 or four years of high school Arabic or equivalent
3 hours lecture
Continues to develop oral, reading, writing and listening skills, but with an emphasis in oral proficiency.
AA/AS GE, CSU, CSU GE, IGETC, UC

254 CONVERSATIONAL IRAQI DIALECT 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in Arabic 121 or 122 or 123 or 220 or 221 or three years of high school Arabic or equivalent
3 hours lecture
Focuses on intermediate level conversation development with vocabulary building and improvement of speaking proficiency using Iraqi dialect in the context of Arabic Iraqi culture. Conversations in the Iraqi dialect are based on culturally relevant vocabulary and idiomatic expressions that deal with everyday situations. The course will focus on speaking and phonetics of Iraqi Arabic. It will continue to develop oral, listening, reading, and writing skills with emphasis in oral proficiency.
AA/AS GE, CSU, CSU GE, UC

ARAMAIC (ARAM)

120 ARAMAIC I 5 UNITS
5 hours lecture
Introductory course to the classical-modern Aramaic language, essentials of grammar and pronunciation, and the Chaldean-Assyrian culture and civilization. Facilitates the practical application of the language in everyday oral and written communication at the beginning level. Students will learn structures that will enable them to function in Aramaic in everyday contexts while becoming familiar with the Aramaic speaking world. The origin of the Semitic languages will be surveyed through selected readings and discussions. *Content equivalent to two years of high school language study.*
AA/AS GE, CSU, CSU GE, IGETC, UC

121 ARAMAIC II 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARAM 120 or equivalent
5 hours lecture
Continuation of Aramaic I. Covers the classical-modern Aramaic alphabet, essentials of grammar and pronunciation, and the language of Chaldean-Assyrian culture and civilization.
AA/AS GE, CSU, CSU GE, IGETC, UC

220 ARAMAIC III 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in ARAM 121 or equivalent
5 hours lecture
Continuation of Aramaic II. Students will further their knowledge of classical-modern Aramaic grammar. The primary emphasis is on the conjugation of verbs, introduction to Aramaic literature, and the translation of ancient and modern text materials. Students will also learn how to compose and write essays in modern Aramaic (Chaldean).
AA/AS GE, CSU, CSU GE, IGETC, UC

ART (ART)

Courses Related in Content (see page 35)

100 ART APPRECIATION 3 UNITS
C-ID ARTH 100
3 hours lecture
In this introductory course, students will learn how to examine, compare, analyze, evaluate, interpret, and discuss works of visual art within their cultural contexts. Art media for study will include drawing, painting, printmaking, photography, sculpture, ceramics, textiles, film, architecture, etc. Works for examination will encompass representative artistic styles from western and other major world cultures, and will also include the artistic contributions of women and minority cultures.
AA/AS GE, CSU, CSU GE, IGETC, UC

120 TWO-DIMENSIONAL DESIGN 3 UNITS
C-ID ARTS 100
2 hours lecture, 4 hours laboratory
Introduction to the two-dimensional arts. Students will study the great works of the human imagination while focusing on those of historical, theoretical and cultural relevance. Students will examine form and content through the application of art elements and principles of design.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 PAINTING I 3 UNITS
C-ID ARTS 210
Prerequisite: "C" grade or higher or "Pass" in ART 120 or 124 or equivalent
2 hours lecture, 4 hours laboratory
Introduction to painting with an emphasis on painting tools, materials, techniques and color principles. Students will develop skill in handling form, space, and plastic aspects of acrylic and/or oil paints.
CSU, UC

124 DRAWING I 3 UNITS
C-ID ARTS 110
2 hours lecture, 4 hours laboratory
Introduction to drawing theory and practice. Students will study major works of art in relation to drawing techniques, illusion of space, and composition through a variety of media.
AA/AS GE, CSU, UC

125 DRAWING II 3 UNITS
C-ID ARTS 205
Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent
2 hours lecture, 4 hours laboratory
Builds on the drawing techniques and composition concepts covered in ART 124 to include new mediums to address creative problem solving and refine drawing skills. Introduces brush, pen and ink into the drawing process with an emphasis on line quality and modeling using washes, hatching and stippling. Colored pencil and mixed media are explored using a variety of linear and tonal techniques. Scientific perspective is extended from ART 124 to include measuring, inclining planes, circles, shadows and reflections.
CSU, UC

129 THREE-DIMENSIONAL DESIGN 3 UNITS
C-ID ARTS 101
2 hours lecture, 4 hours laboratory
Introduction to the fundamental principles of three-dimensional composition emphasizing the formal elements and language of design. Basic visual, tactile and conceptual methods of defining space are examined in a series of compositional exercises. A variety of materials are used to explore the elements of line, shape, mass, texture and volume through the application of design principles such as balance, emphasis, rhythm, harmony, contrast, repetition, proportion, scale and unity. The historical development of design and aesthetics is studied along with how social, political and cultural beliefs have influenced artists and design professionals. Assignments are non-technical and do not require prior knowledge of tools and equipment. This is a comprehensive introductory course that could lead to future study in a diverse range of art and design professions.
AA/AS GE, CSU, UC

135 WATERCOLOR I 3 UNITS
2 hours lecture, 4 hours laboratory
Introduction to basic watercolor tools, materials and techniques emphasizing color principles and skill development in watercolor media.
CSU, UC

140 SURVEY OF WESTERN ART I: PREHISTORY THROUGH MIDDLE AGES 3 UNITS
C-ID ARTH 110
3 hours lecture
Historical survey of the major art forms (primarily architecture, sculpture, ceramics, painting) of the western world from prehistory to circa 1250 A.D.
AA/AS GE, CSU, CSU GE, IGETC, UC

141 SURVEY OF WESTERN ART II: RENAISSANCE THROUGH MODERN 3 UNITS
C-ID ARTH 120
3 hours lecture
Historical survey of the major art forms (primarily architecture, sculpture, ceramics, painting, printmaking, photography) of the western world from the late Gothic era to the present.
AA/AS GE, CSU, CSU GE, IGETC, UC

143 MODERN ART 3 UNITS
C-ID ARTH 150
3 hours lecture
Historical survey of the major art forms (primarily architecture, sculpture, ceramics, painting, printmaking and photography) of the late nineteenth and twentieth centuries with geographical emphasis on Europe and America.
AA/AS GE, CSU, CSU GE, IGETC, UC

144 ARCHITECTURE OF THE 20TH CENTURY 3 UNITS
3 hours lecture
Historical survey of the 20th century masters of the major movements in architecture and environmental spaces. Global political and social economic influences on concepts, styles, philosophy and artistic expressions in architecture will be studied.
AA/AS GE, CSU, CSU GE, IGETC, UC

145 CONTEMPORARY ART 3 UNITS
3 hours lecture
Survey of the major artists and art movements from 1945 to the present. Includes such major topics as the analysis and summary of Modernism, the transition from Modern to Post-Modern art, the emergence of non-traditional art media, and the analysis of the influence of global multiculturalism in art. Specific art practices such as painting, sculpture, earthworks, photography, performance, installation, printmaking and architecture will be discussed in relation to the cultural dialogue they establish or to which they respond.
AA/AS GE, CSU, CSU GE, IGETC, UC

146 ASIAN ART 3 UNITS
C-ID ARTH 130
3 hours lecture
This course provides a select overview of art and architecture from India, Southeast Asia, China, Korea, and Japan, from prehistory to modern times with an emphasis on content, context, and style. The course covers subject matter, function, iconography, patronage, artistic methods and influences, and social and cultural contexts of artworks and monuments. The course includes art from: the Indus Valley, Early Buddhist and Hindu Art in Southeast Asia, later Indian art including Mughal, Neolithic through early Imperial China, Northern Wei through Tang dynasties, later China through contemporary era, Korea, archeological Japan through Heian, and later Japan through contemporary era.
AA/AS GE, CSU, CSU GE, IGETC, UC

148 APPLIED DESIGN AND CRAFTS 3 UNITS
C-ID ARTS 280
2 hours lecture, 4 hours laboratory
Design and construction of aesthetic and functional art projects using a variety of materials and processes to create applied design and crafts from a global perspective.
AA/AS GE, CSU, CSU GE, UC

149 HISTORY OF GRAPHIC DESIGN 3 UNITS
3 hours lecture
This course examines graphic design as a vital component of each culture and period in human history. Leaders in design, innovated technologies and import design movements are covered in their historical context. This course is for students majoring graphic design, art history, studio arts and anyone interested in the history of graphic design.
AA/AS GE, CSU, CSU GE, UC

177 DIGITAL DRAWING AND PAINTING 3 UNITS
2 hours lecture, 4 hours laboratory
This introductory course uses computer based technologies and its application for digital drawings and paintings. Students will develop digital images that showcase perceptual skills, conceptual strategies, production methods and narrative compositions using various software.
CSU, UC

220 PAINTING II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 121 or equivalent
2 hours lecture, 4 hours laboratory
Continuation of Painting I with an emphasis on creative problem-solving skills. Students will develop a personal style of expression.
CSU, UC

221 PAINTING III 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 220 or equivalent
2 hours lecture, 4 hours laboratory
Offers a wider selection of painting mediums to include acrylic, oil, egg tempera, casein and encaustic. Students will continue developing a personal style of expression.
CSU, UC

222 PAINTING IV 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 221 or equivalent
2 hours lecture, 4 hours laboratory
Focuses on a series of paintings that develop a personal theme or statement. Advanced painting techniques will be combined with advanced compositional devices.
CSU, UC

224 DRAWING III 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 125 or equivalent
2 hours lecture, 4 hours laboratory
The drawing mediums, skills, techniques and composition concepts used in ART 124 and 125 will be applied to a variety of subject matters. Students will draw different subject matters including but not limited to animals, plants, still life, landscapes, seascapes, cityscapes, etc. Emphasis is on making effective compositions with good craft.
CSU, UC

225 DRAWING IV 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 224 or equivalent
2 hours lecture, 4 hours laboratory
Focuses on drawing-based artwork that results in artwork that has a personal theme or statement. Students will explore several advanced compositional devices while pursuing their themes. Portfolio preparation is emphasized.
CSU, UC

230 FIGURE DRAWING I 3 UNITS
C-ID ARTS 200
Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent
2 hours lecture, 4 hours laboratory
Utilizes the skills and concepts developed in ART 124 to address the drawing of the nude human figure. Students will learn how articulation, standard proportion, bones and muscles influence the rendering of the human form. Drawing will be done from live models with studio lighting. Emphasis is on representational drawing with line and value. This course is important for anyone dealing with the human figure, i.e., drawing, painting, sculpture, photography, illustration, graphic design, fashion design, etc.
CSU, UC

231 FIGURE DRAWING II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 230 or equivalent
2 hours lecture, 4 hours laboratory
Builds on the concepts and skills developed in ART 230. Surface anatomy related to the bone and muscle structure of the nude human form is studied along with the proportions and anatomy of the human head. Students will work with achromatic and chromatic drawing mediums.
CSU, UC

232 FIGURE DRAWING III 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 231 or equivalent
2 hours lecture, 4 hours laboratory
Concentrates on integrating the human figure into a compositional environment. Figure drawing techniques from ART 230 and 231 will be integrated into the design process.
CSU, UC

233 FIGURE DRAWING IV 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 232 or equivalent
2 hours lecture, 4 hours laboratory
Focuses on figurative artwork that develops a personal theme or statement. Students will be asked to explore several advanced compositional devices while pursuing their themes. This class emphasizes portfolio preparation.
CSU, UC

235 WATERCOLOR II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 135 or equivalent
2 hours lecture, 4 hours laboratory
Continuation of Watercolor I techniques with an emphasis on creative problem solving and aesthetic compositions.
CSU, UC

236 WATERCOLOR III 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 235 or equivalent
2 hours lecture, 4 hours laboratory
Continuation of Watercolor II skill and composition techniques. Students will develop a personal style of expression.
CSU, UC

241 ILLUSTRATION I 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent
2 hours lecture, 4 hours laboratory
This course serves as an introduction to illustration. The course stresses the creative interpretation of subjects, situations, and themes within the context of commercial art such as advertising, editorial, book illustrations, cartooning, and renderings. Emphasis is on developing and communicating visual ideas and imagery. Various media and techniques will be explored.
CSU, UC

242 ILLUSTRATION II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ART 241 or equivalent
2 hours lecture, 4 hours laboratory
This course is a continuation of the concepts and techniques presented in Illustration I. Increasingly more advanced illustration projects, techniques, concepts and methods will be presented. Emphasis is placed on the development of original concepts, refinements of techniques, production methods and development and presentation of portfolio quality artwork. In addition, rendering will be presented and incorporated in several projects.
CSU, UC

ASTRONOMY (ASTR)

110 DESCRIPTIVE ASTRONOMY 3 UNITS
3 hours lecture
The development of modern astronomy and its techniques with an emphasis on the vocabulary of astronomy and the current understanding of our solar system, stellar evolution, our galaxy, and the structure of the universe.
AA/AS GE, CSU, CSU GE, IGETC, UC

112 GENERAL ASTRONOMY LABORATORY 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in ASTR 110 or equivalent or concurrent enrollment
3 hours laboratory
Planet, stellar and lunar studies; acquaintance with constellations and astronomical coordinates; and use of astronomical instruments.
AA/AS GE, CSU, CSU GE, IGETC, UC

AUTOMOTIVE TECHNOLOGY (AUTO)

099 INTRODUCTION TO AUTOMOTIVE TECHNOLOGY 3 UNITS
C-ID AUTO 110X
3 hours lecture
This course presents a basic overview of information about automotive systems. This course serves as a recommended preparation course for students interested in the Automotive Technology major, or for students who want to gain knowledge about vehicle servicing and repair. This course is complemented by AUTO 100L Laboratory where students are able to perform minor inspections, tests, and services to training vehicles using the department laboratory.
CSU

100L INTRODUCTION TO AUTOMOTIVE TECHNOLOGY LABORATORY 1 UNIT
(formerly AUTO 100)
3 hours lecture
Basic laboratory environment designed to prepare students for entry into the Automotive Technology major. This course includes repair, service, and basic diagnostic procedures of a typical passenger car or light truck. A student may use the department laboratory to perform hands on tests and repairs, using automotive tools and equipment. AUTO 100L is the lab companion course of AUTO 099 Introduction to Automotive Technology lecture.
CSU

111 ENGINE DIAGNOSIS AND REPAIR 2 UNITS
(formerly AUTO 193A)
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out.
2 hours lecture
This classroom lecture course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for gasoline and diesel engines including the proper timing procedures. The course also includes how to identify and measure critical clearances, and the theory and operation of various combustion engine designs and systems.
CSU

111L ENGINE DIAGNOSIS AND REPAIR LAB 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out
3 hours laboratory
This laboratory course allows a student to practice proper operation, disassembly, assembly, repair, and diagnostic techniques for gasoline and diesel engines including the proper timing procedures. Students will record and demonstrate critical clearance measurements. This course is the lab for students taking AUTO 111 Engine Diagnosis and Repair lecture, and or for students taking Work Experience and need additional instruction and practice completing required NATEF competencies and tasks.
CSU

111T ENGINE DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
(formerly AUTO 193B)
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of engine systems including diesel engines in the department laboratory; or by using distance education technologies such as augmented reality, virtual reality, or mobile technologies. The tests will include engine component systems such as pistons, bearings, camshafts, electronic and mechanical engine control systems, inputs, actuations, or other auxiliary systems. This course allows a student residing distance from training centers to complete certification requirements. This course is complemented by work experience AUTO 111 lecture, and AUTO 111L lab.
CSU

120 ENGINE PERFORMANCE I - MECHANICAL AND IGNITION SYSTEMS 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 099 or 100 or equivalent or concurrent enrollment
3 hours lecture, 6 hours laboratory
First in a three course series dealing with engine performance. Begins with a review of basic engine mechanical systems and an introduction to vehicle emissions and computer scanners, followed by a detailed study of current ignition systems. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Initial preparation for ASE Engine Performance (A-8) Certification.
CSU

121 AUTOMATIC TRANSMISSION THEORY AND OPERATION 2 UNITS
(formerly AUTO 192A)
2 hours lecture
This lecture course contains information about the theory and operation of automatic transmissions. The course topics include mechanical, hydraulic, and electronic controls of torque distribution. Current computerized control system operation and diagnosis of the drivetrain system will be emphasized. This course is complemented by AUTO 121L Automatic Transmission Theory and Operation Laboratory and AUTO 121T Automatic Transmission Theory and Operation Assessment Test Out.
CSU

121L AUTOMATIC TRANSMISSION THEORY AND OPERATION LABORATORY 1 UNIT
3 hours laboratory
This laboratory course allows a student to practice proper operation, disassembly, and assembly for automatic transmissions. Students will record and demonstrate critical clearance measurements. This course is complemented by AUTO 121 Automatic Transmission Theory and Operation lecture, AUTO 121T Automatic Transmission Theory and Operation Assessment Test Out, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

121T AUTOMATIC TRANSMISSION THEORY AND OPERATION ASSESSMENT TEST OUT .5 UNIT
(formerly AUTO 192B)
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or equivalent.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge, skills and abilities to perform transmission system repairs, including critical measurements of automatic transmission components using vehicles in the department laboratory; or by using distance education technologies such as augmented reality, virtual reality or mobile technologies. The tests will include drivetrain control systems such as hydraulics, friction clutches, electronic and mechanical transmission control systems, inputs, actuations, or other auxiliary systems. This course allows a student residing at a distance from training centers to complete certification requirements. This course is complemented by AUTO 121 Automatic Transmission Theory and Operation lecture and AUTO 121L Automatic Transmission Theory and Operation laboratory courses.
CSU

122 AUTOMOTIVE ELECTRICAL SYSTEMS 5 UNITS
3 hours lecture, 6 hours laboratory
Basic principles of electricity as applied to automobiles. Comprehensive investigation of automotive electrical systems including periodic maintenance, diagnosis, component servicing and adjustment. Students will be expected to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-6 Certification.
CSU

123 ENGINE PERFORMANCE II - EMISSION SYSTEMS 5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 120 or equivalent, AUTO 122 or equivalent, AUTO 127 or equivalent
3 hours lecture, 6 hours laboratory
This is the second in a three course series demonstrating engine performance, applied electronics, and emission systems. AUTO 123 emphasizes the use of computers for the control of fuel and air delivery to the diesel or gasoline engine. Topics include: input and output devices, computer operation, closed loop fuel control, computer-controlled fuel injection, forced air injection, scan tool diagnostics, digital lab scope diagnostics, and on board diagnostics (OBD) . Students will be required to complete associated tasks in the laboratory specified by NATEF (National Automotive Training Educational Foundation). This course prepares students for ASE: A-6 electrical, A-8 engine performance, and L1 advanced engine performance certification tests, and also satisfies California Bureau of Automotive Repair Specified Repair Training for emissions licensing.
CSU

124 ENGINE PERFORMANCE III - DRIVABILITY 5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 123 or equivalent
3 hours lecture, 6 hours laboratory
The capstone course in a three course engine performance series. Students will utilize skills developed in the first two courses to perform drivability diagnostics on all related engine systems. Emphasis on advanced application of scan tools and digital storage oscilloscopes (DSO) in the diagnosis of hard to find system problems, especially intermittent concerns. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE Advanced Engine Performance (L-1) Certification.
CSU

126 AUTOMATIC TRANSMISSION DIAGNOSIS AND TESTING 2 UNITS
(formerly AUTO 192C)
2 hours lecture
This lecture course provides training about diagnosing automatic transmission concerns. Topics include normal operation, electrical fault diagnosis, diagnosing shift concerns, diagnosing engagement concerns, and the diagnostic process. This course is preparation for ASE certification, and is complemented by AUTO 126L Automatic Transmission Diagnosis and Testing Laboratory, AUTO 126T Automatic Transmission Diagnosis and Testing Assessment Test Out, and/or by work experience.
CSU

126L AUTOMATIC TRANSMISSION DIAGNOSIS AND TESTING LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for various automatic transmission types and designs, including FWD and RWD. The course also includes automatic transmission component diagnosis for electronic, hydraulic and mechanical subsystems. This course is the lab for students taking AUTO 126 Automatic Transmission Diagnosis and Testing lecture, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

126T AUTOMATIC TRANSMISSION DIAGNOSIS AND TESTING ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 121T Automatic Transmission Theory and Operation Assessment Test Out and AUTO 162T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge, skills and abilities to perform diagnosis and repair of automatic transmission systems in the department laboratory; or by using distance education technologies such as augmented reality, virtual reality, or mobile technologies. The tests will include automatic transmission component diagnosis for electronic, hydraulic, and mechanical subsystems. This course allows a student residing at a distance from training centers to complete certification requirements. This course is complemented by work experience, AUTO 126 lecture, and AUTO 126L lab.

127 ADVANCED AUTOMOTIVE ELECTRICAL SYSTEMS 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 122 or equivalent
3 hours lecture, 6 hours laboratory
Advanced course in electrical systems designed to develop greater student performance under simulated industry conditions. Students will be expected to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-6 Certification.
CSU

130 AUTOMOTIVE BRAKES AND BRAKE LICENSE 5 UNITS
C-ID AUTO 150X
3 hours lecture, 6 hours laboratory
Detailed study of automotive brake system service procedures. Laboratory experience covers drum and disc brake system inspection, adjustment and repair procedures, and antilock brake systems. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for State of California Official Brake Adjusters License and ASE A-5 Certification.
CSU

131 MANUAL TRANSMISSION AND TRANSAXLE REPAIR 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out
1 hour lecture
This lecture course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for various manual transmission types and designs including electronic shift. The course also includes relationship of torque and coupling using EV electric vehicle motors and traditional clutches.
CSU

131L MANUAL TRANSMISSION AND TRANSAXLE REPAIR LABORATORY 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out
3 hours laboratory
This laboratory course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for various manual transmission types and designs including electronic shift. The course also includes relationship of torque and coupling using EV electric vehicle motors and traditional clutches. This course is the lab for students taking AUTO 131 Manual Transmission and Transaxle lecture, and or for students taking work experience and need additional instruction and practice completing required NATEF competencies and tasks.
CSU

131T MANUAL TRANSMISSION AND TRANSAXLE REPAIR ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T – Electronics Diagnosis and Repair Assessment Test Out
1.5 hours laboratory
This student portfolio assessment course includes summative and criterion tests using actual transmission repair techniques to allow a student to demonstrate knowledge of proper operation, disassembly, assembly, repair, and diagnostic techniques for various manual transmission types and designs including electronic shift in the department laboratory or by using distance education technologies, live demonstrations, and recordings of work. The assessments will include various tests using transmissions, gears, clutch assemblies, and vehicle symptoms and conditions. This course allows a student residing distance from training centers to complete manufacturers certification requirements. This course compliments AUTO 131L Manual Transmission and Transaxle lab, 131 Lecture, and by work experience classes.

132 DIFFERENTIAL AND 4WD SYSTEMS DIAGNOSIS AND SERVICE 1 UNIT
(formerly AUTO 192D)
1 hour lecture
This lecture course includes a detailed study of modern automotive electronic or manually controlled differential and 4WD systems and service procedures. The course will describe systems inspection, adjustment and repair procedures, including methods of diagnosing and repairing various mechanical and hydraulic drivetrain systems using specified tools and procedures. This course is accompanied by AUTO 132L Differential and 4WD Systems Diagnosis and Service Laboratory, AUTO 132T Assessment Test Out, and Work Experience courses where students will perform specific ASE competencies related to differential and 4WD diagnosis and repair.
CSU

132L DIFFERENTIAL AND 4WD SYSTEMS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for various differentials, transfer cases, and axles of standard and 4WD, and all-wheel drive systems types and designs, including electronic shift and hub locking. This course is the lab for students taking courses AUTO 132 Lecture, AUTO 132T Assessment Test Out, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

132T DIFFERENTIAL AND 4WD SYSTEMS ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests using actual differential and 4WD repair techniques. This course allows a student to demonstrate knowledge of proper operation, disassembly, assembly, repair; and diagnostic techniques for various differentials, axles, 4WD, All-Wheel drive types and designs including electronic controls in the department laboratory or by using distance education technologies, live demonstrations, and recordings of work. The assessments will include various tests using differentials and transfer cases, gears, assemblies, and vehicle symptoms and conditions. This course allows a student residing at a distance from training centers to complete manufacturers certification requirements. This course accompanies AUTO 132L Differential and 4WD Systems Lab, 132 Lecture, and Work Experience classes.

135 ADVANCED BRAKES 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 130 or equivalent
3 hours lecture, 6 hours laboratory
Advanced course in automotive brake systems emphasizing diagnosis. Designed to develop greater student performance under simulated industry conditions. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for State of California Official Brake Adjusters License and ASE A-5 Certification.
CSU

140 FOUR WHEEL ALIGNMENT 5 UNITS
C-ID AUTO 140X
3 hours lecture, 6 hours laboratory
Four wheel alignment principles as applied to checking and correcting alignment settings. Repair and replacement of suspension components, computerized steering and ride controls. Additional training in wheel balancing. Emphasis on practical experience on "live" automobiles. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-4 Certification.
CSU

143 STEERING AND SUSPENSION DIAGNOSIS AND REPAIR 1 UNIT
(formerly AUTO 191D)
1 hour lecture
This course includes a detailed study of modern suspension systems and service procedures. This course includes inspection, adjustment, and repair procedures for suspension systems, including methods of diagnosing and repairing various mechanical and hydraulic components using specified tools and procedures. Alignments, adjustments, active suspension, and the relationship between suspension and vehicle dynamics, are demonstrated during lectures. This course is complemented by AUTO 143L Steering and Suspension Diagnosis and Repair Laboratory, AUTO 143T Steering and Suspension Diagnosis and Repair Assessment Test Out, and by Work Experience where students will perform specific ASE competencies related to suspension and steering diagnosis and repair.
CSU

143L STEERING AND SUSPENSION DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper operation, disassembly, assembly, repair, and diagnostic techniques for various suspension and steering components. This course is the lab for students taking courses AUTO 143 Steering and Suspension Diagnosis and Repair Lecture, AUTO 1431T Steering and Suspension Diagnosis and Repair Assessment Test Out, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

143T STEERING AND SUSPENSION DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests using actual suspension and steering description, diagnosis, and repair. This course allows a student to demonstrate knowledge of proper operation, disassembly, assembly, repair, and diagnostic techniques for various suspension and steering types and designs, including electronic controls in the department laboratory, or by using distance education technologies, live demonstrations, and recordings of work. The assessments will include various tests using vehicles with symptoms and conditions. This course allows a student residing at a distance from training centers to complete ASE certification requirements. This course accompanies AUTO 143L Steering and Suspension Diagnosis and Repair Laboratory, 143 Steering and Suspension Diagnosis and Repair lecture, and Work Experience classes.

144 NOISE, VIBRATION, AND HARSHNESS. .5 UNIT
(formerly AUTO 191E)
.5 hours lecture
This course includes a detailed study of modern Noise, Vibration, and Harshness (NVH) systems and service procedures. This course includes inspection, adjustment, and repair procedures for NVH systems, including methods of diagnosing and repairing various mechanical, electronic, and hydraulic components using specified tools and procedures. This course is complemented by 144L NVH Lab, 144T NVH Assessment Test Out, and Work Experience where students will perform specific ASE competencies related to NVH diagnosis and repair.
CSU

144L NOISE, VIBRATION AND HARSHNESS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various Noise, Vibration, and Harshness (NVH) symptoms and conditions. This course is the lab for students taking courses AUTO 144 Noise, Vibration, and Harshness lecture, AUTO 144T Noise, Vibration, and Harshness Assessment Test Out, and/or for students taking Work Experience. This course assists ASE task completions related to noise and vibration concerns.
CSU

144T NOISE, VIBRATION AND HARSHNESS ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 161T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests using actual noise and vibration concerns, diagnosis, and repair procedures. This course allows a student to demonstrate knowledge of proper diagnostic techniques for various Noise, Vibration, and Harshness (NVH) concerns in the department laboratory or by using distance education technologies, live demonstrations, and recordings of work. The assessments will include various tests using vehicles with symptoms and conditions. This course allows a student residing at a distance from training centers to complete ASE certification requirements. This course compliments AUTO 144L Noise, Vibration, and Harshness Laboratory, 144 Noise, Vibration, and Harshness Lecture, and Work Experience classes.

145 ADVANCED FOUR WHEEL ALIGNMENT 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 140 or equivalent
3 hours lecture, 6 hours laboratory
Advanced course in four wheel alignment emphasizing diagnosis and complete suspension system repair. Designed to develop greater student performance under simulated industry conditions. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-4 Certification.
CSU

151 BRAKE SYSTEM DIAGNOSIS AND REPAIR 2 UNIT
(formerly AUTO 191A)
2 hours lecture
This course includes a detailed study of modern automotive braking systems and service procedures. The course will demonstrate drum and disc brake systems inspection, adjustment and repair procedures, including methods of diagnosing and repairing various mechanical and hydraulic brake systems using specified tools and procedures. This course is complemented by AUTO 151L Brake System Laboratory, AUTO 151T Brake System Assessment Test Out, and by Work Experience in the dealership where students will perform specific ASE competencies.
CSU

151L BRAKE SYSTEM DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various brake symptoms and conditions. This course is the lab for students taking courses AUTO 151 Brake Diagnosis and Repair Lecture, AUTO 151T Brake Assessment Test Out, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

151T BRAKE SYSTEM DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
(formerly AUTO 191B)
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or equivalent.
1.5 hours laboratory
This portfolio assessment course includes summative and criterion tests using vehicles with brake system concerns for diagnosis and repair. This course allows a student to demonstrate knowledge of proper diagnostic techniques for various brake component concerns in the department laboratory or by using distance education technologies, live demonstrations, and recordings of work. This course allows a student residing at a distance from training centers to complete ASE certification requirements. This course compliments AUTO 151L Brake Systems Laboratory, AUTO 151 Brake Systems Lecture, and Work Experience classes.
CSU

152 DRIVE TRAIN SYSTEMS 4 UNITS
2.5 hours lecture, 4.5 hours laboratory
In-depth study of hydraulic power transmission and control systems used in automatic transmissions including diagnosis and overhaul of actual transmissions to precise industry standards. Plus, theory of operation, diagnosis, repair and overhaul of manual transmissions, clutches, drivelines and differentials including four wheel drive and front wheel drive. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-2 and A-3 Certification.
CSU

153 ADVANCED BRAKE SYSTEM DIAGNOSIS AND REPAIR 2 UNITS
(formerly AUTO 191C)
2 hours lecture
This lecture course includes a detailed study of automotive braking systems and service procedures. The course includes electronic braking systems inspection, adjustment and repair procedures, including methods of diagnosing and repairing various electro mechanical and hydraulic brake systems using specified tools and procedures. This course is complemented by AUTO 153L Advanced Brake System Lab, AUTO 153T Advanced Brake Assessment, and by Work Experience courses at the dealership where students will perform specific ASE competencies related to advanced brake diagnosis and repair.
CSU

153L ADVANCED BRAKE SYSTEM DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various electronic brake symptoms and conditions. Electronic braking system components and operation are included in this course. This course is the lab for students taking courses AUTO 153 Advanced Brake System Diagnosis and Repair Lecture, AUTO 153T Advanced Brake System Assessment Test Out, and/or for students taking Work Experience who need additional instruction and practice completing required ASE competencies and tasks.
CSU

153T ADVANCED BRAKE SYSTEM ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out and AUTO 151T Brake System Diagnosis and Repair Assessment Test Out or equivalent.
1.5 hours laboratory
This portfolio assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of active brake systems on vehicles in the department laboratory; or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete certification requirements prior to performing warranty service at a dealership. This course is complemented by AUTO 153 Advanced Brake System Diagnosis and Repair lecture, AUTO 153L Advanced Brake System Lab, and by Work Experience at a dealership.

155 ADVANCED DRIVE TRAIN SYSTEMS 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 152 or equivalent
2.5 hours lecture, 4.5 hours laboratory
Advanced course in power drive systems emphasizing advanced diagnosis and repair of drive train systems and components. Designed to develop greater student performance under simulated industry conditions. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-2 and A-3 Certification.
CSU

160 AIR CONDITIONING AND HEATING SYSTEMS 3 UNITS
C-ID AUTO 170X
2 hours lecture, 3 hours laboratory
Study of refrigeration principles with emphasis on servicing, diagnosing, testing and repair or replacement of components. Emphasis on practical experience performing actual repairs. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-7 Certification and EPA-approved CFC Technician Certification.
CSU

161 ELECTRICAL DIAGNOSIS AND REPAIR 2 UNITS
(formerly AUTO 196A)
2 hours lecture
This lecture course includes electrical systems theory, diagnosis and repair procedures utilizing state of the art equipment. Systems covered include storage, generating and starting. Accessory systems covered include lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, and introduction to electronic systems such as transistors and electronic computer controls.
CSU

161L ELECTRICAL DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper operation, repair, and diagnostic techniques for automotive electrical systems. The course also includes the theory of electricity as related to lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers and other automotive systems. This course is the lab for students taking AUTO 161 Electrical Diagnosis and Repair lecture, or for students taking work experience who need additional instruction and practice completing required NATEF competencies and tasks.
CSU

161T ELECTRICAL DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
(formerly AUTO 196B)
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 161L Electrical Diagnosis and Repair Laboratory or equivalent.
1.5 hours laboratory
This assessment course includes hands-on summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of electrical systems in the department laboratory, or by using distance education technologies such as augmented reality, virtual reality, or mobile technologies. The tests will include electrical systems such as lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, or other systems. This course allows students who reside at a distance from training centers to complete certification requirements. This course is complemented by work experience, AUTO 161 lecture, and AUTO 161L lab.
CSU

162 ELECTRONICS DIAGNOSIS AND REPAIR 2 UNITS
(formerly AUTO 196C)
Prerequisite: Students must have a signed Ford dealership sponsorship agreement.
2 hours lecture
This lecture course includes electronic system theory, diagnosis and repair procedures utilizing state of the art equipment. This course applies basic electrical test applications incorporating electronic controls units and computer networks. Covers various vehicle computer functions such as: body electronics, infotainment systems, and electric vehicle and hybrid vehicle system operations. Students will use test equipment to measure sensor outputs used for computer component activation, and study vehicle electronic wiring diagrams in-depth, gaining knowledge, skills and abilities to perform complex tests.
CSU

162L ELECTRONICS DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper diagnosis and repair of electronics systems of modern vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The course also includes diagnosis of automotive computer modules, inputs and outs. This course is the lab for students taking AUTO 162 Electronics Diagnosis and Repair lecture, and or for students who are taking work experience and who need additional instruction and practice completing required NATEF competencies and tasks.
CSU

162T ELECTRONICS DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 161T Electrical Diagnosis and Repair Assessment Test Out
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge skills and abilities to perform diagnosis and repair of automotive electronic systems in the department laboratory; or by using distance education technologies such as augmented reality, virtual reality, or mobile technologies. The tests will include electronic component diagnosis and repair using scan tools, digital multi-meters, and lab-scopes. This course allows students who reside at a distance from training centers to complete certification requirements. This course is complemented by work experience, AUTO 162 lecture, and AUTO 162L lab.

165 ADVANCED AIR CONDITIONING AND HEATING SYSTEMS 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 160 or equivalent
2 hours lecture, 3 hours laboratory
Advanced course in automotive environmental control systems emphasizing advanced diagnosis and repair. Designed to develop greater student performance under simulated industry conditions. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-7 Certification.
CSU

170 ENGINE OVERHAUL 5 UNITS
3 hours lecture, 6 hours laboratory
Diagnosis of engine failures, engine removal and disassembly techniques, engine cleaning and measuring practices, machining principles, and assembly procedures. Emphasis is on practical experience through actual shop training. Students are required to provide an auto engine for overhaul and complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-1 Certification.
CSU

171 CLIMATE CONTROL SYSTEM DIAGNOSIS AND REPAIR 1 UNIT
(formerly AUTO 196D)
1 hour lecture
This lecture course demonstrates and describes climate control systems, theory, diagnosis and repair procedures utilizing state of the art equipment. This course applies basic heating and air conditioning test applications incorporating electronic controls units and computer networks. This course covers various vehicle computer functions such as: body electronics, climate control units, and electric vehicle and hybrid vehicle climate system operations. This course is preparation for ASE certification, and complemented by AUTO 171L Climate Control Diagnosis and Repair Lab, AUTO 171T Climate Control Diagnosis and Repair Assessment Test Out, and by Work Experience at the dealership.
CSU

171L CLIMATE CONTROL SYSTEM DIAGNOSIS AND REPAIR LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various electronic climate control symptoms and conditions. This course is the lab for students taking courses AUTO 171 Climate Control System Diagnosis lecture, AUTO 171T Climate Control System Assessment Test Out, and/or for students taking a Work Experience course who need additional instruction and practice completing required ASE competencies and tasks.
CSU

171T CLIMATE CONTROL SYSTEM DIAGNOSIS AND REPAIR ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This portfolio assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of climate control systems on vehicles in the department laboratory, or by using distance education technologies, such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete certification requirements prior to performing warranty service at a dealership. This course is complemented by AUTO 171 Climate System Diagnosis lecture, AUTO 171L Climate Diagnosis Lab, and by Work Experience at a dealership.

175 ADVANCED ENGINE OVERHAUL 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in AUTO 170 or equivalent
3 hours lecture, 6 hours laboratory
Advanced course in engine overhaul designed to develop greater student performance under simulated industry conditions. Students will be required to complete associated tasks in the shop as specified by NATEF (National Automotive Training Educational Foundation). Preparation for ASE A-1 Certification.
CSU

181 ENGINE PERFORMANCE I IGNITION AND FUEL SYSTEMS 2 UNITS
(formerly AUTO 195A)
2 hours lecture
This lecture course includes an in-depth study of ignition and fuel system engine controls on modern automobiles and trucks, including the diagnosis and repair of these systems. On-board computer logic and strategies of ignition and fuel systems will provide the knowledge needed to describe fundamental engine performance theory and operation. This course is complemented by AUTO 181L Engine Performance I Ignition and Fuel Systems Laboratory, AUTO 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and Work Experience courses.
CSU

181L ENGINE PERFORMANCE I IGNITION AND FUEL SYSTEMS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course demonstrates proper inspection and diagnostic techniques for various engine performance symptoms and conditions, including ignition and fuel systems operations. This course is the laboratory practice opportunity for students taking courses AUTO 181 Engine Performance I Ignition and Fuel Systems lecture, AUTO 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and for students taking Work Experience to attain required ASE competencies.
CSU

181T ENGINE PERFORMANCE I IGNITION AND FUEL SYSTEMS ASSESSMENT TEST OUT .5 UNIT
(formerly AUTO 195B)
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of engine performance systems on vehicles in the department laboratory, or by using distance education technologies, such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete certification requirements. This course is the assessment for AUTO 181 Engine Performance I Ignition and Fuel Systems lecture, AUTO 181L Engine Performance I Ignition and Fuel Systems Laboratory, and Work Experience courses.
CSU

183 ENGINE PERFORMANCE II INTAKE EXHAUST AND EMISSION SYSTEMS 2 UNITS
(formerly AUTO 195C)
2 hours lecture
This lecture course provides the knowledge and skills needed to describe and identify engine performance diagnosis and testing methods of the intake, exhaust, and emission control systems. This course demonstrates diagnostic processes of normally aspirated, forced air systems, exhaust treatment, lambda sensor inputs, and various emission controls. This course is part of a three course series including AUTO 183L Engine Performance II Intake, Exhaust and Emission Systems Laboratory, AUTO 183T Engine Performance II Intake, Exhaust and Emission Systems Assessment Test Out, and Work Experience courses.
CSU

183L ENGINE PERFORMANCE II INTAKE EXHAUST EMISSION SYSTEMS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various engine performance symptoms and conditions, including intake and exhaust systems operations. This course is the laboratory opportunity for students taking courses AUTO 183 Engine Performance II Intake Exhaust Emission Systems lecture, AUTO 183T Engine Performance II Intake Exhaust Emission Systems Assessment Test Out, and for students taking Work Experience for required ASE competencies.
CSU

183T ENGINE PERFORMANCE II INTAKE EXHAUST EMISSION SYSTEMS ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" 162T Electronics Diagnosis and Repair Assessment Test Out or the equivalent.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of engine performance systems on vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete ASE certification requirements. This course is the assessment for AUTO 183 Engine Performance II Intake Exhaust Emission Systems lecture, AUTO 183L Engine Performance II Intake Exhaust Emission Systems Laboratory, and Work Experience courses.

190 ASSET–ORIENTATION, PDI AND LUBRICATION 2 UNITS
1 hour lecture, 3 hours laboratory
Introduction to the Ford sponsored ASSET program. Students will become familiar with dealership operations, vehicle pre-delivery inspection, and proper lubrication of the various systems of the modern automobile. Complemented by required work experience in the dealership.
CSU

191 ASSET–BRAKES, ADVANCED BRAKES, SUSPENSION AND NVH 7 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 122 or AUTO 196 or equivalent
5 hours lecture, 6 hours laboratory
Ford ASSET course to include a detailed study of modern automotive braking systems and service procedures. The course will describe brake systems inspection, adjustments, and repair procedures. Vehicle dynamic electronic brake systems will be demonstrated and described. This course will require the diagnosis and replacement of mechanical and electronic suspension components, and provide training in wheel balancing and tire service. The relationship between brakes and suspension and various causes of noise vibration and harshness will be emphasized. Students will be required to gain practical experience using diagnosing and repairing vehicles. This course is complemented by required work experience at a Ford dealership.
CSU

192 ASSET–DRIVE TRAIN 8 UNITS
5.5 hours lecture, 7.5 hours laboratory
Ford ASSET course encompassing the study of modern drive train systems. Includes theory of operation, diagnosis, repair and overhaul of manual transmissions, clutches, drivelines and differentials including four wheel drive and front wheel drive. The course also includes the theory of operation, diagnosis, repair and overhaul of automatic transmissions and transaxles. Current computerized control system operation and diagnosis of the drive train will be emphasized. Includes Ford Motor Company certification and preparation for ASE Certification. Complemented by work experience in the dealership.
CSU

193 ASSET–ENGINE REPAIR 4.5 UNITS
3 hours lecture, 4.5 hours laboratory
Ford ASSET course to include diagnosis of engine failures, engine removal and disassembly techniques, engine cleaning and measuring practices, machining principles, assembly procedures and in-car repairs. Engine design theory will be discussed. Preparation for ASE Certification. Complemented by required work experience in the dealership.
CSU

194 DIESEL ENGINE PERFORMANCE AND DIAGNOSIS 2 UNITS
(formerly AUTO 193C)
2 hours lecture
This lecture training course describes and demonstrates diesel engine performance concerns and diagnosis, which includes the use of service publications, diagnostic tests and procedures, as well as special tools and equipment. The information and exercises presented in this course are focused on the common rail diesel engines with electronic fuel injection. This is the lecture course for 194L Diesel Engine Performance and Diagnosis Laboratory and 194T Diesel Engine Performance and Diagnosis Assessment Test Out courses.
CSU

194L DIESEL ENGINE PERFORMANCE AND DIAGNOSIS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various diesel engine performance symptoms and conditions, including fuel systems operations. This course is the laboratory practice opportunity for students taking courses AUTO 194 Diesel Engine Performance and Diagnosis lecture, and Diesel Engine Performance and Diagnosis Assessment Test Out, and/or for students taking a Work Experience course who need additional instruction and practice completing required ASE competencies and tasks.
CSU

194T DIESEL ENGINE PERFORMANCE AND DIAGNOSIS ASSESSMENT TEST OUT .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or the equivalent.
1.5 hours laboratory
This portfolio assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of diesel engine performance systems on vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete certification requirements prior to performing warranty service at a dealership. This course is the assessment of AUTO 194 Diesel Engine Performance and Diagnosis lecture, AUTO 194L Diesel Engine Performance and Diagnosis Lab, and is complemented by Work Experience at a dealership.

195 ASSET–ELECTRONIC ENGINE CONTROLS 7 UNITS
5 hours lecture, 6 hours laboratory
Ford ASSET course to include an in-depth study of engine drivability and electronic engine controls on modern automobiles and trucks. Includes the study of basic and electronic ignition systems, early and modern fuel systems, and the repair and diagnosis of these systems. Emphasis is on electronic engine control system theory of operation and repair to include discussion of sensors, processors and actuators, and system diagnosis and repair. On-board computer logic and strategies will also be presented. Preparation for ASE Certification. Students who successfully complete this course will receive Ford Motor Company certification in Electronic Engine Control and Diesel Engine Performance Diagnosis.
CSU

196 ASSET–ELECTRICAL, ACCESSORIES AND AIR CONDITIONING 5 UNITS
4 hours lecture, 3 hours laboratory
Ford ASSET course to include electrical systems, theory, diagnosis and repair procedures utilizing state of the art equipment. Systems covered will be storage, generating and starting. Coverage of accessory systems such as lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, etc. Also covered are all major topics dealing with automotive air conditioning including refrigeration theory, system evacuation and recovery, leak repair, compressor repair, component replacement, and manual and automatic temperature control. Preparation for ASE Certification. Complemented by required work experience in the dealership.
CSU

200 ASEP–ORIENTATION 1 UNIT
1 hour lecture
Introduction to the General Motors sponsored ASEP program. Students will become familiar with dealer operations. Complemented by required work experience in a dealership.
CSU

201 ASEP–ELECTRICAL 6 UNITS
4 hours lecture, 6 hours laboratory
General Motors ASEP course to include electrical systems, theory, diagnosis and repair procedures utilizing state of the art equipment. Major topics include electrical laws, batteries, starting and charging systems, wiring diagrams, and introduction to computer controls. Accessory systems such as lighting, power seats, power door locks, cruise controls, electric windows, electronic dashboards, radios, windshield wipers, etc., are also covered. Preparation for ASE and GM certification.
CSU

202 ASEP–BRAKES AND ALIGNMENT 7 UNITS
5 hours lecture, 6 hours laboratory
General Motors ASEP course to include a detailed study of modern automotive braking systems and service procedures including two and four wheel electronic anti-lock brake system operation and repair. Laboratory experience will cover drum and disc brake system inspection, adjustment and repair procedures. Also covers modern suspension and steering systems including electronic ride control, steering, and four wheel alignment principles as applied to checking and correcting alignment settings. Repair and replacement of suspension components. Additional training in wheel balancing. Emphasis on practical experience on "live" automobiles. Preparation for ASE and GM certification.
CSU

203 ASEP–ENGINE REPAIR 4.5 UNITS
3 hours lecture, 4.5 hours laboratory
General Motors ASEP course to include diagnosis of engine failures, engine removal and disassembly techniques, engine cleaning and measuring practices, machining principles and assembly procedures in car repairs. Engine design theory will be discussed. Preparation for ASE and GM certification.
CSU

204 ASEP–POWER TRAIN 7 UNITS
5 hours lecture, 6 hours laboratory
General Motors ASEP course to include an in-depth study of hydraulic power transmission and control systems used in automatic transmissions, including diagnosis and overhaul of actual transmissions to precise industry standards. Plus, theory of operation, diagnosis, repair and overhaul of manual transmissions, clutches, drivelines and differentials including four wheel drive and front wheel drive. Preparation for ASE and GM certification.
CSU

205 ASEP–ENGINE PERFORMANCE AND AIR CONDITIONING 7 UNITS
5 hours lecture, 6 hours laboratory
General Motors ASEP course to include a detailed study of electronic engine controls on modern automobiles. Emphasis is on electronic engine control system theory of operation and repair to include discussion of sensors, processors and actuators, and system diagnosis and repair. On-board computer logic and strategies will be presented. Covers all major topics dealing with automotive air conditioning including refrigeration theory, system evacuation and recovery, leak repair, compressor repair, component replacement, and manual and automatic temperature control. Preparation for ASE and GM certification.
CSU

210 SERVICE MANAGEMENT 3 UNITS
(formerly AUTO 180)
3 hours lecture
This lecture course prepares students for management operations of independent Automotive Repair Dealers (ARDs) and/or manufacturer franchise dealerships. This is an in-depth course about service procedures, customer relations, government regulation, licensing, compliance, repair orders, and warranty policies.
CSU

211 AUTOMOTIVE CUSTOMER SERVICE 2 UNITS
2 hours lecture
This lecture course prepares students to work in the automotive industry as a service consultant, parts department representative, sales associate, or similar customer service position where communication skills are paramount to customer satisfaction and business success.
CSU

212 AUTOMOTIVE WORK EXPERIENCE 1-4 UNITS
(formerly AUTO 182)
75 hours paid or 60 hours non-paid work experience per unit
Students who seek employment in automotive businesses, full-time or part-time, and are able to work specified hours during the semester, are eligible to enroll in this course. Assessment of students will be performed by the instructor using surveys of the mentor and manager, and student self-reflection based on the agreed upon objectives of the course. Work experience compliments classroom curriculum, and is considered essential for student competency. *Occupational cooperative work experience credit may accrue at the rate of one to four units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. This course may be elected up to five times for a maximum of 16 units.*
CSU

213 ASCCA – WORK EXPERIENCE 1-4 UNITS
75 hours paid work experience per unit, 1-4 units
Automotive Service Councils of California (ASCCA) work experience. Students will attain a sponsoring automotive repair business or approved affiliated business at the start of the training program. This course may be paid work experience at the sponsoring Automotive Repair Dealer (ARD). Students work in the area of emphasis that is concurrent with area of training most recently completed at the college, in order to develop skills attained in the ASE content. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of twelve - sixteen units, and students must work 75 paid hours per unit earned. Twelve - sixteen units must accrue for graduation or certification.*
CSU

214 GENERAL MOTORS ASEP WORK EXPERIENCE 1-4 UNITS
(formerly AUTO 206)
75 hours paid work experience per unit
General Motors ASEP work experience. Students will be placed with a sponsoring dealer at the start of the training program. This course is based on paid work experience at the sponsoring dealership. Assessment of students will be performed by the ASEP coordinator in discussion with appropriate dealership personnel. Students are expected to work in the area of emphasis that is concurrent with area of training most recently completed at the college in order to further develop skills attained in the classroom setting. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours per unit earned. Must be taken for a total 12- 16 units.*
CSU

215 FORD ASSET–WORK EXPERIENCE 1-4 UNITS
(formerly AUTO 197)
75 hours paid work experience per unit
Ford ASSET work experience. Students are responsible for attaining sponsoring dealership employment before enrollment in the work experience course. This course is based on paid work experience at the sponsoring Ford dealership. Assessment of students will be performed by the ASSET Instructor with dealership personnel, including the lead technicians, shop foreman, service manager, and through student self-evaluation reflections. Students are expected to work in the content area of diagnosis and repair concurrent with the content area of instruction in order to further develop skills attained in the classroom setting. Ford certifications will not be attained without documentation completed and signed by the student and evaluators in the work experience record book. Each student is required to use a digital portfolio to document competencies and ASE tasks. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of twelve to sixteen units, and students must work 75 paid hours per unit earned.*
CSU

263 ADVANCED ELECTRONICS 1 UNIT
1 hour lecture
This lecture course will demonstrate and describe how to program software and perform module updates to networked systems. Examples of anti-theft and remote entry with advanced inputs and out-puts may have module related concerns requiring hard fault diagnosis of modules, and networks using integrated scan tools, and tests of network signals using lab scopes for intermittent network concerns. This course is the lecture course accompanying AUTO 263L Advanced Electronics Laboratory, and AUTO 263T Advanced Electronics Assessment Test Out. Work Experience courses at an automotive workplace support competency practice and evaluations critical for student success.
CSU

263L ADVANCED ELECTRONICS LABORATORY 1 UNIT
3 hours laboratory
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various network symptoms and conditions, including programing and fault symptom processes. This course is the laboratory practice opportunity for students taking courses AUTO 263 Advanced Electronics lecture, AUTO 263T Advanced Electronics Assessment Test Out, and/or for students taking a Work Experience course who need additional instruction and practice completing required ASE competencies and tasks required for certification.
CSU

263T ADVANCED ELECTRONICS ASSESSMENT TEST OUT .5 UNIT
Prerequisite: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or the equivalent.
1.5 hours laboratory
This portfolio assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of engine network systems on vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete certification requirements prior to performing warranty service at a dealership. This course is the assessment of AUTO 263 Advanced Electronics lecture, and AUTO 263L Advanced Electronics Lab. Work Experience at a dealership will ensure a student is prepared to perform network service and repair based on competency evaluation.

264 HYBRID AND ELECTRIC VEHICLE OPERATION AND DIAGNOSIS 1 UNIT
(formerly AUTO 129)
Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or the equivalent.
1 hour lecture
This lecture is a manufactures course required for certification of hybrid and electric vehicle (EV) systems for passenger cars and light trucks. The history of battery technologies will apply charging and repair techniques from first generation to present day EVs. EV technologies have evolved rapidly, requiring different methods of service for each new generation and system version. High voltage systems are dangerous. Proper safety procedures for hybrid and EV systems are required and emphasized. This course uses actual hybrids and EVs to perform electrical and electronic diagnosis of various systems. Students must have prerequisite knowledge and skill certifications of automotive electronics prior to enrolling in this course. This course is complemented by AUTO 264L Hybrid and Electric Vehicle Operation and Diagnosis Laboratory and AUTO 264T Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out.
CSU

264L HYBRID AND ELECTRIC VEHICLE OPERATION AND DIAGNOSIS LABORATORY 1 UNIT

3 hours laboratory

This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various hybrid and electric vehicle symptoms and conditions, including high voltage battery and fault symptom processes. This course is the laboratory practice opportunity for students taking courses AUTO 264 Hybrid and Electric Vehicle Operation and Diagnosis lecture, AUTO 264T Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out, and/or for students taking a Work Experience course who need additional instruction and practice completing required ASE competencies and tasks required for certification.

CSU

264T HYBRID AND ELECTRIC VEHICLE OPERATION AND DIAGNOSIS ASSESSMENT TEST OUT .5 UNIT

Prerequisite: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out or the equivalent.

1.5 hours laboratory

This portfolio assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of automotive hybrid and electric vehicle systems in the department laboratory; or by using distance education technologies such as augmented reality, virtual reality, or mobile technologies. The tests include high voltage electronic component diagnosis and repair using scan tools, digital multi-meters, and lab scopes. This course allows a student residing at a distance from training centers to complete certification requirements. This course is complemented by Work Experience, AUTO 264 Hybrid and Electric Vehicle Operation and Diagnosis lecture, and AUTO 264L Hybrid and Electric Vehicle Operation and Diagnosis Laboratory courses.

283 ADVANCED ENGINE PERFORMANCE 1 UNIT

(formerly AUTO 195D)

Prerequisite: "C" grade or higher or "Pass" or the equivalent in: AUTO 162T Electronics Diagnosis and Repair Assessment Test Out, and 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and 183T Engine Performance II Intake Exhaust Emissions Systems Assessment Test Out.

1 hour lecture

This lecture course describes and demonstrates proper diagnosis and repair of advanced engine performance systems using diagnostic methods, including programming. Use the scan tool, reference values, mode 6 data, and follow pinpoint tests to diagnose intermittent related DTC's and symptoms. This course is part of a three course series including 283L Advanced Engine Performance Laboratory, 283T Advanced Engine Performance Assessment Test Out, and Work Experience courses.

CSU

283L ADVANCED ENGINE PERFORMANCE LABORATORY 1 UNIT

Prerequisite: "C" grade or higher or "Pass" or the equivalent in: AUTO 162T Electronics Diagnosis and Repair Assessment Test Out, and 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and 183T Engine Performance II Intake Exhaust Emission Systems Assessment Test Out.

3 hours laboratory

This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various advanced engine performance symptoms and conditions, including intermittent problems affecting ignition and fuel systems operations. This course is the laboratory practice opportunity for students taking courses AUTO 283 Advanced Engine Performance lecture, AUTO 283T Advanced Engine Performance Assessment Test Out, and/or for students taking a Work Experience course and need additional instruction and practice completing required ASE competencies.

CSU

283T ADVANCED ENGINE PERFORMANCE ASSESSMENT TEST OUT .5 UNIT

Prerequisite: "C" grade or higher or "Pass" or the equivalent in: AUTO 162T Electronics Diagnosis and Repair Assessment Test Out, and 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and 183T Engine Performance II Intake Exhaust Emission Systems Assessment Test Out

1.5 hours laboratory

This assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform diagnosis and repair of advanced engine performance systems on vehicles in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows a student residing at a distance from training centers to complete ASE certification requirements. This course is the assessment of AUTO 283 Advanced Engine Performance lecture, AUTO 283L Advanced Engine Performance Laboratory, and is complemented by Work Experience courses.

284 LEVEL I INSPECTOR TRAINING EMISSION CONTROL LICENSE 2 UNITS

(formerly AUTO 141)

2 hours lecture

This lecture course contains the theory of operation and inspection of emission control devices with strong emphasis on federal and state laws and regulations required for licensing and testing of vehicles. This course describes the most current testing devices used for inspection procedures approved by the State of California Bureau of Automotive Repair (BAR). This course prepares students to take the BAR Inspector Only (I.O.) licensing examination. Experienced candidates may skip Level I training if they possess ASE A6, A8, and L1 certification; or have an AA/AS degree or certificate in Automotive Technology and have 1 year experience; or have 2 years of experience and have completed BAR specified diagnostic and repair training.

CSU

284L LEVEL I INSPECTOR TRAINING EMISSION CONTROL LICENSE LABORATORY 1 UNIT

3 hours laboratory

This laboratory course describes and demonstrates proper inspection and testing techniques for various emission systems and conditions including, exhaust, evaporative fuel controls, monitors, forced air, and normally aspirated. This course is the laboratory practice opportunity for students taking courses AUTO 284 Level I Inspector Training lecture, AUTO 284T Level I Inspector Training Assessment Test Out, and/or for students taking a Work Experience course at a Smog Inspection Station who need additional instruction and practice completing required ASE competencies and tasks required to properly perform inspections.

CSU

284T LEVEL I INSPECTOR TRAINING EMISSION CONTROL LICENSE ASSESSMENT TEST OUT .5 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out, AUTO 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, and AUTO 183 Engine Performance II Intake, Exhaust and Emission Systems Assessment Test Out.

1.5 hours laboratory

This assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform emission system inspections in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests will include recorded and live student demonstrations used for observation and assessment. This course allows students residing at a distance from training centers to complete certification requirements prior to performing warranty service at a dealership. This course is the assessment of AUTO 284 Inspector Level I Emissions lecture, AUTO 284L Level I Inspector Emission Training Lab, and complemented by Work Experience at a Smog Inspection Station.

285 LEVEL II INSPECTOR TRAINING EMISSION CONTROL LICENSE 1 UNIT

(formerly AUTO 142)

1 hour lecture,

This lecture class of smog check procedures training must be completed by all Inspector candidates. This training provides students the procedural knowledge skills and abilities to describe and identify emission inspection procedures. This lecture course is part of a three course series: 285 lecture is accompanied by 285 Lab, and 285 Assessment Test Out, required prior to taking the Bureau of Automotive Repair (BAR) Smog Inspector state licensing examination. To pass level II training students must pass a series of hands-on assessments and a written examination. This course is designed for experienced students who possess ASE A6, A8, and L1 certification; or possess an AA/AS degree or Certificate(s) in automotive technology and have 1 year experience; or have 2 years of experience and have completed BAR specified diagnostic and repair training.

CSU

285L LEVEL II INSPECTOR TRAINING EMISSION CONTROL LICENSE LABORATORY 1 UNIT

3 hours laboratory

This laboratory course is designed for students with vast engine performance experience and knowledge to perform complete smog inspections on various vehicles and designs. This course is the laboratory practice opportunity for students taking courses AUTO 285 Level II Inspector Training lecture, AUTO 285T Level II Inspector Training Assessment Test Out, and/or for students taking a Work Experience course at a Smog Inspection Station who need additional instruction and practice completing required ASE competencies and tasks required to properly perform inspections.

CSU

285T LEVEL II INSPECTOR TRAINING EMISSION CONTROL LICENSE ASSESSMENT TEST OUT .5 UNIT

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test Out, AUTO 181T Engine Performance I Ignition and Fuel Systems Assessment Test Out, AUTO 183 Engine Performance II Intake, Exhaust and Emission Systems Assessment Test Out and AUTO 284T

Inspector Level I Emissions Control License Training Assessment Test Out.
1.5 hours laboratory
This assessment course includes summative and criterion tests for students to prove knowledge, skills, and abilities to perform emission system inspections in the department laboratory, or by using distance education technologies such as augmented reality or virtual reality. The tests include recorded and live student demonstrations used for observation and assessment. This course allows students residing at a distance from training centers to complete certification requirements prior to performing inspections at a Smog Test Station. This course is the assessment of AUTO 285 Inspector Level II Emissions lecture, AUTO 285L Level II Inspector Emission Training Lab, and is complemented by Work Experience at a Smog Inspection Station. This course may be used to satisfy BAR citation requirements.

BIOLOGICAL SCIENCES (BIO)

112 CONTEMPORARY ISSUES IN ENVIRONMENTAL RESOURCES 3 UNITS
3 hours lecture
Through the scientific study of basic concepts in ecology, students apply their knowledge and scientific reasoning to the study of contemporary problems dealing with renewable and nonrenewable resources. Environmental resource problems involving air, water, energy, human population growth, and plant and animal diversity are examined in context of their scientific, political, economic and social implications. Alternatives for resolving existing problems and preventing future ones will be explored.
AA/AS GE, CSU, CSU GE, IGETC, UC

115 BIOLOGY OF ALCOHOL AND OTHER DRUGS 3 UNITS
3 hours lecture
Study of the biological principles underlying the effects of the major legal and illegal drugs on the human body. Survey of the commonly abused drugs with regard to their chemical nature, where and how they act, and the factors that modify their effects. Heavy emphasis is placed on how drugs act on neurons in the central nervous system.
AA/AS GE, CSU, CSU GE, UC

122 THE SECRET LIFE OF PLANTS 4 UNITS
3 hours lecture, 3 hours laboratory
Examines the fundamentals of plant biology: how plants grow, develop and respond to environmental stimuli, photosynthesis, water relations and phloem transport, reproduction, and evolution. Emphasis is on structural and functional aspects of plants while focusing on seed producers. Covers contemporary topics in plant biology including the basics of genetic engineering and biotechnology, and revealing the impacts on agriculture, the environment and society.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 GENERAL BIOLOGY I 3 UNITS
3 hours lecture
Survey of the basic biological principles with particular emphasis on the molecular and cellular aspects of the organism. The unifying concepts of biology such as organization, metabolism, genetics and evolution are discussed.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

131 GENERAL BIOLOGY I LABORATORY 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in BIO 130 or equivalent or concurrent enrollment
3 hours laboratory
Laboratory experiments on the basic biological principles with particular emphasis on the molecular and cellular aspects of the organism. Meets transfer requirements for non-majors.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

133 ETHNOECOLOGY 3 UNITS
3 hours lecture
Ethnoecology is the study of the dynamic relationship between people, biota and their environment. Through the scientific study of the principles of ecology, students use their knowledge and scientific reasoning to assess the impacts of humans on Earth's natural systems. This course will focus on the ecological and cultural basis of indigenous land management; particular attention will be paid to the environmental stewardship of the Kumeyaay/Diegueño people of Southern California and Northern Baja California. Local field trips and restoration projects in Cuyamaca College's nature preserve will provide opportunities for working directly with natural habitats.
AA/AS GE, CSU, CSU GE, IGETC, UC

134 ETHNOBOTANY 3 UNITS
3 hours lecture
Ethnobotany is the scientific study of the relationships that exist between peoples and plants, from the perspective of their traditional medicinal, cultural and utilitarian uses. Focusing on the Kumeyaay/Diegueño people of southern California, students will utilize the principles of scientific inquiry and modern plant biology to classify native plants, identify their anatomical structures and phytochemical composition and to relate this information to how plants were woven into the culture of indigenous populations and how plants were used to sustain, heal and protect their people. The historical uses and modern applications of this knowledge will be evaluated. Local field trips will provide opportunities for identification and scientific study of the plants in their natural habitats. Not open to students with credit in GEOG 132.
AA/AS GE, CSU, CSU GE, IGETC, UC

135 ETHNOBOTANY/ETHNOECOLOGY LAB 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in either BIO 133 or 134 or concurrent enrollment
3 hours laboratory
Laboratory experiments to complement BIO 133, Ethnoecology and BIO 134, Ethnobotany. Basic concepts in cell biology, plant taxonomy/identification, plant anatomy, plant physiology, and ecology will be covered. Students will utilize the tools of scientific inquiry to examine the relationship between plants, people and the environment using hands-on experiences. The labs will feature lessons in plant morphology, plant ecology, phytochemistry, and traditional preparation and uses of plants. Particular attention will be paid to the plants and plant communities within the Kumeyaay/Diegueño ethnobotanical region of Southern California.
AA/AS GE, CSU, CSU GE, IGETC, UC

140 HUMAN ANATOMY 5 UNITS
C-ID BIOL 110B
Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent
3 hours lecture, 6 hours laboratory
Students will embark on a study of the systems of the human body. This is accomplished through a study of the organization of the body's systems from a microscopic level of organization to the gross anatomy level. The relationship between structure and function will be examined through the study of histological slides, photomicrographs, anatomical models and charts, and mammalian (cat) dissection.
AA/AS GE, CSU, CSU GE, IGETC, UC

141 HUMAN PHYSIOLOGY 3 UNITS
C-ID BIOL 120B (with BIO 141L)
Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent
3 hours lecture
Study of the function and interrelationships of the nervous, endocrine, muscular, circulatory, respiratory, digestive, and reproductive systems of the human body. Relates these systems to the maintenance of homeostasis and the effects of exercise, behavior and disease on human physiology.
CSU, CSU GE, IGETC, UC

141L LABORATORY IN HUMAN PHYSIOLOGY 1 UNIT
C-ID BIOL 120B (with BIO 141)
Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent, BIO 141 or equivalent or concurrent enrollment
3 hours laboratory
Laboratory course designed to illustrate the physiological principles studied in BIO 141. Emphasis is on lab-based investigations of human physiological processes.
CSU, CSU GE, IGETC, UC

152 PARAMEDICAL MICROBIOLOGY 5 UNITS
Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in CHEM 115 or equivalent
3 hours lecture, 6 hours laboratory
Introduction to the major groups of microorganisms and the diseases they cause. Emphasizes the concepts and techniques relevant to the student entering paramedical professions: identifying and handling bacteria, basic principles of immunology, medical microbiology and epidemiology. Principles of microbial physiology, genetics, growth and microbial control are discussed. This course satisfies the introductory microbiology requirement needed by students majoring in nursing and other paramedical fields leading to a B.S. or B.A. degree.
AA/AS GE, CSU, CSU GE, IGETC, UC

215 STATISTICS FOR LIFE SCIENCES 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in BIO 130, MATH 110 or equivalent
2 hours lecture, 3 hours laboratory
Methods and experience in defining and solving quantitative problems in the life sciences. Emphasis is on the design of experiments and the application of a variety of parametric and nonparametric techniques to the analysis of data.
CSU, CSU GE, IGETC, UC, UC credit limit

230 PRINCIPLES OF CELLULAR, MOLECULAR AND EVOLUTIONARY BIOLOGY 4 UNITS
C-ID BIOL 135S (with BIO 240), 190
Prerequisite: "C" grade or higher or "Pass" in CHEM 141 or equivalent
3 hours lecture, 3 hours laboratory
Survey of the general principles of cell, molecular and evolutionary biology at an advanced level. Emphasis is on the following topics: cellular structure and processes including energy metabolism, membrane transport and cell cycle/cell division; molecular genetics including recombinant DNA; Mendelian and non-Mendelian genetics; communication between cells; and the current models for cellular evolution. Laboratory exercises emphasize the application of these topics to biotechnology. This

course along with BIO 240 is the recommended biology sequence for life science majors. It is suggested that students contact the anticipated transfer institution to ascertain specific transfer requirements for their major. *Not open to students with credit in BIO 220, 221.*

AA/AS GE, CSU, CSU GE, IGETC, UC

240 PRINCIPLES OF ECOLOGY, EVOLUTION AND ORGANISMAL BIOLOGY 5 UNITS

C-ID BIOL 135S (with BIO 230), 140

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

4 hours lecture, 3 hours laboratory

Study of the origin and nature of the different forms of life utilizing evolution as a unifying theme and presenting organismal diversity within a phylogenetic framework. The relationships of environment and fundamental ecological principles, trophic roles and lifestyles to form and function will be explored through examination of comparative structure and the physiology, nutrition, circulation, gas exchange, reproduction, and development of organisms found in the three domains of life. The laboratory component emphasizes the systematics and diversity of prokaryotes, protists, fungi, plants and animals, as well as activities investigating ecological and evolutionary processes using the methods of scientific inquiry. This course along with BIO 230 is the recommended biology sequence for life science majors. It is suggested that students contact the anticipated transfer institution to ascertain specific transfer requirements for their major. *Not open to students with credit in BIO 210.*

AA/AS GE, CSU, CSU GE, IGETC, UC

251 HUMAN DISSECTION 1 UNIT

Prerequisite: "C" grade or higher or "Pass" in BIO 140 or equivalent and recommendation from the student's Human Anatomy instructor

3 hours laboratory

Supervised study of human anatomy through dissection of a human cadaver. Enhances knowledge gained from BIO 140 (Human Anatomy) by observing and relating those organ systems learned to an actual human cadaver. Students will identify surface landmarks and relate them to successively deeper structures, and will develop and refine dissecting skills used on human cadavers. Instruction of human anatomy at this level is intended to assist students pursuing careers in nursing and other allied health professions. *Preregistration counseling with instructor is required; class size is limited.*

CSU, UC

BUSINESS (BUS)

109 ELEMENTARY ACCOUNTING 3 UNITS

3 hours lecture

Introduction to elementary accounting principles. Includes journals, ledgers, worksheets and financial statements for the single proprietorship. Designed for the clerical employee or for those who do not intend further study of accounting. *No credit if taken after BUS 120.*

CSU

110 INTRODUCTION TO BUSINESS 3 UNITS

C-ID BUS 110

3 hours lecture

Provides a comprehensive view of today's dynamic American business and the global economy. Topics include: starting a small business, satisfying customers, managing operations, motivating employees and building self-managed teams, developing and implementing customer-oriented marketing plans, managing information, managing financial resources, and exploring ethical and social responsibilities of American business.

CSU, UC

111 ENTREPRENEURSHIP: STARTING AND DEVELOPING A BUSINESS 3 UNITS

3 hours lecture

Provides the prospective small business owner or entrepreneur with the most up-to-date skills necessary in the planning function of opening one's business. Emphasis is on sources of financing, site locations, legal problems, marketing, including an overview of web and internet marketing organizational structure, and self-analysis to determine one's personal readiness for entrepreneurship.

CSU

112 CRAFT ENTREPRENEUR 2 UNITS

2 hours lecture

This course provides an introductory view of today's craft industry. Specific topics will include an introduction to craft industry entrepreneurship, government assistance programs, project management, customer relationship management, information technology, and exploring ethical and social responsibilities.

CSU

113 GIG ECONOMY: THE NEW ENTREPRENEURIAL PATH 2 UNITS

2 hours lecture

The course provides information and solutions for starting and working in the "GIG Economy" – mixing together short-term jobs, contract work, and freelance assignments. The class will assist students in other disciplines where gigging is common, such as music, ornamental horticulture, automotive, and graphic design, as well as, more traditional field of study such as business. The class will touch on freelancing, entrepreneurship, business and legal aspects, and tech developments, with emphasis on employment and entrepreneurial opportunities that exist in the industry.

CSU

115 HUMAN RELATIONS IN BUSINESS 3 UNITS

3 hours lecture

Examines the human aspects of the organization with an emphasis on the role of the individual in the formal and informal structure of the organization. Leadership and group dynamics, motivation, job enrichment, organizational change, and communications–both verbal and nonverbal–within the organization will be covered.

CSU

120 FINANCIAL ACCOUNTING 4 UNITS

C-ID ACCT 110

4 hours lecture

Introduces the accounting function and how it is used within our economic society. Accounting is viewed as an information-generating system that communicates financial data to support end users in their economic decision-making. Topics include the accounting information system and the recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the classified financial statements, and statement analysis. Issues related to asset, liability and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics will be covered. Designed for students who have an understanding of computer applications in word processing and spreadsheets, basic math skills, and the ability to write in a business-like manner.

CSU, UC

121 MANAGERIAL ACCOUNTING 4 UNITS

C-ID ACCT 120

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

4 hours lecture

Introduces the concepts, methods, and procedures for the development and use of accounting information to support and assist management in their internal cost accounting processes and financial decision making. Areas examined are: cost terms and concepts, cost behavior, cost structure, product costing in a manufacturing environment (including activity based costing), cost-volume-profit analysis, budgeting, standard costing, differential analysis, capital budgeting, variable and absorption costing, and responsibility accounting.

CSU, UC

122 INTERMEDIATE ACCOUNTING 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

4 hours lecture

In-depth study of accounting theories and principles underlying financial statements and the determination of net income. Survey of basic accounting principles. Study of corporate balance sheet items and the analytical processes of statement preparation which include funds-flow and cash-flow reporting.

CSU

124 AUDITING 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

3 hours lecture

Study of the role of the auditor in the American economy including the general principles and concepts of auditing duties, ethics, liability and responsibilities of the auditor, and procedures for verification of financial statements including EDP statements.

CSU

125 BUSINESS LAW: LEGAL ENVIRONMENT OF BUSINESS 3 UNITS

C-ID BUS 120/125

3 hours lecture

Legal environment of business, sources of law, constitutional bases of regulation, social and ethical influences, corporate responsibility, judicial and administrative systems, contracts, torts, agency, business organizations, bankruptcy, securities regulation, regulation of property and protection of intellectual property interests, consumer protection, regulation of businesses to prevent market failures.

CSU, UC

128 BUSINESS COMMUNICATION 3 UNITS

C-ID BUS 115

Prerequisite: "C" grade or higher or "Pass" in ESL 2B or placement into ENGL 120 or equivalent

3 hours lecture

Development of the ability to analyze, organize, and compose various types of written and oral business communications with an emphasis on writing clear, concise and persuasive letters, memos, reports, emails, and social media messages.

CSU

129 PAYROLL ACCOUNTING AND BUSINESS TAXES 2 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

2 hours lecture

In-depth study of payroll accounting. Covers calculations of gross to net pay, federal and

state withholdings and deductions, recording of payroll transactions into the accounting records, and filing of federal and state payroll tax forms. Includes a consideration of factors which determine employee versus independent contractor status, and business taxes such as sales and property taxes and their filing requirements.
CSU

150 INDIVIDUAL INCOME TAX ACCOUNTING 3 UNITS
3 hours lecture
Introduction to federal taxation and tax preparation as applied to the individual taxpayer. Overview of the income tax environment. Topics include filing status, personal and dependency exemption, itemized and standard deductions, and solving specific problems related to filing Federal Form 1040.
CSU

155 HUMAN RESOURCES MANAGEMENT 3 UNITS
3 hours lecture
Introduction to the management of human resources and an understanding of the impact and accountability of human resource activities to the organization. Covers global human resource strategies; social and organizational realities; legal implications affecting people at work; union/non-union practices; employee compensation and benefits; employee rights; safety issues.
CSU

156 PRINCIPLES OF MANAGEMENT 3 UNITS
3 hours lecture
Planning, organizing, directing and controlling for management. Interaction of the functions including setting objectives, MBO, decision-making tools, alternative organization structures, leadership, motivation, communication, group dynamics, management of stress and change, time management, and women in management. Survey of the quantitative tools available to the manager.
CSU

161 BUSINESS INTERNSHIP 1-3 UNITS
75 hours paid or 60 hours unpaid work experience per unit, 1-3 units
A work experience course to enable students in various specialty areas of business to gain practical experience and to apply knowledge gained in their business courses. This course is available to any Accounting, Business, Entrepreneurship, or Management major. Students will meet at least twice during the semester to compare field experiences and submit paperwork. It is recommended that students have completed at least 12 units of Business courses prior to registering for this class. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 unpaid hours per unit earned.*

162 ANALYSIS OF FINANCIAL STATEMENTS 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent
3 hours lecture
This course covers the characteristics and analysis of financial statements. Students will learn how to apply ratios to financial statements and interpret their outcomes in order to draw various inferences and/or conclusions from their results.
CSU

176 COMPUTERIZED ACCOUNTING APPLICATIONS 2 UNITS
2 hours lecture
An introductory course of computerized accounting functions utilizing an integrated general ledger software package. Especially beneficial to students, teachers and professionals who are using, or plan to use, computerized accounting packages to create a chart of accounts, record customer and vendor transactions, process payroll, and print reports.
CSU

195 PRINCIPLES OF MONEY MANAGEMENT FOR SUCCESS 3 UNITS
3 hours lecture
Explores the theories and techniques of managing personal income by setting life planning goals that will culminate in the development of a personal plan for students to manage their finances throughout the lifespan. Within the broad backdrop of business and economics in the United States, topics will include lifelong financial planning, budgeting, managing checking and savings accounts, building and maintaining good credit, retirement and estate planning, insurance, home ownership, and creating an investment portfolio.
CSU

BUSINESS OFFICE TECHNOLOGY (BOT)

096 COMPUTER BASICS FOR THE OFFICE 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 100 or equivalent
.5 hour lecture, 1.5 hours laboratory
Students with little or no computer experience will be provided with the basic information and skills needed to operate a computer efficiently in an office environment. Includes an overview of the components of a computer system hardware and software, proficiency in using a mouse, storing information, using the Internet, and purchasing and maintaining a computer. Recommended that students complete a basic keyboarding course prior to enrolling in this course. **Pass/No Pass only. Non-degree applicable.**

100 BASIC KEYBOARDING 1 UNIT
3 hours laboratory
Beginning keyboarding techniques for students who wish to use keyboarding skills for inputting information on computers. This course is taught on computers using appropriate software. Emphasis on the development of speed and accuracy by use of touch keyboarding methods, development of touch skills on the 10-key pad, understanding of basic vocabulary and concepts used in keyboarding operations for inputting and retrieving information, and composition at the keyboard. For students with physical disabilities that may impair proficiency, emphasis will be on quality of output instead of speed, and on the use of alternative input devices.
CSU

101A KEYBOARDING/DOCUMENT PROCESSING I 1.5 UNITS
Prerequisite: "C" grade or higher or "Pass" in BOT 100 or equivalent
1.5 hours lecture
Focuses on learning or reviewing the alphabetic and numeric keyboard including the 10-key pad for numeric data entry. Students will learn basic features of Microsoft Word to produce simple memos, letters and reports. Keyboarding software will be used to build speed and accuracy. Students wishing to progress to BOT 102AB must complete BOT 101B.
CSU

101B KEYBOARDING/DOCUMENT PROCESSING II 1.5 UNITS
Prerequisite: "C" grade or higher or "Pass" in BOT 101A or equivalent
1.5 hours lecture
Students will use Microsoft Word to produce correctly formatted and accurate business documents including letters, reports and tables. Keyboarding software is used to build speed and accuracy.
CSU

102A INTERMEDIATE KEYBOARDING/ DOCUMENT PROCESSING I 1.5 UNITS
Prerequisite: "C" grade or higher or "Pass" in BOT 101B or equivalent
1.5 hours lecture
Students will review and create business documents to apply formatting skills taught in BOT 101 or 101AB and are then introduced to new formatting and report styles options including agendas, formal reports and multipage tables. This course begins with intermediate Microsoft Word functions; entering students should be proficient in using basic Word features and should key a minimum of 30 net words per minute on a 5-minute timed writing.
CSU

102B INTERMEDIATE KEYBOARDING/ DOCUMENT PROCESSING II 1.5 UNITS
Prerequisite: "C" grade or higher or "Pass" in BOT 102A or equivalent
1.5 hours lecture
Students continue to create business documents, applying new formatting skills including using templates, designing letterheads and office forms, and learning specialized applications such as medical and legal forms. This course begins with intermediate Microsoft Word functions; entering students should be proficient in using basic Word features and should key a minimum of 35 net words per minute on a 5-minute timed writing.
CSU

103A BUILDING KEYBOARDING SKILL I .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 100 or equivalent
1.5 hours laboratory
Designed for students who have completed a keyboarding course but wish to work further on developing speed and accuracy. Entering students should know the alphabetic keyboard by touch and key at a minimum rate of 20 net words per minute on a 5-minute timed writing.
CSU

103B BUILDING KEYBOARDING SKILL II .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 103A or equivalent
1.5 hours laboratory
Continuation in building keyboarding speed and accuracy. Entering students should be keying by touch at a minimum rate of 25 net words per minute on a 5-minute timed writing. Those keying at a lower rate should enroll in BOT 103A.
CSU

103C BUILDING KEYBOARDING SKILL III .5 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 103B or equivalent
1.5 hours laboratory
Continuation in building keyboarding speed and accuracy. Entering students should be keying by touch at a minimum rate of 30 net words per minute on a 5-minute timed writing. Those keying at a lower rate should enroll in BOT 103B.
CSU

104 FILING AND RECORDS MANAGEMENT 1 UNIT
.5 hour lecture, 1.5 hours laboratory
Instruction in the Association of Records Managers and Administrators (ARMA) filing rules and techniques which are widely used in business to create and maintain files. Covers alphabetic, numeric, geographic and subject filing rules; and records management including rules for retention, transfer and disposition of records. Students will use a software package to learn basic filing rules.
CSU

106 EFFECTIVE JOB SEARCH 1 UNIT
1 hour lecture
Provides comprehensive and valuable skills that are needed to successfully secure employment, specializing in the office technology industry. Designed to examine the continuous process of career/life planning through effective, well-planned and efficiently organized job search procedures.
CSU

107 OFFICE SYSTEMS AND PROCEDURES 2 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 101AB, 119 or equivalent or concurrent enrollment
2 hours lecture
Study of office ethics and professionalism; prioritizing and productivity; human relations; working in teams; customer service skills; telephone skills; scheduling appointments; using email, copiers, fax machines and scanners; handling office mail; and using the Internet for common office functions such as travel reservations and ordering supplies.
CSU

114 ESSENTIAL WORD 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
Designed for students who want to learn the most commonly used features of a popular word processing software package. Upon completion, students will be proficient in using text editing and formatting commands to produce typical business documents, and in using the mail merge feature to produce form letters, labels and envelopes. Those desiring more in-depth coverage of these and additional topics should consider enrolling in BOT 120, 121, 122. *Not open to students with credit in BOT 121, 122.*
CSU

115 ESSENTIAL EXCEL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
Designed for students who want to become proficient in the most commonly used features of Microsoft Excel. Basic spreadsheet concepts and terms will be introduced. Students will learn how to create, format and revise spreadsheets, charts, basic formulas, and templates. The use of simple macros will be introduced. Those desiring more in-depth coverage of these and additional topics should consider enrolling in BOT 123, 124, 125. *Not open to students with credit in BOT 124, 125.*
CSU

116 ESSENTIAL ACCESS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
Designed for students who want to become proficient in the most commonly used features of Microsoft Access. Basic database concepts and terms will be introduced. Students will learn how to create, format, edit and revise simple databases, sort and filter records, use queries, and create forms, reports and labels. Those desiring more in-depth coverage of these and additional topics should consider enrolling in CIS 140 or BOT 126, 127, 128. *Not open to students with credit in BOT 127, 128.*
CSU

117 ESSENTIAL POWERPOINT 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
Designed for students who want to become proficient in the most commonly used features of Microsoft PowerPoint. Basic concepts and terms will be introduced. Students will learn how to create, format and revise PowerPoint presentations, including animation effects. Those desiring more in-depth coverage of these and additional topics should consider enrolling in BOT 129, 130. *Not open to students with credit in BOT 130.*
CSU

118 INTEGRATED OFFICE PROJECTS 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in BOT 114, 115, 116, 117 or equivalent
3 hours laboratory
Capstone course for BOT majors who have completed prerequisite courses in all applications of the Microsoft Office suite (Word, Excel, Access, PowerPoint). Students will apply their skills and use cloud computing technologies such as Microsoft OneDrive, Microsoft OneNote, and Google Drive to complete projects that integrate these applications.
CSU

119 WINDOWS FOR THE INFORMATION WORKER 2 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in BOT 100 or equivalent, BOT 096 or equivalent or concurrent enrollment
2 hours lecture
This course is designed for students who wish to learn the latest generation of Windows. Students will learn to use the Windows operating system efficiently to customize desktop settings, control desktop applications and online apps, create an online account to access email and the cloud, conduct sophisticated online searches, understand and avoid online threats, and manage drives, files and folders. In addition, students will learn the latest in the "universal" application.
CSU

120 COMPREHENSIVE WORD, LEVEL I 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 101AB, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
First in a three-level course sequence providing thorough coverage of most features of Microsoft Word. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations. Those desiring less comprehensive coverage of Word should consider enrolling in BOT 114.
CSU

121 COMPREHENSIVE WORD, LEVEL II 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 120 or equivalent
.5 hour lecture, 1.5 hours laboratory
Second in a three-level course sequence providing thorough coverage of most features of Microsoft Word. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

122 COMPREHENSIVE WORD, LEVEL III 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in BOT 121 or equivalent
.5 hour lecture, 1.5 hours laboratory
Third in a three-level course sequence providing thorough coverage of most features of Microsoft Word. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

123 COMPREHENSIVE EXCEL, LEVEL I 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
First in a three-level course sequence providing thorough coverage of most features of Microsoft Excel. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations. Those desiring less comprehensive coverage of Excel should consider enrolling in BOT 115.
CSU

124 COMPREHENSIVE EXCEL, LEVEL II 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 123 or equivalent
.5 hour lecture, 1.5 hours laboratory
Second in a three-level course sequence providing thorough coverage of most features of Microsoft Excel. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

125 COMPREHENSIVE EXCEL, LEVEL III 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in BOT 124 or equivalent
.5 hour lecture, 1.5 hours laboratory
Third in a three-level course sequence providing thorough coverage of most features of Microsoft Excel. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

126 COMPREHENSIVE ACCESS, LEVEL I 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 116, 119 or equivalent
.5 hour lecture, 1.5 hours laboratory
First in a three-level course sequence providing thorough coverage of most features of Microsoft Access. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations. Those desiring less comprehensive coverage of Access should consider enrolling in BOT 116.
CSU

127 COMPREHENSIVE ACCESS, LEVEL II 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 126 or equivalent
.5 hour lecture, 1.5 hours laboratory
Second in a three-level course sequence providing thorough coverage of most features of Microsoft Access. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

128 COMPREHENSIVE ACCESS, LEVEL III 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in BOT 127 or equivalent
.5 hour lecture, 1.5 hours laboratory
Third in a three-level course sequence providing thorough coverage of most features of Microsoft Access. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

129 COMPREHENSIVE POWERPOINT, LEVEL I 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB, 114, 120 or equivalent
.5 hour lecture, 1.5 hours laboratory
First in a three-level course sequence providing thorough coverage of most features of Microsoft PowerPoint. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations. Those desiring less comprehensive coverage of PowerPoint should consider enrolling in BOT 117.
CSU

130 COMPREHENSIVE POWERPOINT, LEVEL II 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 129 or equivalent
.5 hour lecture, 1.5 hours laboratory
Second in a three-level course sequence providing thorough coverage of most features in Microsoft PowerPoint. Students who complete all three levels will be prepared to take the Microsoft Office Specialist (MOS) certification examination or similar examinations.
CSU

132 GOOGLE APPLICATIONS FOR BUSINESS 3 UNITS
3 hours lecture
In this course, students learn how to use Google Apps, a collection of free Web-based productivity tools, in a business environment. Topics include Google Search, Gmail, Google Calendar, Google Docs, Google Spreadsheets, Google Presentations, and emerging trends in Google Apps. Students use the internet to access their files and the tools to manipulate and collaborate with them.
CSU

133 ADOBE ACROBAT FOR THE WORKPLACE 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 119 or equivalent
1 hour lecture
This course involves the study of Adobe Acrobat to create, manage, edit, assemble, and search PDF documents. Students will learn to create Adobe Portable Document Format (PDF), the universal file format for portable documents that preserves all of the fonts, formatting, colors, and graphics of any source document. Additionally, Acrobat can be used to create fillable forms, initiate review processes and apply legal features. Students will learn how to create PDF files from almost any file or paper document, as well as review and comment on PDF files, edit their contents, combine multiple documents into a single PDF file, keep PDF files secure, sign them electronically using the Adobe Document Cloud, and work with interactive online forms. This course will equip students to use Adobe Acrobat successfully in all professional settings, including law offices.

150 USING MICROSOFT PUBLISHER 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB or 121 or equivalent
.5 hour lecture, 1.5 hours laboratory
Introductory course in Microsoft Publisher for students who wish to acquire a basic understanding of concepts and terminology for the production and design of professional quality publications. Emphasizes graphics, word processing and page layout.
CSU

151 USING MICROSOFT OUTLOOK 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in BOT 096, 100, 114, 119 or 120 or equivalent
.5 hour lecture, 1.5 hours laboratory
Designed to offer students proficiency in the use of Microsoft Outlook to create email messages, maintain personal calendars and schedules, plan work, maintain contact lists, and organize information.
CSU

174 COMPUTER CONCEPTS AND APPLICATIONS 3 UNITS
3 hours lecture
This course involves the study of computer concepts and computer skills needed to use computers effectively and efficiently to enhance personal and professional productivity. Computer concepts covered include a basic understanding of the components that comprise computer hardware, system software, social media, mobile computing, and the security and privacy issues related to technology. This course will guide students to achieve entry-level competence with the latest editions of Microsoft Windows, web browsers and the Microsoft Office productivity suite, including OneNote, Outlook, Word, Excel, PowerPoint, and Access.
CSU

180 – BASIC COMPUTER SKILLS FOR ARABIC LEARNERS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in Arabic 120 or equivalent
1 hour lecture
Students will be provided with the basic information and skills needed to operate a computer efficiently to support Arabic classes with an emphasis on basic keyboarding techniques and typing in Arabic, editing and formatting text in Arabic, and creating, formatting, and editing PowerPoint presentations in Arabic. Includes an overview of file and folder management to store information, using computer input devices, searching the internet, and sending email with attachments. *Also listed as ARBC 180. Not open to students with credit in ARBC 180.*
CSU

201 ADVANCED KEYBOARDING/ DOCUMENT PROCESSING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in BOT 102AB or equivalent
3 hours lecture
Advanced keyboarding for further development of keyboarding skills to meet professional placement requirements. Students will apply intermediate and advanced features of Microsoft Word to create complex business documents with minimum instruction. Utilizes software for building speed and accuracy on 5-minute timed writings to attain the speed and accuracy required for professional office positions.
CSU

223 OFFICE WORK EXPERIENCE 1 UNIT
Prerequisite: Limited to BOT majors who have completed at least 12 units in the major
Recommended Preparation: Keyboarding and computer skills as well as training in a variety of office procedures as required by most worksites
60 hours non-paid or 75 hours paid work experience per semester
Work experience in an office setting. Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned.
CSU

224 OFFICE WORK EXPERIENCE 2 UNITS
Prerequisite: Limited to BOT majors who have completed at least 12 units in the major
Recommended Preparation: Keyboarding and computer skills as well as training in a variety of office procedures as required by most worksites
120 hours non-paid or 150 hours paid work experience per semester
Work experience in an office setting. Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a maximum total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. A student taking this course for 2 units must work 150 hours paid or 120 hours non-paid.
CSU

225 OFFICE WORK EXPERIENCE 3 UNITS
Prerequisite: Limited to BOT majors who have completed at least 12 units in the major
Recommended Preparation: Keyboarding and computer skills as well as training in a variety of office procedures as required by most worksites
180 hours non-paid or 225 hours paid work experience per semester
Work experience in an office setting. Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a maximum total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. A student taking this course for 3 units must work 225 hours paid or 180 hours non-paid.
CSU

CADD TECHNOLOGY (CADD)

UC credit limit: all CADD courses, ENGR 119, ENGR 129, OH 200, OH 201 combined: maximum credit, one course

115 ENGINEERING GRAPHICS 3 UNITS
2 hours lecture, 4 hours laboratory
Introduction to engineering drafting. Covers the fundamentals of drafting using both mechanical instruments and the computer as drafting tools. Students will learn the fundamentals of engineering graphics as a universal language of communication in all engineering fields. Includes organization and drawing layouts, text, dimensions, tolerances, scales, multiview projections, and pictorial drawings to visualize, represent and document basic engineering problems.
*CSU, *UC credit limit*

120 INTRODUCTION TO COMPUTER-AIDED DRAFTING AND DESIGN 3 UNITS
Corequisite: CADD 115 or previous enrollment
Recommended Preparation: Working knowledge of basic computer operations and file administration
2 hours lecture, 4 hours laboratory
Concepts, techniques and procedures of Computer-Aided Drafting and Design (CADD). Offers a hands-on activity-based approach to the use of AutoCAD as a drafting tool. Course content focuses on manufacturing drawings, but also includes Architectural and General drawings. Students will develop a comprehensive understanding of computer-aided drafting in 2D geometry as well as in 3D-modeling. Not open to students with credit in ENGR 119.
*CSU, *UC credit limit*

125 SOLID MODELING DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent
Recommended Preparation: Working knowledge of basic computer operations and file administration
2 hours lecture, 4 hours laboratory
This is advanced graphic communication course using solid modeling techniques. This course covers feature based solid part construction including extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps. This also covers assembly construction and constraining in an engineering design environment. Students learn how to produce technical/engineering drawing including proper layout of component drawing views, sectioning and detailing. Threads and fasteners are also included in this course. Dimensioning and tolerancing will be taught in accordance with ANSI standard. Introduction to 3D printing technology (aka Additive Manufacturing) is part of this course. SolidWorks software is used throughout the course. *Also listed as ENGR 125. Not open to students with credit in ENGR 125.*
*CSU, *UC credit limit*

126 ELECTRONIC DRAFTING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent
3 hours lecture
Application of electronic graphics to create all aspects of engineering support documentation. Includes all types: block diagrams, flow charts, wiring, and mechanical enclosures. Covers Schematic Capture and Printed Circuit Board (PCB) layout and design using AutoCAD. Other software may be incorporated. ASME, ANSI, Military and NASA standards for engineering are discussed.
*CSU, *UC credit limit*

127 SURVEY DRAFTING TECHNOLOGY 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent
2 hours lecture, 4 hours laboratory
Professional Civil Engineering/Surveyor's office method drafting course that applies the basic skills and techniques acquired in CADD 115. Land surveying, land development procedures, legal descriptions, topographical analysis, earthworks, geographic control and subdivision processes will be covered. ***Also listed as SURV 127. Not open to students with credit in SURV 127.***
*CSU, *UC credit limit*

128 GEOMETRIC DIMENSIONING AND TOLERANCING (GDT) 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in CADD/ENGR 125 or equivalent
3 hours lecture
Provides the complete fundamentals of Geometric Dimensioning and Tolerancing (GD & T) concepts as adopted by the American National Standard Institute (ANSI) standards: ASME (American Society for Mechanical Engineers)/ANSI Y14.5-2009. The importance of precision technique in conjunction with Computer-Aided Drafting and Design (CADD) is emphasized. The content of this course is considered to be one of the fundamental components to the engineering design and drafting profession.
*CSU, *UC credit limit*

129 ENGINEERING SOLID MODELING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent
2 hours lecture, 4 hours laboratory
Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Creo Parametric) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. 3D printing technology (additive manufacturing) is integrated to this course. *Also listed as ENGR 129. Not open to students with credit in ENGR 129.*
*CSU, *UC credit limit*

131 ARCHITECTURAL COMPUTER-AIDED DRAFTING AND DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 120 or ENGR 119 or equivalent
2 hours lecture, 4 hours laboratory
This course is a hands-on study of computer-aided drafting and design (CADD) using three-dimensional (3D) parametric solid modeling programs, such as Revit and AutoCAD, and associated commands, techniques, and processes required for the creation of contract documents for residential projects using professional standards. Application of architectural graphics, symbols, patterns, layouts, text, dimensions and scales to develop design drawings for small architecture, interior design, and space planning projects. Uses the parametric CADD program Revit.
*CSU, *UC credit limit*

132 ADVANCED COMPUTER-AIDED DRAFTING AND DESIGN IN 3D MODELING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 115 or equivalent
Recommended Preparation: Working knowledge of basic computer operations and file administration
2 hours lecture, 4 hours laboratory
Advanced Computer-Aided Drafting and Design (CADD) topics such as aspects of designing with solid modeling and parametric modeling, concepts, application of three-dimensional constructions, and editing 3D modeling. Exploring and experiencing Additive Manufacturing (aka Rapid Prototyping or 3D Printing Technology). 3D Solid Modeling software *"Autodesk Inventor"* will be used as an instructional tool.
*CSU, *UC credit limit*

133 ADVANCED ARCHITECTURAL COMPUTER-AIDED DRAFTING AND DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 131 or equivalent
2 hours lecture, 4 hours laboratory
This course is an advanced, practical study of Revit and Building Information Modeling (BIM). Emphasis is placed on the complex aspects of the Revit program used in the development of two-dimensional, three-dimensional, and presentation documents. This course is intended for advanced CADD/architecture students and practicing professionals.
*CSU, *UC credit limit*

140 INTRODUCTION TO ADVANCED CADD/MANUFACTURING 2 UNITS
2 hours lecture
Concept of manufacturing, provide in depth the fundamental differences between manufacturing and advanced manufacturing processes. Role of artificial intelligence (AI) in manufacturing– robotics, automation, numerical control, quality control, etc.
CSU

141 INTRODUCTION TO TECHNOLOGY OF MACHINE TOOLS 2 UNITS
2 hours lecture
This course introduces new manufacturing technologies and processes. Study of the development of tools throughout history. Covers the standard types of machine tools used in industry as well as the newly developed space-age machines and processes.
CSU

150 OCCUPATIONAL WORK EXPERIENCE IN CADD TECHNOLOGY/ MANUFACTURING 1-4 UNITS
Prerequisite: Preregistration counseling with the instructor is required. Must meet State guidelines for work experience.
Recommended Preparation: Recommendation from Program Coordinator
75 hours paid or 60 hours non-paid work experience per unit
This course is designed to provide a broad range of hands-on technical experience in CADD Technology/Manufacturing. It prepares students for full-time employment in an appropriate CADD industry setting. Students learn how to work safely in the work environment and apply skills attained in the classroom setting. ***Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned.***
CSU

200 INTRODUCTION TO COMPUTER-AIDED LANDSCAPE DESIGN 3 UNITS
2 hours lecture, 3 hours laboratory
Introduction to computer-aided landscape design using AutoCAD software. Creation of site plans, landscape plans, sprinkler plans, contour maps and landscape estimates. Elevation and perspective drawings are also created. *Also listed as OH 200. Not open to students with credit in OH 200.*
*CSU, *UC credit limit*

201 ADVANCED COMPUTER-AIDED LANDSCAPE DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD/OH 200 or equivalent
2 hours lecture, 3 hours laboratory
Use of computer-aided landscape design software for the application of graphics, symbols, patterns, layouts, text and scales for the development of design drawings, concept plans, construction documents, and cost estimates for residential landscape projects. *Also listed as OH 201. Not open to students with credit in OH 201.*
*CSU, *UC credit limit*

CENTER FOR WATER STUDIES

100 CAREER PATHWAYS IN WATER & WASTEWATER 3 UNITS
3 hours lecture
This course introduces students to Cuyamaca's Center for Water Studies and the career pathways in the water and wastewater field in San Diego County and throughout California. The goal of the course is to develop in each student the skills they need to succeed at Cuyamaca and in their careers in water. This will be the first course in the Center for Water Studies' new Fundamentals of Water module -- a series of four introductory courses -- and students will be encouraged to begin their studies in water and wastewater with the 100 course.
CSU

101 FUNDAMENTALS OF WATER & WASTEWATER 3 UNITS
(formerly WWTR 101)
3 hours lecture
This course provides a broad overview of the water and wastewater fields and issues confronting the industry. Students will learn how source waters are obtained, treated, and distributed and how wastewater is collected, transported, and disposed of in the area. Contemporary issues facing the water and wastewater industry will be explored. *Not open to students with credit in WWTR 101.*
CSU

102 CALCULATIONS IN WATER & WASTEWATER 3 UNITS
(formerly WWTR 102)
Recommended Preparation: Competency in basic math skills
3 hours lecture
Study of the mathematical principles and methods involved in solving problems related to water and wastewater treatment, distribution, and collection systems, including volume, flow rate, velocity, pressure, force, unit conversions, dimensional analysis, chemical dose rates, dilutions, filter loading and backwash rates as related to water/wastewater technology. *Not open to students with credit in WWTR 102.*
CSU

103 WATER RESOURCES MANAGEMENT 3 UNITS
(formerly WWTR 103)
3 hours lecture
With the ever increasing demands for safe and reliable supplies of potable water, combined with decreasing supplies and over commitments of our existing water resources, we are facing a serious water crisis in the western United States. This course explores the history and development of California water resources, legal and financial issues, water portfolio diversification, the role of groundwater recharge and management, wastewater reclamation and reuse, desalination, and energy conservation. *Not open to students with credit in WWTR 103.*
CSU

105 WATER CONSERVATION 3 UNITS
(formerly WWTR 105)
3 hours lecture
This course provides theoretical and practical training in applied water use efficiency and a foundation in the need for and major components of comprehensive water conservation programs. Topics include residential, commercial, and landscape customers; water uses; budgets; demand management; water audits; Best Management Practices; rate structures; and program design and management. *Not open to students with credit in WWTR 105.*
CSU

106 ELECTRICAL & INSTRUMENTATION PROCESSES 3 UNITS
(formerly WWTR 106)
3 hours lecture
An introductory course in basic electronic, electrical, and control system principles. Electrical safety precautions, component identification, schematic interpretation, motors, transformers, relays and test equipment will be studied. Automated process control devices and an overview of current technologies will be discussed. *Not open to students with credit in WWTR 106.*
CSU

107 SAFETY IN WATER & WASTEWATER 3 UNITS
3 hours lecture
This course provides a broad overview of Occupational Safety and Health issues in the water and wastewater industry. Students will learn the history of safety related laws and regulations for the Construction and General Industry. Contemporary safety related issues facing the water and wastewater industry will be explored with an emphasis on the Occupational Safety and Health Administration of the California Department of Industrial Relations.
CSU

110 LABORATORY ANALYSIS FOR WATER & WASTEWATER 3 UNITS
(formerly WWTR 110)
3 hours lecture
Examines basic fundamentals of laboratory analysis with an emphasis on applied chemical and microbiological procedures for water and wastewater plant operators. Includes procedures and techniques used in physical, chemical, bacteriological and biological examination of water/wastewater. Completion of CWS 110 and CWS 210 provides the foundation necessary to obtain a CWEA Grade 1 Laboratory Analyst Certificate. *Not open to students with credit in WWTR 110.*
CSU

112 WATER TREATMENT PLANT OPERATIONS 3 UNITS
(formerly WWTR 112)
Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent
3 hours lecture
Study of the sources of water and the public health aspects of water supply; chemical, physical and bacteriological standards of water quality; types of water treatment plants; and water treatment procedures, operation, maintenance, storage and distribution. *Not open to students with credit in WWTR 112.*
CSU

114 WASTEWATER TREATMENT PLANT OPERATIONS 3 UNITS
(formerly WWTR 114)
3 hours lecture
An introduction to the basic principles involved in the operation of conventional public wastewater treatment plants. Provides information on plant hydraulics, preliminary, primary and secondary treatment processes, disinfection, as well as environmental and safety regulation compliance. *Not open to students with credit in WWTR 114.*
CSU

115 WASTEWATER RECLAMATION AND REUSE 3 UNITS
(formerly WWTR 115)
3 hours lecture
This course covers the fundamentals of wastewater reclamation and reuse. Topics include the history of wastewater treatment and reclamation; total resource recovery including bio-solids/biogas harvesting; planning, design, and construction of reclamation plants; and reclaimed wastewater distribution. Problems regarding regulations, marketing, and public perception of using reclaimed wastewater will be discussed, along with public safety issues. *Not open to students with credit in WWTR 115.*
CSU

130 WATER DISTRIBUTION SYSTEMS 3 UNITS
(formerly WWTR 130)
Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent
3 hours lecture
Study of the operation and maintenance of a water supply and distribution system. Water sources, water quality, treatment methods, distribution operations, customer metering, pipeline installation and repair, valves and appurtenances, storage tanks, and maintenance topics will be discussed. Includes mathematical and hydraulic formulas and principles to determine volume, flow, pressure and force. Part of a series required for eligibility to take the California Department of Public Health (CDPH) Water Distribution Operator certification examinations; supports certification examinations for CDPH Water Distribution Operator grade D1 and D2. *Not open to students with credit in WWTR 130.*
CSU

132 WASTEWATER COLLECTION SYSTEMS 3 UNITS
(formerly WWTR 132)
3 hours lecture
Study of the components of wastewater collection systems. Overview of design installation, operation, monitoring, maintenance and repair of sewer pipelines, pump stations and related facilities. *Not open to students with credit in WWTR 132.*
CSU

134 PUMPS, MOTORS & VALVES 3 UNITS
(formerly WWTR 134)
3 hours lecture
Overview of the basic principles of mechanical equipment design, installation, operation, maintenance, repair, overhaul and replacement. Emphasis on understanding the value of preventative maintenance techniques such as equipment monitoring, lubrication analysis, machine alignment and scheduled overhaul. *Not open to students with credit in WWTR 134.*
CSU

204 APPLIED HYDRAULICS 3 UNITS
(formerly WWTR 104)
Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent
3 hours lecture
Study of the hydraulic principles involved in the operation of water and wastewater distribution and collection systems. The behavior of water in closed-conduit pressure systems and open channel delivery systems, and the types of facilities and infrastructure utilized in water and wastewater service and their operational characteristics will be explored. *Not open to students with credit in WWTR 104.*
CSU

206 ADVANCED ELECTRICAL & INSTRUMENTATION PROCESSES 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CWS 106 or equivalent
3 hours lecture
This course will be an advanced course in instrumentation, controls and SCADA industrial control systems. The focus will be on how these systems are used in the water and wastewater field. This course will cover PLC operations, usage and troubleshooting, how SCADA industrial control systems collect and store data, how the SCADA data historian works and is used by a water and wastewater utility. Finally, the course will look at intelligent equipment, communication standards and the underlying communication network.
CSU

207 PRACTICAL SKILLS IN WATER & WASTEWATER SYSTEMS 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in CWS 107 or equivalent
1.5 hours lecture, 1.5 hours Laboratory
This course provides practical hands-on experience with the equipment and materials commonly used in the water and wastewater industry. Students will become familiar with and learn the specific uses of each piece of equipment commonly utilized in water distribution and wastewater collection systems. Students will have the opportunity to participate in hands-on learning activities and lessons related to the installation and maintenance of equipment and tools used in the water and wastewater industry. This course will utilize the Field Operation Skills Yard (FOSY) to provide a realistic learning environment for the students.
CSU

210 ADVANCED LABORATORY ANALYSIS FOR WATER & WASTEWATER 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CWS 110 or equivalent course
3 hours lecture
Examines the fundamentals of laboratory analysis with an emphasis on applied chemical and microbiological procedures for water and wastewater plant operators. Includes procedures and techniques used in physical, chemical, bacteriological and biological examination of water/wastewater. Covers State Department of Public Health and Federal EPA, Clean Water and Safe Drinking Water Act regulations related to the operation of a water or wastewater laboratory. Completion of CWS 110 and CWS 210 provides the foundation knowledge and skills necessary to test for the California Water Environment Association (CWEA) Grade 1 Laboratory Analyst Certificate.
CSU

212 ADVANCED WATER TREATMENT PLANT OPERATIONS 3 UNITS
(formerly WWTR 117)
Prerequisite: "C" grade or higher or "Pass" in CWS 112 or equivalent
3 hours lecture
The study of water quality control and treatment. Aspects of public health as it relates to the water supply will be highlighted. Sources of contamination and methods of control will be emphasized as well as maintenance of water treatment facilities, safety, cost, and environmental factors. ***Not open to students with credit in WWTR 117.***
CSU

214 ADVANCED WASTEWATER TREATMENT PLANT OPERATIONS 3 UNITS
(formerly WWTR 120)
Prerequisite: "C" grade or higher or "Pass" in CWS 114 or equivalent
3 hours lecture
This course examines how modern wastewater treatment plants are operated to maximize efficiency and reliability in processing municipal wastewater. Emphasis on wastewater treatment plant facilities, equipment, preventative maintenance procedures, plant process monitoring & control, and safety & regulatory compliance. ***Not open to students with credit in WWTR 120.***
CSU

230 ADVANCED WATER DISTRIBUTION SYSTEMS 3 UNITS
(formerly WWTR 265)
Prerequisite: "C" grade or higher or "Pass" in CWS 130 or equivalent
3 hours lecture
The second of an integrated sequence of courses covering water distribution systems. Students will gain a more comprehensive understanding of the operation and maintenance of a water supply and distribution system including advanced calculations, management, safety, and emergency response issues. Contemporary issues facing the water and wastewater industry will be explored in depth. Expands on topics covered in the introductory course, WWTR 130. Part of a series required for eligibility to take the California Department of Public Health (CDPH) Water Distribution Operator certification examinations; prepares students to take and pass CDPH Water Distribution Operator certification examinations for grades D3, D4 and D5. ***Not open to students with credit in WWTR 265.***
CSU

232 ADVANCED WASTEWATER COLLECTION SYSTEMS 3 UNITS
(formerly WWTR 267)
Prerequisite: "C" grade or higher or "Pass" in CWS 132 or equivalent
3 hours lecture
Provides an in-depth understanding of the operation and maintenance of wastewater collection systems. Includes the design, operation, monitoring, maintenance and repair of collection systems and pump stations; equipment maintenance; safety and survival systems; and administration and organizational principles. ***Not open to students with credit in WWTR 267.***
CSU

268 MEMBRANE PLANT OPERATION 3 UNITS
(formerly WWTR 268)
Prerequisite: "C" grade or higher or "Pass" in CWS 112 or 114 or equivalent
3 hours lecture
Study of basic membrane technology and the application of this technology to water and wastewater treatment. This course explores the operation and maintenance of membrane components within a water and wastewater treatment system, as well as pre and post treatment. ***Not open to students with credit in WWTR 268.***
CSU

270 PUBLIC WORKS SUPERVISION 3 UNITS
(formerly WWTR 270)
Prerequisite: "C" grade or higher or "Pass" in CWS 101 or equivalent
3 hours lecture
Introduction to the principles and practices of modern supervision and management with an emphasis on contemporary issues facing supervisors and managers in the water utilities industry. ***Not open to students with credit in WWTR 270.***
CSU

280 BACKFLOW TESTER TRAINING 2 UNITS
(formerly WWTR 280)
1.5 hours lecture, 1.5 hours laboratory
Preparation for the American Water Works Association (AWWA) and the American Backflow Prevention Association (ABPA) certification for Backflow Prevention Assembly Tester Certification. Includes backflow device installation and testing procedures required for the certification testing. ***Not open to students with credit in WWTR 280.***
CSU

282 CROSS-CONNECTION CONTROL SPECIALIST 3 UNITS
(formerly WWTR 282)
3 hours lecture
Study of the administrative and technical procedures required for a cross-connection program, including system inspections, hazard evaluation, identification of cross-connection problems and backflow prevention devices, shut-down tests, and reclaimed water systems. ***Not open to students with credit in WWTR 282.***
CSU

284 CROSS-CONNECTION CONTROL SPECIALIST–RECYCLED WATER 3 UNITS
(formerly WWTR 284)
3 hours lecture
Study of the administrative and technical procedures concerning the production, use and distribution of recycled water including backflow protection, legal, administrative and permitting issues, the treatment process, health and safety aspects, and the cross-connection control (shut down) test as conducted in San Diego County. Various aspects of cross-connection control recycled water shut down testing will be demonstrated. ***Not open to students with credit in WWTR 284.***
CSU

290 COOPERATIVE WORK EXPERIENCE 1-4 UNITS
(formerly WWTR 290)
Recommended Preparation: Successful completion of at least three Water/Wastewater technology courses prior to enrolling in Cooperative Work Experience is highly recommended.
75 hours paid or 60 hours non-paid work experience per unit, 1-4 units
Practical application of principles and procedures learned in the classroom to the various phases of water and wastewater treatment, distribution or collection. Work experience will be paid or non-paid at appropriate curriculum-related work sites. Two on-campus sessions will be scheduled. ***Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 12 units. Not open to students with credit in WWTR 290 without instructor approval.***

CHEMISTRY (CHEM)

012 STRATEGIES FOR SUCCESS IN CHEM 102 INTRODUCTION TO GENERAL, ORGANIC AND BIOLOGICAL CHEMISTRY 1 UNIT
Corequisite: Concurrent enrollment in CHEM 102
3 hours laboratory
The purpose of this course is to review and reinforce the skills and knowledge necessary for success in CHEM 102 (Introduction to General, Organic & Biological Chemistry). Students will strengthen their abilities related to critical thinking strategies, time management skills, coupled with unique features of effective reading strategies in science, technical writing skills and mastery of basic chemistry skills critical to CHEM 102. **Pass/No Pass only. Non-degree applicable.**

020 STRATEGIES FOR SUCCESS IN CHEM 120 1 UNIT
Corequisite: Concurrent enrollment in CHEM 120
3 hours laboratory
The purpose of this course is to review and reinforce the skills and knowledge necessary for success in CHEM 120 (Preparation for General Chemistry). Students will strengthen their abilities related to critical thinking strategies, time management skills, coupled with unique features of effective reading strategies in science, technical writing skills and mastery of basic chemistry skills critical to CHEM 120. **Pass/No Pass only. Non-degree applicable.**

102 INTRODUCTION TO GENERAL, ORGANIC AND BIOLOGICAL CHEMISTRY 5 UNITS
Prerequisite: Appropriate mathematics placement
4 hours lecture, 3 hours laboratory
A one-semester course covering the basic principles of general, organic and biochemistry as needed to understand the biochemistry, physiology and pharmacology of the human body. Intended for students planning to transfer to a California State University nursing program. *Students with a grade of "C" or better in CHEM 115, 116 are not eligible for this class.*
AA/AS GE, CSU, CSU GE, IGETC, UC, UC credit limit

115 FUNDAMENTALS OF CHEMISTRY 4 UNITS
C-ID CHEM 101
Prerequisite: Appropriate mathematics placement
3 hours lecture, 3 hours laboratory
Elementary principles of inorganic and general chemistry with a brief introduction to organic and biochemistry. Previous chemistry background is not required. Recommended for students who need only a one-semester general chemistry course and for students entering paramedical and allied health fields. *Students will not receive credit toward graduation for more than one of the following courses: CHEM 115, 120.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

116 INTRODUCTORY ORGANIC AND BIOCHEMISTRY 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in CHEM 115 or equivalent
3 hours lecture, 3 hours laboratory
Study of carbon compounds with an emphasis on their structure, properties and reactivity. Introduction to the structure of the major classes of biomolecules–carbohydrates, lipids and proteins–and their relationship to the major classes of organic compounds.
AA/AS GE, CSU, CSU GE, IGETC, UC, UC credit limit

120 PREPARATION FOR GENERAL CHEMISTRY 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
3 hours lecture, 3 hours laboratory
Elementary principles of chemistry approached from a problem-solving perspective necessary to succeed in CHEM 141. Intensive study in the areas of problem solving, stoichiometry, chemical nomenclature, basic atomic theory and bonding, solutions, acid-base chemistry, redox reactions and gas laws. The laboratory will be an introduction to quantitative techniques, descriptive chemistry, gas laws, error analysis, and data treatment. *Students will not receive credit toward graduation for more than one of the following courses: CHEM 115, 120.*
AA/AS GE, CSU, CSU GE, IGETC, UC, UC credit limit

141 GENERAL CHEMISTRY I 5 UNITS
C-ID CHEM 110, 120S (with CHEM 142)
Prerequisite: "C" grade or higher or "Pass" in CHEM 120 or equivalent or the CHEM 141 assessment and "C" grade or higher or "Pass" in MATH 110 or equivalent
3 hours lecture, 6 hours laboratory
Basic principles and concepts of chemistry with an emphasis in the areas of stoichiometry, thermochemistry, atomic structure, chemical bonding and gas laws. The laboratory is an introduction to quantitative analysis and the principles of atomic and molecular structures.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

142 GENERAL CHEMISTRY II 5 UNITS
C-ID CHEM 120S (with CHEM 141)
Prerequisite: "C" grade or higher or "Pass" in CHEM 141 or equivalent
3 hours lecture, 6 hours laboratory
Basic principles and calculations of chemistry with emphasis in the areas of chemical and acid-base equilibrium, thermodynamics, descriptive chemistry of the periodic table, intermolecular forces, properties of liquids, solids and solutions, kinetics, electrochemistry, and coordination compounds. The laboratory is a continuation of CHEM 141 with the quantitative analysis of matter and also includes qualitative analysis.
CSU, CSU GE, IGETC, UC

231 ORGANIC CHEMISTRY I 5 UNITS
C-ID CHEM 150, CHEM 160S (with CHEM 232)
Prerequisite: "C" grade or higher or "Pass" in CHEM 142 or equivalent
3 hours lecture, 6 hours laboratory
First of a two semester organic chemistry sequence. Includes nomenclature of organic compounds, stereochemistry, reaction mechanisms, and the study of representative reactions for certain classes of organic compounds. The relationship of structure to properties, reactivity, and mechanism or reaction will be emphasized. This course is intended for biology, chemistry and pre-medical majors needing either one or two semesters of organic chemistry.
CSU, CSU GE, IGETC, UC

232 ORGANIC CHEMISTRY II 5 UNITS
C-ID CHEM 160S (with CHEM 231)
Prerequisite: "C" grade or higher or "Pass" in CHEM 231 or equivalent
3 hours lecture, 6 hours laboratory
Second of a two-semester sequence. The topics covered will include: structure and reactivity of carboxylic acids and their derivatives, amines and other nitrogen functional groups, aromatic compounds, heterocyclic compounds, polyfunctional compounds, conjugation and aromaticity, and multistep organic synthesis.
AA/AS GE, CSU, CSU GE, IGETC, UC

CHILD DEVELOPMENT (CD)

101 PARENT EDUCATION 1 UNIT
1 hour lecture
This course is primarily designed for parents of children enrolled in the Cuyamaca College Child Development Center. Includes an overview of child development principles and an exploration of the role of parents in supporting the development of their children. Provides guidance in effective parenting strategies reflecting family and cultural beliefs.
CSU

106 PRACTICUM: BEGINNING OBSERVATION AND EXPERIENCE 1 UNIT
Prerequisite: CD 123 or 125 or previous completion of either course with a "C" grade or higher or "Pass"
3 hours laboratory
Laboratory experience at an approved placement site that includes observing and recording the behavior of infant through preschool children and working directly with preschool children. Designed to reinforce and augment an understanding of principles and techniques for observing, assessing, planning and working with young children through direct experience.
CSU

115 CHANGING AMERICAN FAMILY 3 UNITS
3 hours lecture
Survey of the contemporary American family with an emphasis on changes in form, functions and expectations. The history of the family, both public and private, will be considered and examined in relation to the effects of class, ethnicity and social policy. The effects on the family of common life events experienced by individuals and family members will be covered including sexuality, mate selection, marriage, childbearing, the working family, divorce, domestic violence, and aging. The future of the family including implications for the individual and society will be discussed.
AA/AS GE, CSU, CSU GE, IGETC, UC

116 PARENT EDUCATION II 1 UNIT
1 hour lecture
Primarily designed for parents of children enrolled in the Child Development Center. This course builds on the basic foundation of child development principles and explores the role of parents in supporting the development of their children. Guidance techniques and effective parenting skills will be emphasized.
CSU

123 PRINCIPLES AND PRACTICES OF PROGRAMS AND CURRICULUM FOR YOUNG CHILDREN 3 UNITS
C-ID ECE 120
3 hours lecture
This course examines the theoretical principles of developmentally appropriate practices applied to programs and environments, with an emphasis on the key role of relationships, constructive adult-child interactions, and teaching strategies in supporting physical, social, creative, and intellectual development for all children. Content includes the historical roots of early childhood programs; the evolution of the professional practices promoting advocacy, ethics and professional identity; and the legal requirements for programs in California including Title 22 and Title 5.
CSU

124 INFANT AND TODDLER DEVELOPMENT 3 UNITS
3 hours lecture
Study of infants and toddlers, ages 0-3, focusing on the development of social-emotional, cognitive, language, and motor domains including variations due to linguistic, cultural, socioeconomic, and special needs. Emphasis is on development as it relates to care in a group setting. Theories and current issues related to group care and appropriate methods of guidance and socialization are examined. Focuses on the importance of the cultural context as it relates to meeting individual needs and building positive relationships with both child and family.
CSU

125 CHILD GROWTH AND DEVELOPMENT 3 UNITS
C-ID CDEV 100
3 hours lecture
The study of child growth and development from conception through adolescence as determined by the interaction of the biosocial, cognitive and social/emotional domains of development within the family and the cultural context with implications for raising successful adults. Observations of children of various ages are an integral part of this course.
AA/AS GE, CSU, CSU GE, IGETC, UC

126 ART FOR CHILD DEVELOPMENT 3 UNITS
3 hours lecture
This course covers the importance and value of creative art activities for young children with a focus on the variety of art media, and evaluation and selection of materials and strategies for incorporating art into an inclusive classroom environment. Students will participate in a variety of creative art experiences for infants, toddlers, preschool, and primary age children, including children with special needs. Theories of artistic development and creative expression through self-discovery will also be integral components of this course.
CSU

127 SCIENCE AND MATHEMATICS FOR CHILD DEVELOPMENT 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CD 125 or equivalent
3 hours lecture
Exploration of the importance and value of science and mathematics in programs for young children. Students will examine and apply theories, methods and materials to facilitate children's understanding and appreciation for the concepts of math and science with an emphasis on problem-solving skills and strategies. Includes California Preschool Foundations for Mathematics and Science and the construction and presentation of appropriate materials for young children including children with special needs.
CSU

128 MUSIC AND MOVEMENT FOR CHILD DEVELOPMENT 3 UNITS
3 hours lecture
Exploration of the importance and meaning of music and movement for infants, toddlers, and preschool children, including children with special needs. Areas emphasized will be listening skills, singing, movement education, and creating instruments.
CSU

129 LANGUAGE AND LITERATURE FOR CHILD DEVELOPMENT 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CD 125 or equivalent
3 hours lecture
Designed to help teachers build language opportunities into every curriculum area, and to explore methods and activities that foster language and emerging literacy skills for young children, including children with special needs. The course focus will include first and second language acquisition, techniques of storytelling and puppetry, the evaluation of children's literature, and reference to the California Preschool Learning Foundations.
CSU

130 CURRICULUM: DESIGN AND IMPLEMENTATION 3 UNITS
C-ID ECE 130
Recommended Preparation: "C" grade or higher or "Pass" in CD 123, 125, 126, 127, 128, 129, 131 or equivalent
3 hours lecture
Students will examine a variety of approaches to curriculum development, the essential role of play, and the teacher's role in supporting development and learning. The course will emphasize a co-constructive process of observation, implementation, and documentation for designing environments that generate meaningful, relevant learning that is responsive to the child in the context of family and culture. An overview of content areas, including language and literacy, social and emotional learning, sensory learning, art and creativity, math and science will be provided.
CSU

131 CHILD, FAMILY AND COMMUNITY 3 UNITS
C-ID CDEV 110
Recommended Preparation: "C" grade or higher or "Pass" in CD 123, 125 or equivalent
3 hours lecture
This course examines the socialization process, including the role families, school, media, peers, and the community play in children's development. Students will learn strategies to support children and families in a diverse society, including how to develop and maintain effective teacher and family relationships. Community resources and agencies that strengthen families will be examined. This course is required by the California Department of Social Services for teachers and directors.
AA/AS GE, CSU, CSU GE, IGETC, UC

132 OBSERVATION AND ASSESSMENT: FIELD EXPERIENCE SEMINAR 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CD 106, 123, 125, 126, 127, 128, 129, 131 and 130 or 143 or equivalent
Corequisite: CD 133 or 170
3 hours lecture
Seminar for students participating in field experience as student teachers in early childhood education programs. Students will develop skills in observation, authentic assessment and portfolio development for children, and positive communication and guidance skills for working with children and families. These skills will be implemented in CD 133 or 170. Reexamines professional ethics, responsibilities, and expectations of the work force, and explores strategies for job search.
CSU

133 PRACTICUM–FIELD EXPERIENCE: STUDENT TEACHING 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in CD 106, 123, 125, 126, 127, 128, 129, 130, 131 or equivalent
Corequisite: CD 132
75 hours paid or 60 hours non-paid work experience per unit
Under supervision at approved field placement sites, student teachers will design, implement, and evaluate curriculum experiences, apply previous coursework to make connections between theory and practice, demonstrate professional behavior, and build a comprehensive understanding of children in the group environment. Respectful workplace relationships among children and adults that serve as a foundation for co-construction of curriculum and positive guidance will be emphasized. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned.*
CSU

134 HEALTH, SAFETY AND NUTRITION OF YOUNG CHILDREN 3 UNITS
C-ID ECE 220
3 hours lecture
Strategies for applying holistic health, safety and nutrition in early childhood settings. Designed for teachers, parents or others who desire current information on concepts of health, safety and nutrition as it applies to children from infancy through school age. Covers laws, practices, and curriculum regarding physical and mental health, safety, fitness and nutrition. An emphasis on program planning will include collaboration with families and healthcare providers leading to the development of good habits, attitudes and responses promoting healthy and safe lifestyles.
CSU

136 ADULT SUPERVISION 3 UNITS
Recommended Preparation: 12 units of Child Development as defined by Title 22 licensing regulations: 3 units in Child Growth and Development (CD 125), 3 units in Child, Family and Community (CD 131), 6 units in Program Curriculum (CD 123 or 126 or 127 or 128 or 129 or 130)
3 hours lecture
This course provides an opportunity for students to develop skills in establishing and maintaining supportive working relationships with adults in early childhood settings. Students explore and practice strategies for positive communication strategies including team building, collaboration, and effective problem solving.
CSU

137 ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS I 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in 12 CD units as required by Title 22 licensing regulations: CD 125, 131 and 6 units in program curriculum (CD 123 and 126 or 127 or 128 or 129 or 130)
3 hours lecture
This course is designed for the beginning director of child care and preschool programs. It includes administrative tools, knowledge, and techniques needed to organize, open, and operate a child development facility. Topics include budget, management, regulatory laws, and development of school policies and procedures. This course meets the California Department of Social Services and California Department of Education requirement for child care and preschool program directors and supervisors.
CSU

138 ADMINISTRATION OF CHILD DEVELOPMENT PROGRAMS II 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CD 137 or equivalent
3 hours lecture
This course is designed for the experienced director of child care and preschool programs. The focus is on human relationships in the professional setting with an emphasis on political, fiscal, and working conditions and how they affect turnover and staff morale; support for families in the program, and managing personal growth and development.
CSU

141 WORKING WITH CHILDREN WITH SPECIAL NEEDS 3 UNITS
3 hours lecture
This course focuses on strategies for working with young children with special needs, including physical, intellectual, emotional, behavioral, and sensory challenges. The emphasis will be on developmentally appropriate inclusive practices, activities, materials, and environments, and developing strong relationships with families and community resources.
CSU

143 RESPONSIVE PLANNING FOR INFANT/TODDLER CARE 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CD 124 or 125 or equivalent
3 hours lecture
Examination of programs, philosophies and components of high quality group care for infants and toddlers. Students will develop planning skills for environments, experiences, and caregiving routines that are based on respectful relationships and needs of diverse children and families. Emphasis is on building relationships between the family, child and caregiver in the context of linguistic, cultural, socioeconomic, and individual family differences and special needs.
CSU

145 CHILD ABUSE AND FAMILY VIOLENCE IN OUR SOCIETY 3 UNITS
3 hours lecture
Students will examine child abuse and neglect, domestic violence, elder abuse, and community violence. Safety and self protection will be studied with an emphasis on how the classroom teacher, foster parents, and members of the general public can recognize, prevent, report, and intervene in cases of child abuse and domestic violence.
AA/AS GE, CSU, CSU GE, UC

153 TEACHING IN A DIVERSE SOCIETY 3 UNITS
C-ID ECE 230
3 hours lecture
Analysis of the many contexts and variables related to an individual's socialization process and how these factors impact one's work with children and families. Using an anti-bias approach, the class will examine and discuss topics related to ethnicity, religion, race, sex, disability and lifestyles as they are represented in our schools and society at large. Includes self reflection as a tool for personal growth. Students will better understand their own attitudes regarding diversity and will apply this knowledge to their work with children and families.
CSU

170 PRACTICUM: FIELD EXPERIENCE WITH INFANTS AND TODDLERS 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in CD 106, 123, 124, 125, 126, 127, 128, 129, and 143 or equivalent
Corequisite: CD 132 or previous enrollment
75 hours paid or 60 hours unpaid work experience per unit
Under supervision at an approved field placement site, students will participate in all classroom activities and will design and modify the environment, develop and supervise learning experiences, handle routines, and respond to individual and group needs of children under three years of age. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 unpaid hours per unit earned.*
CSU

210 WORKING WITH YOUNG CHILDREN WITH CHALLENGING BEHAVIORS 3 UNITS
3 hours lecture
This course provides a practical foundation for working with children with challenging behaviors in early childhood programs. Key components are developmentally appropriate guidance and proactive management techniques, preventative and intervention strategies, and adaptations of environment and settings. The importance of a child's developmental age, family involvement, and community resources will be included.
CSU

212 PRACTICUM IN EARLY CHILDHOOD EDUCATION 3 UNITS
C-ID ECE 210
Prerequisite: "C" grade or higher or "Pass" in CD 123, 125, 130, 131 or equivalent
2 hours lecture, 3 hours laboratory
In this course students will practice and demonstrate developmentally appropriate early childhood program planning and teaching competencies under the supervision of ECE/CD faculty and other qualified early education professionals. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Child-centered, play-oriented approaches to teaching, learning, and assessment, and knowledge of curriculum content areas will be emphasized as student teachers design, implement, and evaluate experiences that promote positive development and learning for all young children.
CSU

213 OBSERVATION AND ASSESSMENT 3 UNITS
C-ID ECE 200
3 hours lecture
This course focuses on the appropriate use of a variety of assessment and observation strategies to document child development and behavior. Child observations will be conducted and analyzed. The use of observation and assessment of children in planning, implementing, and evaluating early childhood curriculum and environments will be included.
CSU

COMMUNICATION (COMM)

110 INTRODUCTION TO MASS COMMUNICATION 3 UNITS
C-ID JOUR 100
3 hours lecture
Introduction to mass media practices and influences in the United States (and globally). Topics include current media practices, problems, issues, and significant trends with special emphasis on the ways media and society influence and change each other. The history of mass media theories, ethics, roles and responsibilities, contributions of diverse groups, gender issues, and legal rights and restrictions will be explored. Mass media contexts will include news advertising, public relations, photojournalism, newspapers, radio, television, film, recording industry, book publishing, network/cable and online communication.
AA/AS GE, CSU, CSU GE, IGETC, UC

120 INTERPERSONAL COMMUNICATION 3 UNITS
C-ID COMM 130
3 hours lecture
This course provides an opportunity to learn and apply in daily life principles of interpersonal communication, effective rhetorical strategies, and public speaking skills. Students present speeches and participate in structured oral and written exercises and simulations; these activities are designed to enhance communicative awareness and skills in interpersonal contexts. Emphasis is on personal, situational and cultural influences on interaction. It is designed to assist students in improving their own interpersonal and oral communication skills. Attention is given to rhetorical strategies, human perception, interpersonal dynamics, listening, conflict management, verbal and nonverbal communication skills including delivery of speeches in front of listeners.
AA/AS GE, CSU, CSU GE, IGETC, UC

122 PUBLIC SPEAKING 3 UNITS
C-ID COMM 110
3 hours lecture
Theory and techniques of public speaking in a democratic society. Discovery, development and criticism of ideas in public discourse through research, reasoning, organization, presentation, and evaluation of various types of speeches including informative and persuasive speeches.
AA/AS GE, CSU, CSU GE, IGETC, UC

123 ADVANCED PUBLIC SPEAKING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in COMM 122 or equivalent
3 hours lecture
Advanced training in the preparation and delivery of common types of public speaking. There is an emphasis on new theoretical approaches to the process of oral communication.
CSU, UC

124 INTERCULTURAL COMMUNICATION 3 UNITS
C-ID COMM 150
3 hours lecture
The purpose of this course is to explore and learn about intercultural communication: the study of face-to-face communication between people from different cultural backgrounds, including those reflecting national or ethnic diversity. This course will utilize a culture-general approach, meaning that the focus will be on general principles of intercultural communication that are applicable across a broad spectrum of cultures and contexts.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 FUNDAMENTALS OF HUMAN COMMUNICATION **3 UNITS**
3 hours lecture
A survey of the theory, basic principles, and methods of human communication with emphasis on improving speaking and listening in public speaking, interpersonal and group contexts.
AA/AS GE, CSU, CSU GE, IGETC, UC

135 ORAL INTERPRETATION OF LITERATURE **3 UNITS**
C-ID COMM 170
3 hours lecture
This course provides both a theoretical and a practical exploration of the oral interpretation of literature. Attention is given to art appreciation, art criticism, and analysis as it relates to the performance of literature in various genres. The oral interpretation of traditional literary genres of poetry, prose, and drama is practiced, as well as newer and more diverse modes of expression such as spoken word and other cultural forms of artistic expression. Emphasis is on the effective interpretation, communication, and evaluation and performance of various literary works.
AA/AS GE, CSU, UC

137 CRITICAL THINKING IN GROUP COMMUNICATION **3 UNITS**
C-ID COMM 140
3 hours lecture
This course is designed to assist students in the development of critical thinking and decision making skills in the small group communication context. There is an emphasis on the basic elements of critical thinking such as evidence, reasoning and language. Students will become familiar with leadership strategies, problem solving techniques, discussion plans, and conflict management as applicable in groups.
AA/AS GE, CSU, CSU GE, UC

145 ARGUMENTATION **3 UNITS**
C-ID COMM 120
3 hours lecture
Study of the construction and analysis of public argument. Covers the theory of argument, the processes and development of arguments, and the application of argument to decision making.
AA/AS GE, CSU, CSU GE, UC

238 SPEECH AND DEBATE COMPETITION I **1 UNIT**
1 hour lecture, 1 hour laboratory
This is the introductory course to intercollegiate forensics: Cuyamaca's Speech and Debate Team. It is designed to give students preparation procedures for competitive speech/debate tournaments. Students will learn the requirements for the four major areas of competitive speaking: public address, oral interpretation, impromptu/extemporaneous speaking, and debate. Students will be required to participate or observe at one tournament or public speaking activity.
CSU

239 SPEECH AND DEBATE COMPETITION II **2 UNITS**
2 hours lecture, 1 hour laboratory
This course is designed for students who wish to participate in intercollegiate speech and debate tournaments through the Cuyamaca Speech and Debate Team. Students will develop speech performance skills by selecting areas of emphasis which include public speaking, oral interpretation or debate events. Competition in at least one tournament or public speaking activity is required.
CSU

240 SPEECH AND DEBATE COMPETITION III **3 UNITS**
C-ID COMM 160B
2 hours lecture, 3 hours laboratory
This course is designed for students to develop speaking and argumentation skills and participate in multiple intercollegiate speaking competitions, festivals or public events as members of the Cuyamaca Speech and Debate Team. Emphasis is on group and oral performance for team competition at state and national tournaments. Students will focus on multiple events from parliamentary debate, platform speaking, extemporaneous speaking, or oral interpretations events. Competition at two or more tournament or public speaking activities is required.
CSU

241 SPEECH AND DEBATE COMPETITION IV **3 UNITS**
2 hours lecture, 3 hours laboratory
This course is designed for students who have competed in intercollegiate forensics tournaments and want to focus on one or more specific areas of emphasis as a member of the Cuyamaca Speech and Debate Team. Team leadership skills, debate theory, research analyzing political and social issues, directing and writing of readers theatre, and coaching skills, may be selected as possible focus areas. Competition at three or more tournaments or public speaking activities is required.
CSU

COMPUTER AND INFORMATION SCIENCE (CIS)

See Business Office Technology for specific Microsoft applications such as Word, PowerPoint, Excel, and Access.

101 FUNDAMENTALS OF INFORMATION TECHNOLOGY **1.5 UNITS**
1 hour lecture, 1.5 hours laboratory
Designed for beginners, no previous computer experience is required. This class introduces students to the various careers that IT has to offer. Students will explore PC Hardware, Operating Systems, Networking, Web design, Programming, Security through highly interactive laboratory exercises:
- Build a personal web page
- Build and secure a home or office network
- Identify computer components assemble a PC, and install an operating system
- Program lights, motors, and devices

When completed, students will have the ability to make informed decisions regarding their educational pathway toward a career in Information Technology.
CSU

105 INTRODUCTION TO COMPUTING **2 UNITS**
2 hours lecture
Introductory computing course for those desiring beginning computer knowledge and skills. Includes an overview of a typical personal computer system including input and output devices, the processor, and storage devices. Emphasis is on those skills and knowledge needed to use a home or small business computer.
CSU

110 PRINCIPLES OF INFORMATION SYSTEMS **4 UNITS**
C-ID BUS 140/ITIS 120
3 hours lecture, 3 hours laboratory
An introductory course in information technology with an emphasis on business and business-related applications. Concepts include computer organization, data processing systems, decision support systems, systems analysis and design. The laboratory component consists of hands-on problem solving using software applications including spreadsheets and databases.
CSU, CSU GE, UC

120 COMPUTER MAINTENANCE AND A+ CERTIFICATION **3 UNITS**
Recommended Preparation: Basic computer skills (basic knowledge of hardware, operating systems, applications software)
2 hours lecture, 3 hours laboratory
Preparation for the A+ Certification exam, an industry-sponsored test that establishes a benchmark level of knowledge and competence expected of computer service technicians in entry-level positions. A+ Certification also serves as the foundation for computer service professionals who are pursuing other valuable industry certifications such as the Cisco Certified Networking Associate (CCNA), Network+, and Microsoft Certified Professional (MCP). Students will gain a comprehensive knowledge base in computer hardware, DOS and Windows operating systems, networking basics, printers, and customer service. Hands-on labs using the latest computer components and operating systems provide an opportunity for students to enhance their skills in assembling, disassembling, servicing, troubleshooting, and upgrading advanced computer and networking systems.
CSU

121 NETWORK CABLING SYSTEMS **3 UNITS**
2 hours lecture, 3 hours laboratory
This course introduces students to the basic concepts of network cabling systems. It focuses on network cabling design, installation, testing, certification and troubleshooting. Students will develop knowledge and skills in installing and testing voice and data cable connectors and jacks, horizontal links and channels, pulling and terminating cables, cable system certification, telecommunications room design, and patch panel installation. The laboratory component allows students to verify concepts introduced in class and to develop the knowledge and skills required to build, test, operate and maintain the physical aspects of voice, video and data networks.
CSU

125 NETWORK+ CERTIFICATION **3 UNITS**
C-ID ITIS 150
Recommended Preparation: Basic computer skills (basic knowledge of hardware, operating systems, applications software)
2 hours lecture, 3 hours laboratory
Practical course intended for those interested in learning computer networking with an emphasis on earning the Computing Technology Industry Association's certification Network+, a foundation-level, vendor-neutral international industry credential that validates the knowledge of networking professionals. Earning this certification demonstrates that a candidate can describe the features and functions of networking components, and possesses the knowledge and skills needed to install, configure and troubleshoot basic networking hardware, protocols and services. It also indicates technical ability in the areas of media and topologies, protocols and standards, network implementation, and network support. Throughout the course, theory will be demonstrated and practiced in laboratory

exercises. Lectures, laboratories and practical assignments will emphasize skills needed to work effectively in the networking environment and to earn the Network+ certification.
CSU

140 DATABASES 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent
2 hours lecture, 3 hours laboratory
Beginning course in database software that provides a solid background in database applications and operation. Students will create, update and retrieve information using a computer and database software. Beneficial for those who wish to use the computer to file, organize, retrieve and create reports from data.
CSU

162 TECHNICAL DIAGRAMMING USING MICROSOFT VISIO 2 UNITS
Recommended Preparation: Basic computer skills
1 hour lecture, 3 hours laboratory
Networking and telecommunications professionals must know how to create technical diagrams and drawings, and use computer tools to manage Information Technology (IT) projects. Using Microsoft Visio, students will learn how to create basic and advanced networking and telecommunications diagrams and drawings, building plans, project schedules, and flow charts. Students will also learn how to visualize and create presentations of complex technical and business information systems. Challenging case studies will provide real-world technical and business experiences.
CSU

170 INTERNET OF THINGS (IOT) – CONNECTING THINGS 3 UNITS
2 hours lecture, 3 hours laboratory
From washing machines to sophisticated components of an airplane's jet engine, even organic items like crops and cows, nearly every object can now be connected to the Internet. The ability to connect things and capture useful data from these connections is transforming organizations in every industry and opening doors for new career specializations. This course is for people who love creating devices. From designing electronic circuits to writing code, the IoT (Internet of Things) provides the platform for various types of professionals. The goal of this course is to explore things and their connection to the IoT by conducting hands-on labs both individually and as a member of a team. Discover the basis of this exciting and emerging field using fun, hands-on activities to model securely connecting sensors to cloud services over IP networks and collecting data in an end-to-end IoT system. While an understanding of basic programming (such as PCAP: Programming Essentials in Python), networking and electronics knowledge is useful, it is not required.
CSU

172 INTERNET OF THINGS (IOT) SECURITY 3 UNITS
Prerequisite: Successful completion of CIS 170
2 hours lecture, 3 hours laboratory
The explosive growth of connected IoT devices enables the world's digitization, but also increases the exposure to security threats. You will use the latest technologies to perform vulnerability and risk assessments, then research and recommend risk mitigation strategies for common security threats in IoT systems. The world needs more skilled cybersecurity professionals. Adding IoT Security to your skillset differentiates you from other job candidates. Consider becoming an IoT Specialist in Network Security by combining this course with your CCENT/CCNA Routing & Switching and CCNA Security certifications. Or pair IoT Security with the CCNA Cybersecurity Operations certification and increase your employability with a deeper understanding of the anatomy of an attack and how to mitigate it.
CSU

190 WINDOWS OPERATING SYSTEM 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 120 or 125 or equivalent or current CompTIA A+ or N+ certification
2 hours lecture, 3 hours laboratory
Comprehensive hands-on application, use and training on a Windows client computer operating system for both beginning and intermediate level students preparing for the current Microsoft Certified Technology Specialist certification exam. Instruction will include: operating system installation and configuration, graphical user interface and command-line commands, hardware installation and configuration, file system management, user and group management, security configuration, network configuration and management, troubleshooting, and disaster recovery.
CSU

191 LINUX OPERATING SYSTEM 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 120 or 125 or equivalent or current CompTIA A+ or N+ certification
2 hours lecture, 3 hours laboratory
Comprehensive hands-on application, use and training on a Linux client computer operating system for both beginning and intermediate-level students. Instruction will include: operating system installation and configuration, graphical user interface and command-line commands, hardware installation and configuration, file system management, user and group management, security configuration, network configuration and management, troubleshooting and disaster recovery. Course maps to the Computer Technology Industry Association (CompTIA) Linux+ and Linux Professional Institute (LPI) Certification Level 1 certification exams.
CSU

201 CISCO ACADEMY – INTRODUCTION TO NETWORKING 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CIS 125 or equivalent
2 hours lecture, 3 hours laboratory
This is the first of four courses designed to provide knowledge, experience and skills in current and emerging networking technology. This course is also designed to help students prepare for the professional certification as a Cisco Certified Network Associate (CCNA). This course introduces you to fundamental networking concepts and technologies. In this course, you will learn both the practical and conceptual skills that build the foundation for understanding basic networking. Students will: examine human versus network communication and see the parallels between them; be introduced to the two major models used to plan and implement networks: OSI and TCP/IP; learn about network devices and network addressing schemes, and discover the types of media used to carry data across the network. This course maps to the current Cisco Certified Networking Associate curriculum version.
CSU

202 CISCO ACADEMY – ROUTING, SWITCHING, AND WIRELESS ESSENTIALS 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 201 or completion of CCNA1 Version 6 at another Cisco Networking Academy, or explicit instructor permission
2 hours lecture, 3 hours laboratory
This is the second of four courses designed to provide knowledge, experience and skills in current and emerging networking technology. This course is also designed to help students prepare for the professional certification as a Cisco Certified Network Associate (CCNA). Routing and Switching Essentials describes the architecture, components, and operations of routers and switches. Students learn how to configure basic router and switch functions necessary for planning and implementing small networks. By the end of this course, students will be able to configure routers and switches and troubleshoot common issues with the Routing Information Protocol (RIPv1, RIPv2, and RIPng), single-area Open Shortest Path First Protocol (OSPF), Dynamic Host Configuration Protocol (DHCP), Network Address Translation (NAT), Access Control lists (ACLs), Virtual Local Area Networks (VLANs), and inter-VLAN routing in both IPv4 and IPv6 networks. This course maps to the current Cisco Certified Networking Associate curriculum version.
CSU

203 CISCO ACADEMY – ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 202 or completion of CCNA2 Version 6 at another Cisco Networking Academy, or explicit instructor permission
2 hours lecture, 3 hours laboratory
This is the third of four courses designed to provide knowledge, experience and skills in current and emerging networking technology. This course is also designed to help students prepare for the professional certification as a Cisco Certified Network Associate (CCNA). Scaling Networks describes the architecture, components, and operations of routers and switches in larger and more complex networks. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with Open Shortest Path First (OSPF) protocol, Enhanced Interior Gateway Routing Protocol (EIGRP), First Hop Redundancy Protocols (HSRP), EtherChannel, and Spanning-Tree Protocol (STP) in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement a WLAN in a small-to-medium network. This course maps to the current Cisco Certified Networking Associate curriculum version.
CSU

204 CISCO CCNA SECURITY 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 203 or completion of CCNA3 Version 6 at another Cisco Networking Academy, or explicit instructor permission
2 hours lecture, 3 hours laboratory
This is the fourth of four courses designed to provide knowledge, experience and skills in current and emerging networking technology. This course is also designed to help students prepare for the professional certification as a Cisco Certified Network Associate (CCNA) using the current Cisco Academy curriculum. Connected Networks discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students will also develop the knowledge and skills needed to implement virtual private network (VPN) operations in a complex network.
CSU

205 IMPLEMENTING CISCO IP ROUTING (ROUTE) 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or successful completion of the current version of CCNA1, 2, 3 and 4 at another Cisco Networking Academy or possess a current CCNA.

2 hours lecture, 3 hours laboratory

This course covers topics necessary to successfully complete the Cisco Certified Networking Professional ROUTE certification. Skills necessary for implementing, monitoring, and maintaining routing services in an enterprise network will be enhanced. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions using a range of IPv4 and IPv6 routing protocols. Topics include: EIGRP (Enhanced Interior Gateway Routing Protocol); Multi-area OSPF (Open Shortest Path First) routing protocols; mechanisms for controlling routing updates and traffic; BGP (Border Gateway Protocol); and secure routing solutions. This lab-intensive course provides hands-on experience building and configuring complex networks using Cisco routers and switches.

CSU

206 CISCO NETWORKING ACADEMY VI 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 205 or equivalent

2 hours lecture, 3 hours laboratory

This course, combined with CIS 205 Cisco Networking Academy V, covers topics necessary to successfully complete the Cisco Certified Networking Professional ROUTE certification. Skills necessary for implementing, monitoring, and maintaining routing services in an enterprise network will be enhanced. Students will learn how to plan, configure, and verify the implementation of complex enterprise LAN and WAN routing solutions using a range of routing protocols in IPv4 and IPv6 environments. Continues using the CCNP ROUTE certification content learned in CIS 205 and introduces new topics: BGP (Border Gateway Protocol); secure routing solutions to support branch offices and mobile workers; introduction to IPv6; IPv6 addressing and routing; OSPFv3; IPv6 tunneling; and IPv4 to IPv6 translation. This lab-intensive course provides hands-on experience by performing case studies using Cisco networking devices.

CSU

207 CISCO NETWORKING ACADEMY VII 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or successful completion of the current version of CCNA1, 2, 3 and 4 at another Cisco Networking Academy or possess a current CCNA certification

2 hours lecture, 3 hours laboratory

Cisco Networking Academy VII–Switch is the fifth level of Cisco Networking Academy routing and switching courses and one of three courses for the Cisco Certified Networking Professional designation. Students will learn how to implement, monitor, secure, and maintain network switching solutions in converged enterprise campus networks. Campus Network Technologies include: Multilayer Switching, VLANs, VTP (VLAN Trunking Protocol), STP (Spanning Tree Protocol), Switch security techniques (Private VLANs, AAA, VACLs, IEEE 802.1X, and various IOS-based security methods), SPAN (Switched Port Analyzer), PAgP and LACP (EtherChannel, Link Aggregation Control Protocol), Inter-VLAN Routing, HSRP (Hot Standby Router Protocol), VRRP (Virtual Redundant Router Protocol), GLBP (Gateway Load Balancing Protocol), SNMP (Simple Network Management Protocol) and NTP (Network Time Protocol). This lab-intensive course provides hands-on learning and practice to reinforce configuration skills using Cisco networking devices.

CSU

208 CISCO NETWORKING ACADEMY VIII 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 205 and 207 or equivalent or successful completion of the current Cisco Networking Academy CCNP ROUTE and SWITCH courses at another Cisco Networking Academy or possess current CCNP ROUTE and SWITCH certifications

2 hours lecture, 3 hours laboratory

Cisco Networking Academy VIII–TSHOOT is the seventh level of Cisco Networking Academy courses and one of three courses for the Cisco Certified Networking Professional designation. Students will learn how to monitor and maintain complex enterprise routed and switched IP networks. Skills learned are based on systematic and industry recognized approaches to plan and execute regular network maintenance including support and troubleshooting network problems using technology-based processes and best practices. Troubleshooting topics include: processes for complex enterprise networks; tools and applications; campus switched solutions; routing solutions; addressing services; network performance issues; converged networks; network security implementations; and complex enterprise networks. This lab-intensive course provides hands-on learning and practice to reinforce troubleshooting skills using Cisco networking devices.

CSU

209 CISCO CYBEROPS 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 202 or equivalent or successful completion of the current version of CCNA1, and 2 at another Cisco Networking Academy or possess a current CCNA or CCENT certification

2 hours lecture, 3 hours laboratory

Designed for students seeking career-oriented, entry-level security specialist skills. Provides the technical knowledge and skill experience needed to prepare for entry-level security specialist careers. The CCNA Security curriculum blends classroom hands-on experience using Cisco routers, switches, ASAs and an online e-learning solution to develop an in-depth understanding of network security principles and security tools such as: protocol sniffers/analyzers, TCP/IP and common desktop utilities; Cisco IOS-based network security, administrative access security and Intrusion Prevention System (IPS); Cisco ASA Firewalls; AAA; and VPNs. Preparation for the Implementing Cisco Network Security (IINS) certification exam (210-260 IINS), leading to the CCNA CyberOps certification.

CSU

210 CISCO NETWORKING ACADEMY–VOICE 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in CIS 204 or equivalent or Cisco Networking Academy CCNA1, 2, 3, and 4 version 4 or version 5; or possess current CCNA certification

3 hours lecture, 3 hours laboratory

The Cisco Networking Academy–Voice course covers the topics aligned to the Introducing Cisco Voice and Unified Communications Administration (ICOMM v8.0) 640-461 professional certification exam. This course introduces students to the architecture, components, functionalities, and features related to Cisco Unified Communications. This is a lab-intensive course providing students with the hands-on experience necessary to perform tasks related to system monitoring, moves, additions and changes on Cisco Unified Communications Manager, Cisco Unified Communications Manager Express, Cisco Unity Connection, and Cisco Unified Presence.

CSU

211 WEB DEVELOPMENT I 3 UNITS

Recommended Preparation: Basic computer skills (ability to use the Internet, word process documents, manage electronic files)

2 hours lecture, 3 hours laboratory

This course is a hands-on overview of current web development. Emphasis will be placed on coding and debugging valid HTML and Cascading Style Sheets (CSS), but the course will also include design principles and introductory graphics to encourage attractive, usable design. Mobile development will be introduced. Student will use industry standard development environments to create websites.

CSU

213 WEB DEVELOPMENT II 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent

2 hours lecture, 3 hours laboratory

This course builds on the skills introduced in Web Development I (CIS 211) with hands-on projects that reinforce and further develop HTML5 and CSS3 expertise. Mobile development is addressed in detail. Also covered are content management systems, Search Engine Optimization (SEO), usability, and use of hosted and local servers.

CSU

215 JAVASCRIPT WEB PROGRAMMING 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent or one year verifiable HTML and CSS coding experience

2 hours lecture, 3 hours laboratory

JavaScript, the most popular web development language, works with HTML and CSS to add interactivity, special effects, and functionality to web pages. This introduction to JavaScript focuses on using JavaScript to develop practical front-end web components such as menus, slide shows, accordions, tabs, form validators, and date pickers. The foundation is set with JavaScript coding and syntax basics and quickly moves on to manipulating web page elements. Students then learn to work with JQuery and jQuery UI, free JavaScript libraries commonly used by web developers to simplify JavaScript programming. The course includes practical examples and hands-on assignments.

CSU

219 PHP/MYSQL DYNAMIC WEB-BASED APPLICATIONS 3 UNITS

Recommended Preparation: Prior experience with HTML/CSS coding, programming, and database development. These skills can be acquired by completing CIS 211, CIS 140, and any Computer Science course.

2 hours lecture, 3 hours laboratory

PHP, a popular server-side web development language, is used to develop web applications that collect data from HTML forms and store them in databases like MySQL. Examples include online stores and content driven sites like WordPress and Wikipedia. This introduction to PHP and MySQL provides the knowledge and skills necessary to develop dynamic web-based applications that allow users to create, read, update, and delete database data via web browser forms. Students will build practical web applications such as shopping carts, address books, and more.

CSU

225 WEB DEVELOPMENT CAPSTONE 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 211 or equivalent and completion of 15+ units with a "C" grade or higher or "Pass" from the following: CIS 140, 211, 213, 215, 219; GD 105, 126, 217
2 hours lecture, 3 hours laboratory
In this course, participants build professional quality websites, gaining the experience and work examples necessary to find employment in the field. The practical, hands-on work of the class will require participants to reinforce and synthesize learning from the Web Development degree core and explore topics too new or advanced for prior courses. Participants will be guided through project analysis, design, development, implementation and evaluation.
CSU

261 NSSA DEGREE CAPSTONE 2 UNITS
Prerequisite: Completion of 30+ units with a "C" grade or higher or "Pass" from the following courses: CIS 120, 121, 125, 140, 190, 191, 201, 202, 203, 204, 209, 210, 262, 263, 290, 291, 293, 294, 295, CS 119, 119L or equivalent
1 hour lecture, 3 hours laboratory
This Networking, Security and System Administration (NSSA) course allows students to verify skills and knowledge obtained in previous computer, networking, security, and telecommunications classes. Students will design, build, test, operate and maintain end-to-end converging and unified information and communication networks during the capstone's "hands-on" lab.
CSU

262 WIRELESS NETWORKING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 120, CIS 121, and CIS 125 or successful completion of CIS 201 or equivalent or possess current CCNA or CCNET certification or two years verifiable network administration experience
Recommended Preparation: "C" grade or higher or "Pass" in CIS 190, 202 or equivalent
2 hours lecture, 3 hours laboratory
Covers WLAN (Wireless Local Area Network) topics including basic wireless principles, wireless technology concepts, wireless networking devices, 802.11 antenna technology, and WLAN Security. Introduces 802.11 WLAN communication technologies available today. Along with learning wireless technology terms, concepts and principles, students will get hands-on experience configuring a variety of WLAN networking devices and topologies. The CWNA certification is the foundation level enterprise Wi-Fi certification for the Certified Wireless Network Professional (CWNP) program, and is required for the Certified Wireless Security Professional (CWSP) and Certified Wireless Networking Expert (CWNE) certifications.
CSU

263 FUNDAMENTALS OF NETWORK SECURITY 3 UNITS
C-ID ITIS 160
Recommended Preparation: "C" grade or higher or "Pass" in CIS 125 or 201 or equivalent, and "C" grade or higher or "Pass" in 190 or 191 or equivalent
2 hours lecture, 3 hours laboratory
Entry-level course in network security that addresses the various aspects of designing and implementing a secure network. Designed for students interested in understanding the field of network security and how it relates to other areas of Information Technology (IT). Covers materials included in the CompTIA (Computing Technology Industry Association) Security+ exam.
CSU

264 ETHICAL CYBERSECURITY HACKING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 263 or CIS 209
2 hours lecture, 3 hours laboratory
This course immerses IT Professionals in hands-on intensive environments, providing in-depth knowledge and experience with current essential security systems. Provides understanding of perimeter defenses and leads to scanning and attacking networks; no real networks are harmed. Students learn how intruders escalate privileges and the steps to be taken to secure a system. Also covers Intrusion Detection, Policy Creation, Social Engineering, DDoS Attacks, Buffer Overflows, and Virtual Creation. Focus includes legal and regulatory requirements, ethical issues, basic methodology and technical tools used for ethical hacking and penetration tests. Students establish a pre-test agreement with the enterprise, discover and exploit vulnerabilities, participate as a member of a pen test team and prepare a penetration test report.
CSU

265 COMPUTER FORENSICS FUNDAMENTALS 3 UNITS
Prerequisite: Completion of CIS 264 with grades of "C" or better
2 hours lecture, 3 hours laboratory
This course introduces the methods used to properly conduct a computer forensics investigation. Topics include ethics, computer forensics as a profession, the computer investigation process, operating systems boot processes and disk structures, data acquisition and analysis, technical writing, and a review of familiar computer forensics tools. The course prepares students for Computer Hacking Forensic Investigation certification (CHFI ECO 312-46).
CSU

267 DIRECTED WORK EXPERIENCE IN CIS 1-4 UNITS
Prerequisite: 12 units in CIS/CS courses related to field in which work experience is sought and current resume highlighting computer science or information system experience and course-related study
75 hours paid or 60 hours non-paid work experience per unit
Work experience at a designated industry site in an information and communication technology (ICT) occupation category for students seeking job experience in the ICT industry. ***Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 12 units.***
CSU

270 PALO ALTO NETWORK SECURITY I 3 UNITS
Recommended Preparation: CCNA 1-4, CCNA Security, Security +
2 hours lecture, 3 hours laboratory
The Palo Alto Academy course feature hands-on lab training using Palo Alto Networks® next-generation firewalls. This course maps to certification exams that validate proficiency in managing Palo Alto Networks next-generation firewalls. Students learn the fundamentals of cybersecurity and identify the concepts required to recognize as well as mitigate attacks against enterprise networks and mission-critical infrastructure; general concepts involved in maintaining a secure network computing environment; students evaluate cybersecurity principles and demonstrate how to secure a network computing environment through the application of security controls. Students will learn the nature and scope of today's cybersecurity challenges, strategies for network defense and detailed information about next-generation cybersecurity, students will also deploy a variety of security methodologies as well as technologies and concepts used for implementing secure network environments. Students will gain a general understanding of how to install, configure and manage firewalls for the defense of enterprise network architecture. Students will also learn the theory and steps for setting up the security, networking, threat prevention, logging and reporting features of next-generation firewalls. This course is aligned with the U.S. National Initiative for Cybersecurity Education (NICE) framework.
CSU

271 PALO ALTO NETWORKS – CERTIFIED NETWORK SECURITY ADMINISTRATOR (PCNSA) 3 UNITS
Recommended Preparation: CIS 270
2 hours lecture, 3 hours laboratory
Cybersecurity has become an essential survival skill for the modern world. The ability to secure information networks is increasing in demand every day. The Palo Alto Networks firewalls have become the industry standard for front-line Cybersecurity appliances. This course is designed to teach students to configure and manage next-generation firewalls. This is the second course in a series of three that trains students to become Network Security professionals. Students will learn to build and deploy Global Protect systems, manage and maintain high availability firewall protection, and monitor network traffic. Upon completion, students will be prepared to take the PCNSA exam for certification.
CSU

272 – PALO ALTO NETWORKS FIREWALL CONFIGURATION, MANAGEMENT, AND THREAT PREVENTION 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 270 and CIS 271 or equivalent
2 hours lecture, 3 hours laboratory
Palo Alto Networks firewalls are leaders in Cybersecurity. This is the third course designed to teach students how to plan for security, design and implement Palo Alto firewalls for optimum protection. Students will learn to build and deploy high availability firewalls for the defense of Enterprise network architecture. Students will also learn features necessary for setting up traffic handling, advanced content and user identification, quality of service, GlobalProtect, monitoring and reporting, and high availability of next-generation firewalls. This course prepares students to take the Palo Alto Certified Network Security Engineer (PCNSE) exam.
CSU

290 WINDOWS SERVER– INSTALLING AND CONFIGURING 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in CIS 190 or equivalent or current Microsoft Certified Technology Specialist (MCTS) 70-680 certification
1 hour lecture, 3 hours laboratory
Comprehensive hands-on system administration course focusing on the installation, initial implementation, and configuration of Windows server software core services, including: Active Directory (AD) Domain Services, local storage, file and print services, group policy and server virtualization technologies.
CSU

291 LINUX SYSTEM ADMINISTRATION **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in CIS 191 or equivalent
2 hours lecture, 3 hours laboratory
Comprehensive hands-on application and instruction in multi-user, multi-tasking operating systems and networked operating systems. Topics include: operating system installation and configuration, storage configuration and management, server security configuration, user and group management, configuration and management of various server roles (such as LDAP, DNS, DHCP, Print, Mail, Samba, Apache), troubleshooting, and disaster recovery. Course maps to the Linux Professional Institute (LPI) Certification Level 2 exam.
CSU

293 WINDOWS SERVER–ADMINISTERING **2 UNITS**
Prerequisite: "C" grade or higher or "Pass" in CIS 190 or equivalent or current Microsoft Certified Technology Specialist (MCTS) 70-680 certification
1 hour lecture, 3 hours laboratory
Comprehensive hands-on system administration course focusing on the administration tasks essential to administering a Windows server infrastructure, including: user and group management, network access, and data security.
CSU

294 WINDOWS SERVER–ADVANCED CONFI GURATION **2 UNITS**
Prerequisite: "C" grade or higher or "Pass" in CIS 190 or equivalent or current Microsoft Certified Technology Specialist (MCTS) 70-680 certification
1 hour lecture, 3 hours laboratory
Comprehensive hands-on system administration course focusing on advanced Windows server configuration tasks, including: fault tolerance, certificate services, and identity federation.
CSU

295 VMWARE CERTIFIED PROFESSIONAL **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in CIS 290 or 291 or equivalent or two years verifiable server administration experience
2 hours lecture, 3 hours laboratory
Comprehensive hands-on instruction on enterprise level data center virtualization. Topics include: concepts of Data Center Virtualization; common IT virtualization challenges faced by organizations; and installation, configuration, and management of VMware vSphere (which consists of VMware ESXi and VMware vCenter Server). Course maps to the current VMware Certified Professional exam.
CSU

COMPUTER SCIENCE (CS)

119 PROGRAM DESIGN AND DEVELOPMENT **3 UNITS**
C-ID COMP 112 (with CS 119L)
Corequisite: CS 119L
Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent
3 hours lecture
Introductory course in program design and development using Java or other object-oriented programming language to serve as a foundation for more advanced programming, computer science or networking courses. Emphasizes the development of problem-solving skills while introducing students to computer science through the use of a modern object-oriented programming language. Devotes attention to the development of effective software engineering practices emphasizing such principles as design decomposition, encapsulation, procedural abstraction, testing and software reuse. Students will learn and apply standard programming constructs, problem-solving strategies, the concept of an algorithm, fundamental data structures, the machine representation of data, introductory graphics and networking.
CSU, UC

119L PROGRAM DESIGN AND DEVELOPMENT LAB **1 UNIT**
C-ID COMP 112 (with CS 119)
Corequisite: CS 119
Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent
3 hours laboratory
Laboratory tutorials, drills and programming problems designed to help students master the concepts and programming projects presented/assigned in CS 119.
CSU, UC

165 ASSEMBLY LANGUAGE AND MACHINE ARCHITECTURE **4 UNITS**
C-ID COMP 142
Prerequisite: "C" grade or higher or "Pass" in CS 181, CS 182 or equivalent, or experience programming in C/C++ or Java
3 hours lecture, 3 hours laboratory
This introductory course covers organization and behavior of real computer systems at the assembly-language level. Topics covered include number theory, registers, memory, CPU, linkers, debuggers, basic language syntax and high-level language/operating system interface. This course is intended for persons with a prior background in any other programming language and will emphasize those applications not easily performed using higher-level languages.
CSU, UC

175 MECHATRONICS: INTRODUCTION TO MICROCONTROLLERS AND ROBOTICS **3 UNITS**
2 hours lecture, 3 hours laboratory
Mechatronics is the combination of mechanical, electronic, and computer engineering to create automatic "intelligent" devices. Microcontrollers offer an easy and flexible way to do this. This course introduces the use of microcontrollers to operate motors, lights, and other electromechanical devices in response to inputs from sensors. Application of these ideas through the development of an autonomous robot. *Also listed as ENGR 175. Not open to students with credit in ENGR 175.*
CSU, UC

176 MECHATRONICS: PROTOTYPE DESIGN **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in CS 175 or ENGR 175 or equivalent
2 hours lecture, 3 hours laboratory
This course focuses on electromechanical product development. Control of single chip microcontrollers including memory-mapped I/O (Input/Output), direct access to registers, and fine control of timing. Development of custom circuits including manufacture of printed circuits. Control of DC and AC motors and stepper motors. Development of mechanisms and transmissions. Introduction to manufacturing techniques. This course includes a capstone design project. *Also listed as ENGR 176. Not open to students with credit in ENGR 176.*
CSU, UC

181 INTRODUCTION TO C++ PROGRAMMING **4 UNITS**
C-ID COMP 122
Recommended Preparation: "C" grade or higher or "Pass" in CS 119 or equivalent, and intermediate algebra
3 hours lecture, 3 hours laboratory
Introduction to computer programming using a C family language. Students with no previous programming experience in C++ will learn computer organization and operation, binary representation of information, how to plan and create well-structured programs, write programs using sequence, selection and repetition structures, and create and manipulate sequential access files, structs, classes, pointers and arrays.
CSU, UC

182 INTRODUCTION TO JAVA PROGRAMMING **4 UNITS**
C-ID COMP 122
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in CS 119 or equivalent or experience programming in C++ or Java
3 hours lecture, 3 hours laboratory
Introductory course in the basics of the Java programming language focusing on object oriented methodology. Topics include classes, methods, parameters, arrays, modularity, abstraction, exception handling, and stream and file I/O. In addition to writing and using new classes, students will utilize the AWT and/or Swing libraries of classes. Basic inheritance and mobile application programming are introduced.
CSU, UC

240 DISCRETE STRUCTURES **3 UNITS**
C-ID COMP 152
Prerequisite: "C" grade or higher or "Pass" in CS 181, CS 182 or equivalent, or experience programming in C/C++ or Java
3 hours lecture
This course is an introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: Functions, Relations and Sets; Basic Logic; Proof Techniques; Basics of Counting; Graphs and Trees; and Discrete Probability.
CSU, CSU GE, UC

281 INTERMEDIATE C++ PROGRAMMING AND FUNDAMENTAL DATA STRUCTURES **4 UNITS**
C-ID COMP 132
Prerequisite: "C" grade or higher or "Pass" in CS 181 or equivalent
3 hours lecture, 3 hours laboratory
Continuation of CS 181. Provides the programmer with professional training in memory management, documentation, structured programming, and programming to professional standards using C++. Explores some of the more advanced concepts of preprocessing, low-level data objects, recursion, and dynamic data structures including linked lists, stacks, queues and trees. Laboratory instruction includes program development and execution.
CSU, UC

282 INTERMEDIATE JAVA PROGRAMMING AND FUNDAMENTAL DATA STRUCTURES **4 UNITS**
C-ID COMP 132
Prerequisite: "C" grade or higher or "Pass" in CS 182 or equivalent
3 hours lecture, 3 hours laboratory
Continuation of CS 182. Implement and analyze a variety of data structures and the algorithms used with those data structures, and create abstract data types and learn how and when to utilize them. Fundamental data structures include multidimensional arrays, linked lists,

stacks, queues, heaps, trees, and hash tables; learn when to use which of the available dynamic memory data structures. Tools for analyzing and predicting run time and memory usage are introduced, as is Big-O notation. A variety of sort algorithms are reviewed and analyzed for best, worst, and average case performance, and are compared with tree traversal algorithms. Develop increased sophistication in object-oriented basics such as inheritance, encapsulation, design of abstract data types and polymorphism, and gain experience by working on larger programs and managing large, multi-programmer projects. Laboratory instrtuction includes program development and execution. Mobile and database applications will be introduced.
CSU, UC

COUNSELING (COUN)

095 ACADEMIC AND FINANCIAL AID PLANNING .5 UNIT
.5 hour lecture
This course will familiarize students with: (a) financial aid resources available to them to meet educational expenses; (b) Cuyamaca College's Financial Aid Satisfactory Academic Progress Policy; (c) federal/state regulations for determining and maintaining eligibility for financial aid eligibility; (d) the student's rights and responsibilities in receiving aid. **Pass/No Pass only. Non-degree applicable.**

101 INTRODUCTION TO COLLEGE .5-1 UNIT
.5-1 hour lecture
An introductory course designed to assist students with a successful transition to college. An overview of student responsibilities, college expectations, college and career success strategies will be discussed. Students will learn about the college; its facilities, services, academic regulations, general education requirements, and certificate, degree and transfer options. Students will receive preliminary guidance in education planning. **Pass/No Pass only. Non-degree applicable.**

110 CAREER DECISION MAKING 1 UNIT
1 hour lecture
Utilization of a group seminar structure to explore and research various career and major options. Lecture, group discussion, experiential activities, and vocational assessment tools will be utilized to assist students in identifying their individual interests, values, and personality styles. Students will conduct educational and career research to relate their vocational assessment results to setting academic and career goals.
CSU

120* COLLEGE AND CAREER SUCCESS 3 UNITS
3 hours lecture
This course teaches success strategies to enhance academic and lifelong learning. The course also discusses the importance of looking at the human being as an integrated physiological, social and psychological organism. Students will explore personality types and examine their own interests and values as a way to increase self-understanding and select an appropriate major and career. Students will identify their learning style and apply psychological principles of learning, memory, motivation and stress management to academic study strategies. Students will also apply life management techniques, such as time and money management, to accomplish personal goals. Students will examine the adult stages of development and develop a plan for wellness and living a long and healthy life. Additionally, students will be given the opportunity to practice creative and critical thinking techniques.
CSU, CSU GE, UC

130 STUDY SKILLS AND TIME MANAGEMENT 1 UNIT
1 hour lecture
Designed to prepare students to adjust to the academic community by learning to plan and study effectively within given time limitations. Strategies include: time management, goal setting, textbook mastery, library research skills, note-taking, exam preparation, stress reduction, and educational planning.
CSU

140 SELF AWARENESS AND INTERPERSONAL RELATIONSHIPS 3 UNITS
3 hours lecture
This course analyzes the cognitive, behavioral, humanistic, and existential theories as they relate to the awareness of the self and the dynamics of healthy relationships. Using many of the skills suggested by the above theories, students will define and utilize personal achievement techniques, basic principles of healthy functioning, and effective coping strategies that facilitate the process of intra and interpersonal change and relationships. Utilizing the major theories in the field of psychology and psychotherapy, the development of a healthy and strong identity and an empowered sense of self will be explored.
CSU, CSU GE

150* TRANSFER SUCCESS 1 UNIT
1 hour lecture
This course provides the information needed for a student to transfer to a baccalaureate institution, including strategies to achieve academic success and research skills essential to developing a comprehensive educational plan. Topics include the community college transfer process, selection of major, student support services, comparing and contrasting a variety of universities, and clarification of one's educational goal.
CSU, UC

*120 and 150 combined; maximum UC credit, one course

ECONOMICS (ECON)

110 ECONOMIC ISSUES AND POLICIES 3 UNITS
3 hours lecture
A one-semester course that provides general elementary knowledge of basic economic concepts and serves as an introduction to more advanced economics courses. Surveys current economic subjects including consumer economics, inflation, recession, competition, monopoly, world trade and competing economic systems. *Not open to students with credit in ECON 120 or 121.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

120 PRINCIPLES OF MACROECONOMICS 3 UNITS
C-ID ECON 202
Prerequisite: Appropriate mathematics placement
3 hours lecture
Introductory course focusing on aggregate economic analysis. Topics include: market systems; economic cycles including recession, unemployment and inflation; national income accounts; macroeconomic equilibrium; money and financial institutions; monetary and fiscal policy; and international trade and finance. Includes some use of graphs and elementary algebra.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 PRINCIPLES OF MICROECONOMICS 3 UNITS
C-ID ECON 201
Prerequisite: Appropriate mathematics placement
3 hours lecture
Principles of economic analysis and decision-making from the viewpoint of the individual consumer, worker, and firm. Focuses on the price system allocation of resources and income, supply and demand analysis, the structure of American industry, and applications to current economic policy and problems. Includes some use of graphs and elementary algebra.
AA/AS GE, CSU, CSU GE, IGETC, UC

EDUCATION (ED)

151 EFFECTIVE TUTORING STRATEGIES 1 UNIT
1 hour lecture
This course is designed to prepare students for tutoring college students. Provides an overview of effective learner-centered, process oriented, tutoring strategies and practices. Topics include basic study skills, the tutoring cycle, learning styles, learning disabilities, behaviors and stresses that affect learning, communication skills, and diversity/cultural awareness. Students interested in working in the Tutoring Center must have a grade of "B" or higher in subject matter to qualify. **Pass/No Pass only. Non-degree applicable.**

200 TEACHING AS A PROFESSION 3 UNITS
C-ID EDUC 200
3 hours lecture
This course introduces students to the concepts and issues related to teaching diverse learners in today's contemporary schools, kindergarten through grade 12 (K-12). Career exploration, historical and philosophical foundations of education, critical issues, California's content standards and frameworks, teaching performance standards, and conditions for effective learning are discussed. A minimum of 45 hours of structured fieldwork in public school elementary classrooms that represent California's diverse student population, and includes cooperation with at least one carefully selected and campus-approved certificated classroom teacher is required. *Limitation on enrollment: must meet health and safety requirements for public school field experience placement.*
CSU, UC

ELECTRONICS TECHNOLOGY (ET)

110 INTRODUCTION TO ELECTRICITY AND ELECTRONICS 4 UNITS
3 hours lecture, 3 hours laboratory
This course includes the laws of physics as they relate to electricity and electronics. Topics include the history of electrical science, atomic structure, basic electrical laws, DC and AC circuits, semiconductors, integrated circuits, amplifiers, waveforms, electrical test equipment, circuit construction, and electrical safety. Knowledge of basic algebra and how to use scientific calculators is highly desirable.
AA/AS GE, CSU, CSU GE

ENGINEERING (ENGR)

***UC credit limit: all CADD courses, ENGR 119, ENGR 129, OH 200, OH 201 combined: maximum credit, one course**

100 INTRODUCTION TO ENGINEERING AND DESIGN 4 UNITS

C-ID ENGR 110

3 hours lecture, 3 hours laboratory

Introduction to engineering as a way of perceiving the world. Overview of design and analytical techniques, problem solving and strategic thinking, disciplines, and ethics. Fundamentals of engineering graphics as a universal language and application to the visualization, representation, and documentation of designed artifacts, including orthographic projections, pictorial, section, and detail views; creation of basic to intermediate solid parts and assemblies; dimensioning and tolerancing practices; thread notation per ASME Y14.5M-1994. This course covers the principles of engineering drawings in visually communicating engineering designs, and an introduction to solid modeling and computer-aided design (CAD). Assignments develop technical sketching and 2D and 3D CAD skills. The use of solid modeling CAD software (SolidWorks and Creo Parametric) is an integral part of the course, as is the production of physical prototypes using 3D printing and other techniques. This course focuses on the design process and on spatial reasoning and visualization.

AA/AS GE, CSU, UC

119 BASIC ENGINEERING CAD 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent

Recommended Preparation: Working knowledge of basic computer operations and file administration

2 hours lecture, 4 hours laboratory

CAD (Computer-Aided Drafting) fundamentals for engineers. Basic drawing techniques and commands in AutoCAD. Includes geometric construction, multiview and singleview projections, section views, dimensions, and text. *Not open to students with credit in CADD 120, 120ABCD.*

*CSU, *UC credit limit*

120 ENGINEERING COMPUTER APPLICATIONS 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent or concurrent enrollment

2 hours lecture, 3 hours laboratory

Use of computerized mathematical analysis, computer programming, and computer graphics as tools for solving engineering problems.

CSU, UC

125 SOLID MODELING DESIGN 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent

Recommended preparation: Working knowledge of basic computer operations and file administration

2 hours lecture, 4 hours laboratory

This is advanced graphic communication course using solid modeling techniques. This course covers feature based solid part construction including extrudes, cuts and revolves; advanced surface shaping using lofts and sweeps. This also covers assembly construction and constraining in an engineering design environment. Students learn how to produce technical/engineering drawing including proper layout of component drawing views, sectioning and detailing. Threads and fasteners are also included in this course. Dimensioning and tolerancing will be taught in accordance with ANSI standard. Introduction to 3D printing technology (aka Additive Manufacturing) is part of this course. SolidWorks software is used throughout the course. *Also listed as CADD 125. Not open to students with credit in CADD 125.*

CSU, UC credit limit

129 ENGINEERING SOLID MODELING 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent

2 hours lecture, 4 hours laboratory

Advanced 3D computer-aided mechanical design and drafting. This parametric modeling course provides skills and knowledge of appropriate software (Creo Parametric) and feature based part construction using extrudes, cuts, revolves, lofts and sweeps. Students will enhance their skills in model assembly and assembly drawings including proper organization and layout of component drawing views, dimensioning and tolerancing, sectioning and detailing. 3D printing technology (additive manufacturing) is integrated to this course. *Also listed as CADD 129. Not open to students with credit in CADD 129.*

*CSU, *UC credit limit*

175 MECHATRONICS: INTRODUCTION TO MICROCONTROLLERS AND ROBOTICS 3 UNITS

2 hours lecture, 3 hours laboratory

Mechatronics is the combination of mechanical, electronic, and computer engineering to create automatic "intelligent" devices. Microcontrollers offer an easy and flexible way to do this. This course introduces the use of microcontrollers to operate motors, lights, and other electromechanical devices in response to inputs from sensors. Application of these ideas through the development of an autonomous robot. *Also listed as CS 175. Not open to students with credit in CS 175.*

CSU, UC

176 MECHATRONICS: PROTOTYPE DESIGN 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CS 175 or ENGR 175 or equivalent

2 hours lecture, 3 hours laboratory

This course focuses on electromechanical product development. Control of single chip microcontrollers including memory-mapped I/O (Input/Output), direct access to registers, and fine control of timing. Development of custom circuits including manufacture of printed circuits. Control of DC and AC motors and stepper motors. Development of mechanisms and transmissions. Introduction to manufacturing techniques. This course includes a capstone design project. *Also listed as CS 176. Not open to students with credit in CS 176.*

CSU

182 WORK EXPERIENCE IN ENGINEERING TECHNOLOGY 1-3 UNITS

Prerequisite: Completion of a minimum of 10 units in an engineering technology program (e.g., CADD Technology, Mechatronics) and recommendation from engineering or CADD instructor. Must meet state guidelines for work experience.

75 hours paid or 60 hours non-paid work experience per unit

Students who are employed in the engineering technology industry full-time or part-time (paid or unpaid) and able to work the minimum required hours during the semester are eligible to enroll in this course. Assessment of student will be performed by instructor in discussion with appropriate supervisor at place of employment. Students will further develop skills attained in the classroom setting. *Preregistration counseling with the instructor is required. Occupational cooperative work experience may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned.*

CSU

199 SPECIAL STUDIES OR PROJECTS IN ENGINEERING 1-3 UNITS

48-54 hours (1 unit), 96-108 hours (2 units), 144-162 hours (3 units)

Individual study, research or projects under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and the Office of Instruction. ***May be repeated with different content for a maximum of 9 units.***

(see catalog page 40, 199 Courses-Special Studies)

200 ENGINEERING MECHANICS–STATICS 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in PHYC 190 or equivalent

Corequisite: MATH 280 or previous enrollment

3 hours lecture

Engineering applications of the principles of: static equilibrium of force systems acting on particles and rigid bodies; structural analysis of trusses, frames, and machines; forces in beams; dry friction; centroids and moments of inertia.

CSU, UC

210 ELECTRIC CIRCUITS 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 280, PHYC 200 or equivalent

3 hours lecture, 3 hours laboratory

Fundamentals of electrical circuits for engineers. Includes both DC and AC analysis. Concepts include Kirchhoff's laws, nodal and mesh analysis, linearity and superposition, Thevenin's theorem, ideal and real operational amplifiers, step response of first and second order RLC circuits, complex impedance, steady-state sinusoidal AC circuits, and AC power. Laboratory work supports the theory and introduces basic lab practices and tools (e.g., oscilloscopes and signal generators).

CSU, UC

218 PLANE SURVEYING 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 170 or MATH 176, or equivalent or concurrent enrollment

2 hours lecture, 6 hours laboratory

Use, care and adjustment of surveying instruments. Fundamental surveying methods, traverse measurements, and area computations. Introduction to horizontal and vertical curves, stadia, and construction layout. Introduction to topographic mapping. Earth work computations. *Also listed as SURV 218. Not open to students with credit in SURV 218.*

CSU, UC

220 ENGINEERING MECHANICS–DYNAMICS 3 UNITS

C-ID ENGR 230

Prerequisite: "C" grade or higher or "Pass" in ENGR 200 or equivalent

3 hours lecture

Motion of particles, particle systems and rigid bodies, and the effects thereon of applied forces and moments. Newtonian laws of motion, work and energy; linear and angular momentum. Application to engineering problems.

CSU, UC

260 ENGINEERING MATERIALS 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in PHYC 190 or equivalent

Corequisite: CHEM 141 or previous enrollment

3 hours lecture

Atomic and molecular structure of materials used in engineering. Analysis of the relationships

between structure of materials and their mechanical, thermal, electrical, corrosion and radiation properties, together with examples of specific application to engineering problems.
CSU, UC

270 DIGITAL DESIGN 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 175 or 176 or equivalent
3 hours lecture, 3 hours laboratory
Modeling, analysis, simulation, design and construction of combinational and sequential digital logic systems and networks.
CSU, UC

ENGLISH (ENGL)

020 SUPPORT FOR FRESHMAN COMPOSITION 1 UNIT
Prerequisite: Appropriate Placement
Corequisite: Concurrent enrollment in English 120
1 hour lecture
This course is designed to review and reinforce the skills necessary to be successful in English 120 (freshman composition). Students will study the elements and principles of composition through the practice of editing and revising narrative, expository, and argumentative essays. Students will also be introduced to effective reading skills and strategies necessary for the reading of college level material. **Pass/No Pass only. Non-degree applicable.**

099 ACCELERATED PREPARATION FOR COLLEGE READING, REASONING, AND WRITING 5 UNITS
5 hours lecture
The course is designed to prepare students for college-level academic reading, reasoning, and writing expected in transfer and associate-degree courses. Students will engage in the essential practice of academic inquiry and practice the writing process with an emphasis on effective expression of ideas. Readings will be studied for form and content in order to enhance critical thinking skills. In a highly supported learning environment, students will develop critical reading, reasoning, and writing strategies and skills to help them engage in research and write academic essays by using and acknowledging multiple sources. **Non-degree applicable.**

120 COLLEGE COMPOSITION AND READING 3 UNITS
C-ID ENGL 100
Prerequisite: "C" grade or higher or "Pass" in ENGL 099 or ESL 2B or equivalent or assessment
3 hours lecture, 1 hour laboratory
Freshman composition course. Students study the elements and principles of composition through the practice of writing expository essays and a research paper. Emphasizing the reading and writing processes, revision is stressed as a means of achieving effective skills in reading and writing college-level texts. Analysis of assigned readings stimulate critical thinking and serve as models of effective writing. Emphasis is on using outside sources as evidence in students' argumentative essays and documenting source material in MLA format. The course allows students to develop metacognitive awareness of the role writing plays in their lives.
AA/AS GE, CSU, CSU GE, IGETC, UC

122 INTRODUCTION TO LITERATURE 3 UNITS
C-ID ENGL 120
Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
Introduces literature through the reading, analysis and discussion of various genres such as myths, folktales, essays, short stories, poems, plays and novels. Literature encompasses different time periods and a variety of male and female authors from around the world. Students will use the literature to write critical and appreciative essays.
AA/AS GE, CSU, CSU GE, IGETC, UC

124 ADVANCED COMPOSITION: CRITICAL REASONING AND WRITING 3 UNITS
C-ID ENGL 105
Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or ESL 122 or equivalent
3 hours lecture, 1 hour laboratory
This course offers advanced instruction in critical reading, writing, and thinking, with particular emphasis on argumentation and analysis of complex and diverse texts.
AA/AS GE, CSU, CSU GE, IGETC, UC

126 CREATIVE WRITING 3 UNITS
C-ID ENGL 200
Prerequisite: Placement into ENGL 120 or equivalent
3 hours lecture
This course affords students the opportunity to write short prose, poetry, and drama in a positive atmosphere. Explore, study and analyze techniques in the works of professional writers and in the works of students. Ample opportunity will be directed toward publication of students' work.
AA/AS GE, CSU, UC

200 COOPERATIVE WORK EXPERIENCE IN ENGLISH 1-4 UNITS
75 hours paid or 60 hours non-paid work experience per unit
Practical application of principles and procedures learned in the classroom to the various phases of writing-related career experiences. Work experience will be paid or unpaid at local businesses, organizations, or educational institutions that are relevant to career options for English majors. Placement assistance will be provided and done in collaboration between the faculty member and student. Two on-campus sessions will be scheduled. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 12 units.*

201 IMAGES OF WOMEN IN LITERATURE 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
Examines women and their roles in society as portrayed in various forms of literature, past and present. Students may read poetry, short stories, novels, plays, and view films which will provide them with a broad base for understanding the changing role of women throughout history. Works by significant male and female authors will be used, reflecting a broad spectrum of political, cultural and historical views. Authors sampled may include Jane Austen, George Eliot, Virginia Woolf, William Shakespeare, Amy Tan, Alice Walker, Sandra Cisneros, Norman Mailer, Thomas Hardy, Ernest Hemingway, Sylvia Plath and others.
AA/AS GE, CSU, CSU GE, IGETC, UC

202 INTRODUCTION TO FILM AS LITERATURE 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
Survey course to study film as a 20th century/21st century form of literature. Students will view a variety of films spanning the 100 years of film history, from the silent era to the present, to develop an understanding of the different types of films, the film-making process, and the historical, political and sociological context of cinema. Key figures in film history such as Buster Keaton, John Ford, Orson Welles, Alfred Hitchcock, Spike Lee, Woody Allen, Akira Kurosawa and others will be studied.
AA/AS GE, CSU, CSU GE, IGETC, UC

214 MASTERPIECES OF DRAMA 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
Survey of masterpieces in drama beginning with works from ancient Greece and concluding with plays from the 20th century. Although other types of drama may be discussed, the primary texts will be comedies and tragedies. Representative playwrights include Sophocles, William Shakespeare, Moliere, Henrik Ibsen, Susan Glaspell, Eugene O'Neill, Arthur Miller, Samuel Beckett, Lorraine Hansberry, August Wilson and others. Texts will be read, analyzed, discussed, and written about in essay format.
AA/AS GE, CSU, CSU GE, IGETC, UC

217 FANTASY AND SCIENCE FICTION 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent
3 hours lecture
Survey reading course of fantasy and science fiction, a unique literary genre with an unparalleled and still growing popularity. Reading selections cover a diverse spectrum of fantasy and science fiction. Oral and written discussion of such readings and their relevance to current trends will be emphasized. Analytical or original creative writings will be included.
AA/AS GE, CSU, CSU GE, IGETC, UC

221 BRITISH LITERATURE I 3 UNITS
C-ID ENGL 160
Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 122 or equivalent
3 hours lecture
Survey of British literature from the Anglo Saxon period to the Romantic period. Students will read and interpret literature from historical, social and philosophical perspectives and according to various schools of critical theory. A typical syllabus might include Geoffrey Chaucer, William Langland, Edmund Spenser, William Shakespeare, Ben Johnson, John Milton, Lady Mary Wroth, Aphra Behn, and Jonathan Swift.
AA/AS GE, CSU, CSU GE, IGETC, UC

222 BRITISH LITERATURE II 3 UNITS
C-ID ENGL 165
Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in ENGL 122 or equivalent
3 hours lecture
Survey of British literature from the Romantic period to the present. Students will read and interpret literature from historical, social, and philosophical perspectives and according to various schools of critical theory. A typical

syllabus might include William Blake, Mary Wollstonecraft, William Wordsworth, Samuel Coleridge, Lord Byron, Percy Shelley, John Keats, Elizabeth Browning, Alfred Tennyson, Robert Browning, Emily Bronte, Matthew Arnold, Christina Rossetti, Oscar Wilde, Jane Austen, Thomas Hardy, William Butler Yeats, Virginia Woolf, James Joyce, Doris Lessing, and Derek Walcott.

AA/AS GE, CSU, CSU GE, IGETC, UC

231 AMERICAN LITERATURE I 3 UNITS

C-ID ENGL 130

Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 122 or equivalent

3 hours lecture

Study of American literature which explores literary works and their political, religious, economic and aesthetic context from pre-colonial America until 1860. Reading selections may consist of poetry, short stories, novels and nonfiction prose, including essays and autobiographies. Authors studied include various anonymous Native Americans, Pedro de Casteñeda, William Bradford, Anne Bradstreet, Benjamin Franklin, Thomas Jefferson, Judith Sargent Murray, Washington Irving, Catherine Sedgwick, James Fennimore Cooper, Henry David Thoreau, Walt Whitman and many others. Selections from the major writers will be read, analyzed, discussed and written about in essay format.

AA/AS GE, CSU, CSU GE, IGETC, UC

232 AMERICAN LITERATURE II 3 UNITS

C-ID ENGL 135

Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 122 or equivalent

3 hours lecture

Study of American literature which explores literary works and their political, religious, economic and aesthetic context from 1860 to the present. Reading selections may consist of poetry, short stories, novels, plays and nonfiction prose, including essays. Authors studied include Abraham Lincoln, Frederick Douglass, Mark Twain, Edgar Allan Poe, Walt Whitman, Emily Dickinson, Eugene O'Neill, Gertrude Stein, Langston Hughes, Ernest Hemingway, John Steinbeck, Toni Morrison and others. Selections from the major writers will be read, analyzed, discussed and written about in essay format.

AA/AS GE, CSU, CSU GE, IGETC, UC

236 CHICANA/O LITERATURE 3 UNITS

Recommended Preparation:Placement into ENGL 120 or equivalent

3 hours lecture

This course is a survey of colonial, post-colonial, and contemporary Chicano/Chicana literature. Literary works originally written in English and the Chicano/a bilingual idiom as well as English translations of works written in Spanish will be taught. Reading selections may consist of poetry, ballads, short stories, novels, plays, and nonfiction prose. Students analyze the literature and apply critical theory to describe critical events in the histories, cultures, and intellectual and literary traditions, with special focus on the lived experiences, social struggles, and contributions of Latino/a Americans in the United States. *Also listed as ETHN 236. Not open to students with credit in ETHN 236.*

AA/AS GE, CSU, CSU GE, IGETC, UC

238 BLACK LITERATURE 3 UNITS

Recommended Preparation: Placement into ENGL 120 or equivalent

3 hours lecture

This course introduces students to a survey of Black literature, focusing on the early oral tradition, literature of slavery and freedom, the Harlem Renaissance, Modernism, the Black Arts Era, and the contemporary period. Reading selections may consist of poetry, short stories, plays, novels, and nonfiction prose, including essays, letters, political tracts, autobiographies, speeches, and sermons. Students analyze the literature and apply critical theory to describe critical events in the histories, cultures, and intellectual and literary traditions, with special focus on the lived experiences, social struggles, and contributions of African Americans in the United States. *Also listed as ETHN 238. Not open to students with credit in ETHN 238.*

AA/AS GE, CSU, CSU GE, IGETC, UC

270 WORLD LITERATURE I 3 UNITS

C-ID ENGL 140

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3 hours lecture

This class is a survey and comparison of major works from various continents and cultures prior to 1650 A.D. Students examine the literature as a reflection of multiple and diverse experiences across the world. The course may include discussions on the historical, social, philosophical, aesthetic, and cultural aspects of world literature. Reading selections may consist of poetry, short stories, plays, novels, and nonfiction prose, including essays, letters, political tracts, autobiographies, and speeches. Reading selections include works from the ancient Mediterranean world, South and East Asia, Europe, Middle East, Africa, and the early Americas.

AA/AS GE, CSU, CSU GE, IGETC, UC

271 WORLD LITERATURE II 3 UNITS

C-ID ENGL 145

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3 hours lecture

Survey and comparison of major works in translation and in English from various continents and cultures from 1650 A.D. to the present. Focuses on the historical, social, philosophical, and cultural aspects of literature and the roles of women and men. Minority perspectives will be included. Reading selections include works from Asia, the Middle East, Africa, Europe, the Americas, Australia and New Zealand.

AA/AS GE, CSU, CSU GE, IGETC, UC

ENGLISH AS A SECOND LANGUAGE (ESL)

1A ACCELERATED READING AND WRITING FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS

Prerequisite: Grade of "Pass" in ESL 050 or equivalent or assessment into ESL 1A

6 hours lecture

This course is designed to bring students up to the grammatical, reading and composition level needed for three to two levels below ENGL 120. The focus is on reading intermediate-level complex texts, analyzing with critical attitude, and writing paragraph-to-essay length papers with proper format and evidence of intermediate to high intermediate level academic depth and rigor of research. Students in this course are generally on an accelerated pathway through the English as a Second Language program. **Non-degree applicable.**

1AG GRAMMAR FOR ESL ACCELERATED READING AND WRITING 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ESL 050 or equivalent placement, or concurrent enrollment in ESL 1A

3 hours lecture

This course focuses on the study of English grammar for students whose first language is other than English. It is designed as a companion course to the ESL 1A (Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar and sentence structure such as is utilized in ESL 1A. Software is utilized to reinforce grammar skills introduced in class. **Pass/No Pass only. Non-degree applicable.**

1B ADVANCED ACCELERATED READING AND WRITING FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS

Prerequisite: "C" grade or higher or "Pass" in ESL 1A or equivalent placement into ESL 1B

6 hours lecture

This course follows the sequence begun with ESL 2B and is designed to bring students up to the grammatical, reading and composition level needed for two levels below ENGL 120. The focus is on reading more complex texts, analyzing with more advanced critical attitude, and writing paragraph-to-essay length papers with proper format and evidence of high intermediate to low advanced academic depth and rigor of research. Students in this course are generally on an accelerated pathway through the English as a Second Language program. **Non-degree applicable.**

1BG GRAMMAR FOR ADVANCED ESL READING AND WRITING 3 UNITS

Prerequisite: Grade of "Pass" in ESL 1AG or ESL 1A or equivalent placement, or concurrent enrollment in ESL 1B

3 hours lecture

This course focuses on the study of English grammar for students whose first language is other than English. It is designed as a companion course to ESL 1B (Advanced Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar and sentence structure such as is utilized in ESL 1B. Software is utilized to reinforce grammar skills introduced in class. **Pass/No Pass only. Non-degree applicable.**

2 ACCELERATED COMPOSITION FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS

6 hours lecture

This course combines the curricula of ESL 2A and 2B into an accelerated program designed to bring students up to the grammatical and composition level needed for ENGL 120 or ESL 122. The focus is on writing the essay in proper format with proper depth of analysis and rigor of research. Critical written responses to academic readings are also emphasized.

2A ACCELERATED COMPOSITION FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS

6 hours lecture

This course is designed to bring students up to the grammatical and composition level needed for one level below ENGL 120, with the possibility of skipping that level and placing directly into ENGL 120 if student progress is advanced enough. The focus is on writing the essay in proper format with proper depth of analysis and rigor of research. Critical written responses to academic readings are also emphasized.

CSU, UC

2AG GRAMMAR FOR ESL ACCELERATED COMPOSITION 3 UNITS
3 hours lecture
This course focuses on the study of English grammar for students whose first language is other than English. It is designed as a companion course to ESL 2A (Accelerated Composition for English as a Second Language). It develops and adds to skills in grammar and sentence structure such as is utilized in ESL 2A. Software is utilized to reinforce grammar skills introduced in class. **Pass/No Pass only. Non-degree applicable.**

2B ADVANCED ACCELERATED COMPOSITION FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS
Prerequisite: "C" grade or higher or "Pass" in ESL 2A or equivalent placement into ESL 2B
6 hours lecture
This course is designed to bring students up to the advanced grammatical and composition level needed for ENGL 120. The focus is on writing the essay in proper format with proper depth of analysis and rigor of research. Critical written responses to academic readings are also emphasized.
CSU, UC

2BG GRAMMAR FOR ESL ADVANCED ACCELERATED COMPOSITION 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in ESL 2A or 2AG or equivalent, or assessment, or concurrent enrollment in ESL 2B
3 hours lecture
This course builds upon the skills taught in ESL 2AG and further focuses on the study of English grammar for students whose first language is other than English. It is designed as a companion course to ESL 2B (Advanced Accelerated Composition for English as a Second Language). It develops and adds to skills in grammar and sentence structure such as is utilized in ESL 2B. Software is utilized to reinforce grammar skills introduced in class. **Pass/No Pass only. Non-degree applicable.**

3 ADVANCED ENGLISH SUPPORT 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in ESL 2B, or "B" grade or higher in ESL 2A
Corequisite: ENGL 120
2 hours lecture
This is a Boost course for English as a Second Language students who manage to enroll in ENGL 120 but need help with basic skills structure and fundamentals. It is meant to be taken only concurrently with ENGL 120. The basic principles and skills of ENGL 120 are reinforced in this course using a laboratory setting. **Pass/No Pass only. Non-degree applicable.**

010 AMERICAN CULTURE I 3 UNITS
3 hours lecture
First course in American culture for students to practice applied reading, writing, listening and speaking skills gained in the first two levels of the ESL program. Various aspects of American culture such as lifestyles, institutions, values and issues will be studied. **Pass/No Pass only. Non-degree applicable.**

020 AMERICAN CULTURE II 3 UNITS
3 hours lecture
Second course in American culture for students to practice applied reading, writing, listening and speaking skills gained in the third and fourth levels of the ESL program. Various aspects of American culture such as lifestyles, attitudes, government, customs and traditions will be studied. **Pass/No Pass only. Non-degree applicable.**

021 ENGLISH AS A SECOND LANGUAGE SUPPORT FOR MATH 3 UNITS
3 hours lecture
This is a course in American culture, vocabulary, and English study skills to help ESL students successfully enter a Math pathway. Students taking this course should be concurrently enrolled in an entry-level Math course requiring concurrent enrollment in ESL 021. Students will develop and apply reading, writing, listening and speaking skills to sufficiently navigate the classroom participation requirements of an entry-level Math course at the college. Various aspects of a Math course covered may include problem scenarios, experiments and their write-ups, critical thinking through word problems, and cultural intentions and implications of course readings in those disciplines. **Pass/No Pass only. Non-degree applicable.**

025 ESL WORKPLACE SKILLS LAB 1 UNIT
3 hours laboratory
ESL instruction in preparation for a vocational program. Students will work independently to complete computer modules in a vocational area in order to increase knowledge of vocabulary and subject matter. Provides complementary instruction in language and academic skills necessary to succeed in a vocational program. Vocational areas offered will be listed in the class schedule. **Pass/No Pass only. Non-degree applicable.**

026 ESL COMPUTER SKILLS INTRODUCTION AND VOCABULARY 2 UNITS
2 hours lecture
This course is designed as an ESL companion for BOT 100. It focuses on the vocabulary and culture of the computer lab and all the integrated skills needed to successfully submit assignments in future classes. ESL 026 will be "hands-off" any actual computers, emphasizing instead all the language elements that are required for success in a computer skills class teaching proper formatting and software use for preparing assignments. The actual practice of the content of this course will occur in BOT 100, a course which the student must be concurrently enrolled in with ESL 026. **Pass/No Pass only. Non-degree applicable.**

050 BASIC ACCELERATED READING AND WRITING FOR ENGLISH AS A SECOND LANGUAGE 6 UNITS
Prerequisite: Assessment into ESL 050
6 hours lecture
This is the literacy course in the first level of the ESL accelerated course sequence. Students learn to read and write Basic English. They also learn basic word, phrase, and sentence grammar in a Just-In-Time remediation setting. In addition to reading, writing, and grammar, students learn classroom rules and communication necessary in academic settings. The course is designed to expose the students to all the skills necessary to enter a placement of four semesters below transfer level (ESL 1A), with the possibility of advancing in as little as two further semesters given the acceleration pathway. **Pass/No Pass only. Non-degree applicable.**

050G BASIC GRAMMAR FOR ESL ACCELERATED READING AND WRITING 3 UNITS
3 hours lecture
This course focuses on the study of English grammar for students whose first language is other than English. It is designed as a companion course to ESL 050 (Basic Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar and sentence structure such as is utilized in ESL 050. Software may be utilized to reinforce grammar skills introduced in class. **Pass/No Pass only. Non-degree applicable.**

090 AMERICAN ENGLISH PRONUNCIATION I 3 UNITS
3 hours lecture
Beginning course designed to assist non-native American English learners develop oral and aural language skills through the improvement of understanding spoken English and articulation of the language. Lessons will facilitate non-native speakers' learning of English through beginning level repetition and oral discrimination exercises; stress, rhythm and intonation exercises; and other types of oral production activities including poster talks, situational role-plays, short planned or impromptu speeches, and informal debates. Beginning level listening tasks include aural discrimination exercises, evaluating short student speeches, dictations, note-taking, and comprehension tests. **Pass/No Pass only. Non-degree applicable.**

099A ESL FOR THE WORKPLACE I 3 UNITS
Prerequisite: Placement based on assessment
3 hours lecture, 1 hour laboratory
First course in the study of English for the workplace for students whose first language is other than English. Supplements language skills for beginning to intermediate ESL and focuses on using English in business situations. Learn simple business vocabulary, basic writing and oral communication skills, and word processing skills. **Pass/No Pass only. Non-degree applicable.**

099B ESL FOR THE WORKPLACE II 3 UNITS
Prerequisite: Grade of "Pass" in ESL 099A or equivalent or assessment
3 hours lecture, 1 hour laboratory
Second course in the study of English for the workplace for students whose first language is other than English. Supplements language skills taught in ESL 050 and ESL 1A and develops and adds to business English skills taught in ESL 099A. Learn business vocabulary, intermediate writing and oral communication skills, and computer skills. **Pass/No Pass only. Non-degree applicable.**

109 AMERICAN ENGLISH PRONUNCIATION II 3 UNITS
Recommended Preparation: Grade of "Pass" in ESL 090 or equivalent or assessment
3 hours lecture
Intermediate level course to assist non-native American English learners develop oral and aural language skills through the improvement of understanding spoken English and articulation of the language. Intermediate level lessons include repetition and oral discrimination exercises; stress, rhythm and intonation exercises; and other types of oral production activities including poster talks, situational role-plays, short planned or impromptu speeches, and informal debates. Intermediate level listening tasks include aural discrimination exercises, evaluating short student speeches, dictations, note-taking, and comprehension tests. Students are expected to reduce their accent when speaking American English in addition to a number of problems with grammatical accuracy. Improvement scores are based on student and teacher analyses and assessments. **Pass/No Pass only. Non-degree applicable.**

122 COLLEGE RHETORIC 6 UNITS
Prerequisite: "C" grade or higher or "Pass" in ESL 2, 2A or 2B, or advisory placement in ESL 122 or equivalent
6 hours lecture
ESL 122 is the transfer-level English course designed for advanced, non-native speakers to develop college-level critical reading, writing, and thinking skills and to enhance fluid listening and speaking through academic inquiry across the disciplines. Students analyze and evaluate a variety of texts in response to particular audiences and purposes. They study composition and rhetoric to craft accurate and fluent expository, analytical, and argumentative academic papers and oral presentations, including an extended argument, which synthesizes, integrates, and acknowledges multiple sources. Students expand their cultural competence through discussion and analysis of diverse media addressing contemporary issues and engage in meaningful dialogue with the instructor, peers, and target audience.
AA/AS GE, CSU

ENVIRONMENTAL HEALTH AND SAFETY MANAGEMENT (EHSM)

100 INTRODUCTION TO ENVIRONMENTAL AND OCCUPATIONAL SAFETY AND HEALTH (OSH) TECHNOLOGY 4 UNITS
4 hours lecture
General overview of the Environmental Health and Safety Management (EHSM) field with an emphasis on hazardous materials, hazardous waste management, and their effect upon the environment and worker health and safety. Topics include the history of pollution and workplace hazards leading to current legislation, and current best practices of handling hazardous substances to minimize the harmful impact on society and the environment.
CSU

110 POLLUTION PREVENTION 3 UNITS
3 hours lecture
Study of various raw materials and chemicals used in industry and the changes that occur as they move through the industrial process. Topics include: applicable regulations; the material balance concept of inventory; the importance of waste minimization/pollution prevention; pollution and residential waste generation, reduction and prevention. Students will develop a waste source reduction plan.
CSU

130 ENVIRONMENTAL/OCCUPATIONAL HEALTH EFFECTS OF HAZARDOUS MATERIALS 3 UNITS
3 hours lecture
Study of the acute and chronic health effects produced by exposure to chemical, physical and biological agents with an emphasis on hazardous materials commonly associated with industrial operations, waste disposal, and remediation sites. Topics include routes of entry, toxic effects, risk evaluation, permissible exposure limits, medical surveillance, control methods for reducing exposure, and using Material Safety Data Sheets (MSDS) to develop strategies to reduce worker exposure.
CSU

135 GENERAL INDUSTRY SAFETY STANDARDS 3 UNITS
3 hours lecture
Overview of the elements which are incorporated in a comprehensive general industrial safety program. Emphasizes methods used to reduce accidents/injuries through the application of workplace health protection and safety fundamentals. Topics include protocols, safety audits, data collection and analysis techniques, interpretation of safety data, safety inspections, development and implementation of safety programs, worker education, and the essentials of Personal Protective Equipment (PPE).
CSU

145 CONSTRUCTION SAFETY STANDARDS 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in EHSM 100 or equivalent
3 hours lecture
Introduction to California and Federal (Cal/OSHA and Fed/OSHA) construction safety standards and regulations. Integrated study of hazard recognition and abatement principles related to the construction worksite. Topics include: compliance issues and challenges facing safety professionals including mishap and case study analysis; California and Federal construction safety standards; worksite inspection; interfacing with compliance officials; vertical and horizontal standards; and common construction industry compliance issues.
CSU

150 HAZARDOUS WASTE MANAGEMENT APPLICATIONS 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
4 hours lecture
Overview of hazardous waste regulations with an emphasis on generator compliance, site investigation, remediation, permitting, enforcement, and liability. Explains the hazardous waste regulatory framework and the types of environmental resources available; develops research skills in the hazardous waste area; and provides hands-on application of the regulations at the technician level. Topics include proper methods of preparing a hazardous waste manifest, labeling of storage containers, sampling and analysis, preparing a Phase I Environmental Audit, and selecting environmental consultants.
CSU

200 HAZARDOUS MATERIALS MANAGEMENT (HMM) APPLICATIONS 4 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
4 hours lecture
Requirements and applications of federal, state and local hazardous materials laws and regulations. Emphasizes program compliance with OSHA (Occupational Health and Safety Administration) Hazard Communication Plan, EPA (Environmental Protection Agency) Community Right-To-Know, Department of Transportation, Proposition 65, and Emergency Response Plan. Includes the legal framework of hazardous materials laws and requirements and step-by-step program development: written plan, obtaining/interpreting MSDS (Material Safety Data Sheets), labeling, emergency responders site map, shipping, handling, and training. Students will develop plans related to hazardous materials management through hands-on program development: DEH/HMD (Department of Environmental Health/ Hazardous Materials Division) Hazardous Material Business Plan, OSHA Hazardous Communication Plan, components of CalARP (California Accidental Release Prevention) and RMP (Risk Management Plan), and planning and reporting functions.
CSU

201 INTRODUCTION TO INDUSTRIAL HYGIENE AND OCCUPATIONAL HEALTH 4 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
3 hours lecture, 3 hours laboratory
Anticipation, recognition, revaluation and control of biological, chemical and physical hazards in the workplace. Introduction to the development of industrial hygiene and occupational health and safety as a professional discipline. Provides an understanding of basic physiological processes and the effects caused by occupational exposure to hazards. Survey of various occupational health and safety programs and government regulations. Industrial hygiene monitoring and sampling techniques for airborne contaminants, noise, heat, radiation and illumination.
CSU

205 SAFETY AND RISK MANAGEMENT ADMINISTRATION 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
4 hours lecture
Study of how accidents and incidents occur in the occupational health and safety environment. Instruction in the establishment and maintenance of safety programs and comprehensive analysis of occupational health programs with an emphasis on safety program management. Topics include: planning approaches to safety and health management used by international, national and local regulatory agencies, insurance companies, and professional societies; risk management; worker compensation; and employee accommodations in the workplace. Students will develop plans related to safety and risk management.
CSU

210 INDUSTRIAL WASTEWATER AND STORMWATER MANAGEMENT 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
4 hours lecture
Overview of water/wastewater regulations with an emphasis on federal, state and local regulatory standards. Integrated study of the principles of wastewater and stormwater management including hydrology, water distribution, wastewater collection, stormwater management, and overall safe drinking water issues.
CSU

215 AIR QUALITY MANAGEMENT 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment
3 hours lecture
Overview of air quality regulations with an emphasis on federal, state and local requirements. Integrated study of the principles of air permits and permit compliance including source testing, emission reduction, inspections, monitoring, stationary and mobile sources, air toxics, new equipment shakedown, and overall global air quality issues.
CSU

230 HAZWOPER CERTIFICATION 3 UNITS
3 hours lecture
Instruction in safety and emergency response to chemical and physical exposures in industrial and field settings. Topics include: hazard

analysis; contingency planning; housekeeping and safety practices including proper use and selection of PPE (Personal Protective Equipment); site control and evaluation; handling drums and containers; field sampling and monitoring; proper use of instruments; incident response planning; emergency response including field exercises in the use of PAPR (Powered Air Purifying Respirator) and SCBA (Self Contained Breathing Apparatus); and an overview of the ICS (Incident Command System). Satisfies requirements for generalized employee training under OSHA (Occupational Health and Safety Administration) [29 CFR 1910.120] and Title 8, California Code of Regulations [5192 (e) (3) (A)].

CSU

240 COOPERATIVE WORK EXPERIENCE 1-4 UNITS

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent

75 hours paid or 60 hours unpaid work experience per unit

Practical application of principles and procedures learned in the classroom to various phases of Environmental Health and Safety Management (EHSM). Work experience will be paid or volunteer positions at local industries or governmental agencies that regulate environmental industries. Placement assistance will be provided, but students are required to select and secure a placement site. Minimum of one unit of work experience is required to complete the EHSM certificate/degree. *Occupational cooperative work experience credit may accrue at the rate of one to 8 units per semester for a total of 16 units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 8 units in EHSM.*

CSU

ETHNIC STUDIES (ETHN)

107* HISTORY OF RACE & ETHNICITY IN THE UNITED STATES 3 UNITS

3 hours lecture

An introduction to the historical and socio-cultural experiences of racial and ethnic groups and their roles in shaping society and culture in the United States, from pre-contact to the present. Focus will be on migration, colonization, racialization, discrimination, assimilation, social stratification, liberation movements, and the intersection of racial, ethnic, gender, sexual identities as they relate to African Americans, Asian Americans, Latinas/os/x, Native Americans, and Middle Eastern Americans. *Also listed as HIST 107. Not open to students with credit in HIST 107.*

AA/AS GE, CSU, CSU GE

111 CULTURE, ART & IDEAS OF THE UNITED STATES 3 UNITS

3 hours lecture

Humanities of the United States explored through film and television, music, dance, graphic novels, writing, photography, handicrafts (i.e. weaving, pottery, quilting, etc.), architecture, food, philosophy, and social institutions. Focus will be on the experiences and contributions of African Americans, Asian Americans, Latinas/os/x, Native Americans, and Middle Eastern Americans, with an emphasis on discrimination, social stratification, intersectionality, resistance, and liberation movements. *Also listed as HUM 111. Not open to students with credit in HUM 111.*

AA/AS GE, CSU, CSU GE

114 INTRODUCTION TO RACE & ETHNICITY 3 UNITS

3 hours lecture

An introduction to the sociological analysis of ethnicity, race, and immigration in the United States. Topics include the history of racialized and minoritized groups in the United States, patterns of interaction between racial and ethnic groups, colonialism, immigration, identity formation, prejudice, discrimination, ethnocentrism, racism, institutional racism, social movements for civil rights, liberation and decolonization, and the intersection of race and ethnicity with other forms of difference. *Also listed as SOC 114. Not open to students with credit in SOC 114.*

AA/AS GE, CSU, CSU GE

118* U.S. HISTORY: CHICANO/CHICANA PERSPECTIVES I 3 UNITS

3 hours lecture

Historical survey of Mexican Americans in the United States in which attention is given to social, political and economic background, with an emphasis on the origins of basic American institutions and ideals. Particular emphasis on the development of Spanish-speaking peoples' economic, social, political, and racialized experience in the United States, especially in the Southwest from the pre-contact period to the Mexican American War. *Also listed as HIST 118. Not open to students with credit in HIST 118.*

AA/AS GE, CSU

119* U.S. HISTORY: CHICANO/CHICANA PERSPECTIVES II 3 UNITS

3 hours lecture

Historical survey of Mexican Americans in the United States in which attention is given to the social, political, and economic background, including explorations of the U.S. and California constitutions and interactions between federal, state, and local governments. Particular emphasis on the economic, social and political experiences of Mexican Americans and Latinas/os/x in the United States, including migration, colonization, racialization, discrimination, assimilation, social stratification, liberation movements, and the intersection of racial, ethnic, gender, sexual identities, especially in the Southwest from the Mexican-American War to the present. *Also listed as HIST 119. Not open to students with credit in HIST 119.*

AA/AS GE, CSU

130* U.S. HISTORY AND CULTURES: NATIVE AMERICAN PERSPECTIVES I 3 UNITS

3 hours lecture

This course covers the social, political, cultural, economic, and intellectual history of indigenous groups in North America from pre-history to 1850. Areas of focus include: Native American perspectives of native and non-native cultures, the influence of Native Americans on the Federal Constitution and the U.S. political system, the impact of legislation on Native Americans, and Native American resistance and adaptability in response to land encroachment, racial and ethnic discrimination, and assimilation strategies. *Also listed as HIST 130. Not open to students with credit in HIST 130.*

AA/AS GE, CSU

131* U.S. HISTORY AND CULTURES: NATIVE AMERICAN PERSPECTIVES II 3 UNITS

3 hours lecture

This course covers the social, political, cultural, economic, and intellectual history of indigenous groups in North America from 1850 to the present. Areas of focus include: Native American perspectives of native and non-native cultures, the portrayal and influence of Native Americans in popular culture, the influence of Native Americans on the California State Constitution and government, the impact of State and Federal legislation on Native Americans, and Native American agency and resistance movements in the struggle for civil and political rights and indigenous sovereignty. *Also listed as HIST 131. Not open to students with credit in HIST 131.*

AA/AS GE, CSU

132 KUMEYAAY HISTORY I: PRECONTACT - 1845 3 UNITS

3 hours lecture

Historical survey of the Kumeyaay Nation from prehistoric times to 1845. Focus will be on Kumeyaay perspectives of Kumeyaay and non-Kumeyaay cultures; Kumeyaay oral history as it relates to the Creation Story, bird songs, ceremonies, religion and peon games; tribal sovereignty; sociopolitical clan structures; and the evolution of Kumeyaay leadership. Special emphasis will be given to the health and morbidity of indigenous populations and their labor in relation to the Mission San Diego de Alcalá and historic ranchos in San Diego County. *Also listed as HIST 132. Not open to students with credit in HIST 132.*

AA/AS GE, CSU

133 KUMEYAAY HISTORY II: 1846 - PRESENT 3 UNITS

3 hours lecture

Historical survey of the Kumeyaay Nation from 1846 to the present. Focus will be on Kumeyaay perspectives of Kumeyaay and non-Kumeyaay cultures, creation of Kumeyaay reservations, Mission Indian Federation, Public Law 83-280, Indian self-determination, Indian Gaming Regulatory Act, contemporary tribal governments, landmark Indian Gaming court cases, and an overview of laws pertaining to Native Americans in the United States. Special emphasis will be given to contemporary issues affecting the Kumeyaay Nation and Kumeyaay tribal governments, including socioeconomic deficits, tribal sovereignty, blood quantum, tribal enrollment, demographic challenges, language loss and acquisition, historical trauma, and the growing equity gaps among tribes without casinos. *Also listed as HIST 133. Not open to students with credit in HIST 133.*

AA/AS GE, CSU

150 LATINX SOCIOLOGY 3 UNITS

3 hours lecture

This course is an in-depth sociological examination of Latinx/Hispanic communities in the United States. Topics include family structure, gender roles and sexuality; religion; economics; racialization, racism; intersectionality, social movements; U.S./Mexico border issues and immigration policy; and education. Emphasis is placed on social interactions, politics of identity formation, and social processes impacting the status of U.S. Latinx/Hispanics. This course is intended for sociology majors or any student interested in the social sciences. *Also listed as SOC 150. Not open to students with credit in SOC 150.*

AA/AS GE, CSU

165 INTRODUCTION TO THE POLITICS OF RACE AND GENDER 3 UNITS

3 hours lecture

This course is an introduction to the politics of race and gender. The course offers an overview of the identity, status, and power of Women, Native Americans, African Americans, Latina/o Americans, and Asian Americans from an intersectionality perspective. *Also listed as POSC 165. Not open to students with credit in POSC 165.*

AA/AS GE, CSU, CSU GE

166 INTRODUCTION TO NATIVE AMERICAN POLITICS AND POLICY 3 UNITS
3 hours lecture
This course introduces students to Native American politics and policy from the treaty making process that formed the foundation of contemporary tribal sovereignty to legal cases and precedents that impact Native American lands and people. The course will also explore how Native people have both petitioned for access into the American polity and actively resisted assimilation. Emphasis will be given to twelve recognized Kumeyaay tribal governments in the United States and four recognized Kumeyaay/Kumiai tribal governments in Baja California, Mexico. *Also listed as POSC 166. Not open to students with credit in POSC 166.*
AA/AS GE, CSU

180* U.S. HISTORY: BLACK PERSPECTIVES I 3 UNITS
3 hours lecture
United States history with an emphasis on social, economic, political and cultural experiences of Black people. Traces the development of African American history from African origins through the period of Reconstruction, with a focus on agency, resistance, self-determination, and liberation. *Also listed as HIST 180. Not open to students with credit in HIST 180.*
AA/AS GE, CSU

181* U.S. HISTORY: BLACK PERSPECTIVES II 3 UNITS
3 hours lecture
Examination of significant aspects of United States history from the aftermath of the Civil War to the present, including explorations of the U.S. and California constitutions and interactions between federal, state, and local governments. Emphasis is on the socio-economic, political, and cultural experiences of African Americans in the United States from Reconstruction to the present, with a focus on agency, resistance, self-determination, and liberation. *Also listed as HIST 181. Not open to students with credit in HIST 181.*
AA/AS GE, CSU

236— CHICANA/O LITERATURE 3 UNITS
Recommended Preparation: Placement into ENGL 120 or equivalent
3 hours lecture
This course is a survey of colonial, post-colonial, and contemporary Chicano/Chicana literature. Literary works originally written in English and the Chicano/a bilingual idiom as well as English translations of works written in Spanish will be taught. Reading selections may consist of poetry, ballads, short stories, novels, plays, and nonfiction prose. Students analyze the literature and apply critical theory to describe critical events in the histories, cultures, and intellectual and literary traditions, with special focus on the lived experiences, social struggles, and contributions of Latino/a Americans in the United States. *Also listed as ENGL 236. Not open to students with credit in ENGL 236.*
AA/AS GE, CSU, CSU GE

238—BLACK LITERATURE 3 UNITS
Recommended Preparation: Placement into ENGL 120 or equivalent
3 hours lecture
This course introduces students to a survey of Black literature, focusing on the early oral tradition, literature of slavery and freedom, the Harlem Renaissance, Modernism, the Black Arts Era, and the contemporary period. Reading selections may consist of poetry, short stories, plays, novels, and nonfiction prose, including essays, letters, political tracts, autobiographies, speeches, and sermons. Students analyze the literature and apply critical theory to describe critical events in the histories, cultures, and intellectual and literary traditions, with special focus on the lived experiences, social struggles, and contributions of African Americans in the United States. *Also listed as ENGL 238. Not open to students with credit in ENGL 238.*
AA/AS GE, CSU, CSU GE

*Can be used to satisfy U.S. History, Constitution, and American Ideals graduation requirement for the CSU.

EXERCISE SCIENCE (ES)

Courses which meet the activity requirement for graduation have an asterisk (*). Intercollegiate athletics courses, ES 206, 209, 213, 218, 224, 227, 230, 248, 249, are repeatable. Intercollegiate sports do not meet the activity requirement for graduation. A physical examination is recommended for all classes if the student has medical problems or is over the age of 30. ***Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.***

Courses Related in Content (see page 35)

UC credit limit: Maximum of four units of UC credit for physical activity courses (see page 47).

001* ADAPTED PHYSICAL EXERCISE 1 UNIT
1 hour lecture, 1 hour laboratory
Assessment of physical performance status and postural evaluation. Individually prescribed exercise programs for the physically disabled. Recreational games and individual sports adapted to students' capabilities.
CSU, UC credit limit

008A* BEGINNING INDOOR CYCLING 1 UNIT
1 hour lecture, 1 hour laboratory
This course is designed to provide a beginning level indoor cycling experience to develop the key components of health-related physical fitness: cardiorespiratory, endurance, muscular strength/endurance, body composition, and flexibility. The components of fitness will be met through structured individually paced indoor group cycling classes. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness.
CSU

008B* INTERMEDIATE INDOOR CYCLING 1 UNIT
Recommended Preparation: ES 008A Beginning Indoor Cycling
1 hour lecture, 1 hour laboratory
This course is designed to provide an intermediate level indoor cycling experience to develop the key components of health-related physical fitness: cardiorespiratory, endurance, muscular strength/endurance, body composition, and flexibility. The components of fitness will be met through structured individually paced indoor group cycling classes. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness.
CSU

008C* ADVANCED INDOOR CYCLING 1 UNIT
Recommended Preparation: ES 008B Intermediate Indoor Cycling
1 hour lecture, 1 hour laboratory
This course is designed to provide an advanced level indoor cycling experience to develop the key components of health-related physical fitness: cardiorespiratory, endurance, muscular strength/endurance, body composition, and flexibility. The components of fitness will be met through structured individually paced indoor group cycling classes. Students will also learn the fundamental principles of physical fitness and their impact on a life-long health and wellness.
CSU

009A* BEGINNING AEROBIC DANCE EXERCISE 1 UNIT
1 hour lecture, 1 hour laboratory
Aerobic dance exercise with an emphasis on conditioning the musculoskeletal system, improving the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. Principles of physical fitness, conditioning and other relevant health-related topics will be covered.
CSU, UC credit limit

009B* INTERMEDIATE AEROBIC DANCE EXERCISE 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 009A or equivalent or specified skill competencies
1 hour lecture, 1 hour laboratory
A continuation of ES 009A emphasizing the development of an intermediate level of conditioning of the musculoskeletal system, improvement of the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. More complex movement patterns, routines and equipment will be used to increase intensity of exercise to achieve an increased level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered.
CSU, UC, UC credit limit

009C* ADVANCED AEROBIC DANCE EXERCISE 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 009B or equivalent or specified skill competencies
1 hour lecture, 1 hour laboratory
A continuation of ES 009B emphasizing the development of an advanced level of conditioning of the musculoskeletal system, improvement of the cardiovascular system, increasing the efficiency of the respiratory system, and increasing flexibility. More complex movement patterns, routines and equipment will be used to increase intensity of exercise to achieve an increased level of fitness. Principles of physical fitness, conditioning, and other relevant health-related topics will also be covered.
CSU, UC, UC credit limit

010* CARDIOVASCULAR FITNESS AND NUTRITION 1 UNIT
3 hours laboratory
Kinesiology Lab course designed to teach the benefits of cardiovascular exercise, heart-healthy nutrition guidelines, and to provide opportunities for students to analyze their eating habits. This course requires workouts and consultations with the instructor, as well as written and computer assignments. Each student will be assessed in the areas of fitness and diet. ***Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.***
CSU, UC credit limit

011* CIRCUIT TRAINING 1 UNIT
3 hours laboratory
Kinesiology Lab course designed to develop and encourage positive attitudes and habits with regard to exercise. Each student will be assessed in the areas of body composition, cardiovascular efficiency, muscular strength and endurance, and flexibility. An individual fitness profile will then be established. From this profile, an individual fitness prescription will be developed. Fitness activity will primarily utilize exercise equipment organized into a super circuit. ***Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.***
CSU, UC credit limit

012* INDIVIDUALIZED SPORTS CONDITIONING 1 UNIT
3 hours laboratory
Kinesiology Lab course designed to provide advanced exercisers with the opportunity to increase their fitness levels with an emphasis on strength training and muscle flexibility. An individualized fitness program will then be prescribed utilizing the student's personal fitness goals. ***Due to health and safety considerations, only one Kinesiology Lab class (ES 010, 011, 012) may be taken per semester.***
CSU, UC credit limit

013* FLEXIBILITY FITNESS 1.5 UNITS
1 hour lecture, 2 hours laboratory
Flexibility program which provides students with knowledge of their optimal range of motion. Emphasizes participation that suits the needs of all age and ability levels including dancers, athletes, seniors and fitness enthusiasts.
CSU, UC credit limit

014A* BEGINNING BODY BUILDING 1.5 UNITS
1 hour lecture, 2 hours laboratory
Instruction and practice in conditioning, running and resistance exercises with an emphasis on total fitness of the individual.
CSU, UC credit limit

014B* INTERMEDIATE BODY BUILDING 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 014A or equivalent
1 hour lecture, 2 hours laboratory
Instruction and practice in weight lifting and weight training with an emphasis on techniques of lifting. Individual program adaptation is stressed.
CSU, UC credit limit

014C* ADVANCED BODY BUILDING 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 014B or equivalent
1 hour lecture, 2 hours laboratory
Advanced skills and techniques of body building.
CSU, UC credit limit

019A* BEGINNING PHYSICAL FITNESS 1.5 UNITS
1 hour lecture, 2 hours laboratory
Instruction in physical conditioning, nutrition and weight control.
CSU, CSU GE, UC credit limit

019B* INTERMEDIATE PHYSICAL FITNESS 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 019A or equivalent
1 hour lecture, 2 hours laboratory
Further emphasis on individual physical conditioning, nutrition and weight control.
CSU, CSU GE, UC credit limit

019C* ADVANCED PHYSICAL FITNESS 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 019B or equivalent
1 hour lecture, 2 hours laboratory
Advanced skills and techniques of physical fitness with an emphasis on new concepts and techniques.
CSU, CSU GE, UC credit limit

024A* BEGINNING FITNESS BOOT CAMP 1 UNIT
1 hour lecture, 1 hour laboratory
This course presents a fast-paced, regimented style exercise program designed at a beginning level that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of basic activities, emphasis will be placed on self-discipline, intensity, and goal-oriented basic exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness.
CSU, UC

024B* INTERMEDIATE FITNESS BOOT CAMP 1 UNIT
Recommended Preparation: ES 024A Beginning Fitness Boot Camp
1 hour lecture, 1 hour laboratory
This course presents a fast-paced, regimented style exercise program designed at an intermediate level that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of basic activities, emphasis will be placed on self-discipline, intensity, and goal-oriented basic exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness.
CSU, UC

024C* ADVANCED FITNESS BOOT CAMP 1 UNIT
Recommended Preparation: ES 024B Intermediate Fitness Boot Camp
1 hour lecture, 1 hour laboratory
This course presents a fast-paced, regimented style exercise program designed at an advanced level that works the entire body through the use of calisthenics, running, body resistance training and agility drills designed to promote physical fitness and weight control. Using a variety of basic activities, emphasis will be placed on self-discipline, intensity, and goal-oriented basic exercise programming. The course will utilize numerous training modalities including cross-training, basic boxing, plyometrics, speed and agility, core stability, flexibility training as well as cardiovascular endurance. Students will also learn the fundamental principles of physical fitness and their impact on life-long health and wellness.
CSU, UC

028A* BEGINNING YOGA 1.5 UNITS
1 hour lecture, 2 hours laboratory
This course is designed to help students increase flexibility and balance as well as practice relaxation and stress reduction through beginning Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Discussion regarding the history and traditions of Yoga as well as stress reduction will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long wellness.
CSU, UC

028B* INTERMEDIATE YOGA 1.5 UNITS
Recommended Preparation: ES 028A Beginning Yoga
1 hour lecture, 2 hours laboratory
This course is designed to help students increase flexibility and balance as well as practice relaxation and stress reduction through intermediate Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Discussion regarding the history and traditions of Yoga as well as stress reduction will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long wellness.
CSU, UC

028C* ADVANCED YOGA 1.5 UNITS
Recommended Preparation: ES 028B Intermediate Yoga
1 hour lecture, 2 hours laboratory
This course is designed to help students increase flexibility and balance as well as practice relaxation and stress reduction through advanced Yoga techniques. The course will focus on safe, effective stretching, balance, stability of supporting muscle groups and breathing techniques. Discussion regarding the history and traditions of Yoga as well as stress reduction will take place. Students will also learn the fundamental principles of physical fitness and their impact on life-long wellness.
CSU, UC

060A* BEGINNING BADMINTON 1 UNIT
1 hour lecture, 1 hour laboratory
Presentation of the official singles and doubles games including the six basic strokes, footwork, strategy and etiquette.
CSU, UC credit limit

060B* INTERMEDIATE BADMINTON 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 060A or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 060A with an emphasis on playing strategy and match play in singles and doubles.
CSU, UC credit limit

060C* ADVANCED BADMINTON 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 060B or equivalent
1 hour lecture, 1 hour laboratory
Advanced playing techniques, strategy, knowledge and attitudes for students who wish to excel in badminton and increase aerobic capacity.
CSU, UC credit limit

076A* BEGINNING TENNIS 1 UNIT
1 hour lecture, 1 hour laboratory
Presentation of the official singles and doubles games including basic strokes, rules, strategy and etiquette.
CSU, UC credit limit

076B* INTERMEDIATE TENNIS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 076A or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 076A with an emphasis on individual stroke analysis, playing strategy and match play, singles and doubles.
CSU, UC credit limit

076C* ADVANCED TENNIS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 076B or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 076B with an emphasis on advanced techniques, strategy and match play for singles, doubles and mixed doubles.
CSU, UC credit limit

125A* BEGINNING GOLF 1 UNIT
1 hour lecture, 1 hour laboratory
Instruction and practice in basic golf skills to include course conduct, rules and self-evaluation of skills. Practice is limited to development of swing, stance and grip.
CSU, UC credit limit

125B* INTERMEDIATE GOLF 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 125A or equivalent
1 hour lecture, 2 hours laboratory
Instruction and practice in golf including skills required to play a small executive course. Students must furnish their own equipment.
CSU, UC credit limit

125C* ADVANCED GOLF 1.5 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in ES 125B or equivalent
1 hour lecture, 2 hours laboratory
Continuation of ES 125B with an emphasis on advanced techniques, strategies and tournament play. Students must furnish their own equipment.
CSU, UC credit limit

155A* BEGINNING BASKETBALL 1 UNIT
1 hour lecture, 1 hour laboratory
Instruction and practice in the basic skills of basketball with an emphasis on individual skill development and team play. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.
CSU, UC credit limit

155B* INTERMEDIATE BASKETBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 155A or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 155A with an emphasis on intermediate level individual skill development, team play, defensive/offensive tactics and team strategies. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.
CSU, UC credit limit

155C* ADVANCED BASKETBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 155B or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 155B with an emphasis on advanced level individual skill development, team play, defensive/offensive tactics and team strategies. Includes the fundamental principles of physical fitness and their impact on lifelong health and wellness.
CSU, UC credit limit

170A* BEGINNING SOCCER 1 UNIT
1 hour lecture, 1 hour laboratory
Basic skills and strategy of soccer with an emphasis on team play and individual skills.
CSU, UC credit limit

170B* INTERMEDIATE SOCCER 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 170A or equivalent
1 hour lecture, 1 hour laboratory
Intermediate soccer skills and team play with an emphasis on techniques, team strategy, language, and lore of the game of soccer.
CSU, UC credit limit

170C* ADVANCED SOCCER 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 170B or equivalent
1 hour lecture, 1 hour laboratory
Advanced individual soccer skills and team play. Emphasizes techniques and team strategy.
CSU, UC credit limit

171A* BEGINNING SOFTBALL 1 UNIT
1 hour lecture, 1 hour laboratory
Introduces the basic fundamentals of the game of softball. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes individual position skill, and offense and defense strategies.
CSU, UC credit limit

171B* INTERMEDIATE SOFTBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 171A or equivalent
1 hour lecture, 1 hour laboratory
Instruction in the fundamentals of the game of softball at the intermediate level. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes individual position skill, and offense and defense strategies.
CSU, UC credit limit

171C* ADVANCED SOFTBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 171B or equivalent
1 hour lecture, 1 hour laboratory
Instruction in the game of softball at the advanced level. For individuals of all ages and fitness levels. Emphasizes lifelong health and vigor through exercise and activities. Promotes enjoyment of the game of softball, physical activity, safety, and injury prevention. Includes individual position skill, and offense and defense strategies.
CSU, UC credit limit

175A* BEGINNING VOLLEYBALL 1 UNIT
1 hour lecture, 1 hour laboratory
Competency development in the team sport of volleyball with an emphasis on individual techniques and team strategy.
CSU, UC credit limit

175B* INTERMEDIATE VOLLEYBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 175A or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 175A with an emphasis on intermediate level play and strategy and four-person teams.
CSU, UC credit limit

175C* ADVANCED VOLLEYBALL 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in ES 175B or equivalent
1 hour lecture, 1 hour laboratory
Continuation of ES 175B with an emphasis on advanced play and strategy and four-person teams.
CSU, UC credit limit

180* SELF DEFENSE FOR WOMEN 1 UNIT
1 hour lecture, 1 hour laboratory
Basic principles of practical personal protection for women with an emphasis on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Physical, mental and verbal responses will be taught and practiced so that students may develop the confidence to stand up and defend themselves, if needed. Students will learn the fundamental principles of physical fitness and its impact on lifelong health and wellness.
CSU, UC credit limit

206 INTERCOLLEGIATE BASKETBALL 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Intercollegiate competition in the sport of basketball. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

209 INTERCOLLEGIATE CROSS-COUNTRY 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Open to students with advanced cross-country skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

213 INTERCOLLEGIATE GOLF 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Instruction in team play and strategy. Competition in practice and league play. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

218 INTERCOLLEGIATE SOCCER 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Open to students with advanced soccer skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

224 INTERCOLLEGIATE TENNIS 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Intercollegiate competition in the sport of tennis. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

227 INTERCOLLEGIATE TRACK 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Open to students with advanced track skills who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

230 INTERCOLLEGIATE VOLLEYBALL 3 UNITS
Prerequisite: Tryout
10 hours laboratory
Intercollegiate competition in the sport of volleyball. Instruction in specific skills, performance techniques and strategies, as well as daily practice, development of physical fitness, team travel and competition against other collegiate institutions. Open to all students who wish to compete at the intercollegiate level. *Athletic insurance fee is required. Repeatable.*
CSU, UC credit limit

248 CONDITIONING FOR INTERCOLLEGIATE ATHLETES 1 UNIT
1 hour lecture, 1 hour laboratory
Physical conditioning and mastery of the basic fundamentals of movement and skills necessary to reduce the risk of injury associated with athletic activity. Conditioning activities, games, and resistance exercises will be emphasized. This course is intended for intercollegiate athletes who are proficient in the fundamental skills and have knowledge of the basic rules of the competitive sport. Instruction is geared toward advanced techniques, strategies, injury prevention, conditioning, and team play. *Athletic insurance fee is required. Repeatable.*
CSU

249 COMPETENCIES FOR INTERCOLLEGIATE ATHLETES 2-4 UNITS
Prerequisite: Recommendation of Intercollegiate Coach
1 hour lecture, 3 hours laboratory, 2 units
1 hour lecture, 6 hours laboratory, 3 units
1 hour lecture, 9 hours laboratory, 4 units
This course is designed to prepare student athletes for intercollegiate competition at both the two and four year level, and to maintain athletic conditioning between seasons. It is intended for students who have demonstrated the potential (through performance or interview with respective coach) to succeed in intercollegiate athletics. Students will be required to participate in lab hours within the intercollegiate sport of their choice. *Athletic insurance fee may be required upon enrollment. Repeatable.*
CSU

250 INTRODUCTION TO KINESIOLOGY 3 UNITS
C-ID KIN 100
3 hours lecture
Introduction to the interdisciplinary approach to the study of human movement. An overview of the concepts within and importance of the sub-disciplines in kinesiology will be discussed, along with career opportunities in the areas of teaching, coaching, allied health, dietetic, and fitness professions.
CSU, UC

253 PHYSICAL EDUCATION IN ELEMENTARY SCHOOLS 3 UNITS
2.5 hours lecture, 1.5 hours laboratory
The statewide program in physical education for elementary schools forms the basis for this course. Includes the study of child development, personality development, analysis and practice of fundamental skills, selection of activities, organizational materials, and evaluation of teaching ability.
CSU

255 CARE AND PREVENTION OF ATHLETIC INJURIES 3 UNITS
3 hours lecture, 1 hour laboratory
Designed to (1) provide a background for individuals interested in an athletic training career, (2) develop an understanding of athletic injuries in terms of prevention, recognition, evaluation, treatment, first aid and emergency care for coaches and/or teachers in athletic settings, and (3) provide athletes with an understanding of how to manage their own injuries and methods of prevention.
CSU, UC credit limit

270 COOPERATIVE GAMES 1 UNIT
1 hour lecture
Instruction in planning and implementing cooperative games for physical education/activities involving pre-school and elementary school-age children in a variety of settings. The philosophy behind the need for cooperative games will be explored, as well as the importance of incorporating movement into daily life.
CSU, UC credit limit

271 FITNESS WALKING WITH CHILDREN 1 UNIT
1 hour lecture
Instruction in planning and implementing a walking program for children in a variety of settings. Lifelong fitness activities and walking as a form of appropriate and challenging exercise will be emphasized.
CSU

272 ISSUES IN CHILDHOOD OBESITY 1 UNIT
1 hour lecture
Survey of current knowledge relating to the cause and prevention of childhood obesity. Content will include suggested physical activity planning and nutrition guidelines, as well as historically relevant trends in regards to childhood obesity, diet and physical activity.
CSU

GEOGRAPHY (GEOG)

106 WORLD REGIONAL GEOGRAPHY 3 UNITS
C-ID GEOG 125
3 hours lecture
World regional geography studies the overarching principles of human geography as applied to the major geographic regions of the world including Africa, the Middle East, South and East Asia, Australia, Europe and the Americas. Regional analysis will include: language, religion and ethnicity; population, land use and settlement patterns; economic, social and political systems; urban and environmental relationships; and the effects of technology and globalization in a rapidly changing world.
AA/AS GE, CSU, CSU GE, IGETC, UC

120 PHYSICAL GEOGRAPHY: EARTH SYSTEMS 3 UNITS
C-ID GEOG 110
3 hours lecture
Physical geography is the study of the patterns and processes that underlie the fundamental nature and dynamics of the physical world. Topics will be investigated from a systems perspective, with particular attention to the spatial relationships among the atmosphere, hydrosphere, lithosphere and biosphere. Global, regional and local environmental concerns will be discussed as relevant to course topics.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 PHYSICAL GEOGRAPHY: EARTH SYSTEMS LABORATORY 1 UNIT
C-ID GEOG 111, GEOL 120L
Prerequisite: "C" grade or higher or "Pass" in GEOG 120 or GEOL 104 or equivalent or concurrent enrollment in either course
3 hours laboratory
This course is designed to explore the Earth's physical environment, complementing either the physical geography lecture course (GEOG 120) or the Earth Science lecture course (GEOL 104) through practical applications of materials covered in these courses. This laboratory course enhances the observational and analytical skills that are vital to understanding Earth's major physical and chemical systems including atmospheric, hydrospheric, lithospheric and biospheric processes and the Earth's place within the Solar System. Exercises will utilize the methods of scientific inquiry to explore the Geographic Grid, Earth-Sun relationships; weather and climate; the rock cycle; plate tectonics, including faulting, earthquakes, hot spot volcanism and plate boundary dynamics; erosional and depositional environments; landform genesis, identification and geomorphic change; soil and vegetation distributions and habitat analysis. Students gain experience with map interpretation/analysis, unit conversions and dimensional analysis, field work using GPS, compass, clinometer, and other specialized equipment. Special attention is given to the unique local setting of San Diego County especially as exhibited in the Cuyamaca College Nature Preserve where field experiences are incorporated into laboratory exercises on a regular basis. *Also listed as GEOL 105. Not open to students with credit in GEOL 105.*
AA/AS GE, CSU, CSU GE, IGETC, UC

122 REGIONAL FIELD STUDIES IN PHYSICAL GEOGRAPHY AND GEOLOGY OF DESERT ENVIRONMENTS 1 UNIT
C-ID GEOG 160
Recommended Preparation: "C" grade or higher or "Pass" in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment
1 hour lecture, 1 hour laboratory
Are you interested in science and enjoy spending time outdoors? Explore the desert and learn about regional geology and geography with this field studies course! Regional Field Studies in Physical Geography and Geology of Desert Environments provides focused experience in geological and geographical field studies of desert environments in California and western North America. This course emphasizes use of the scientific process, observation, and interpretation of geologic and geographic phenomena in desert environments through direct experience in a field setting. This course centers around multi-day weekend field trips to desert environments in addition to on-campus meetings prior to and immediately following the field trips. Students must supply their own camping gear (sleeping bag, tent, etc.) and attend all class meetings and field trips. *Also listed as GEOL 122. Not open to students with credit in GEOL 122*
CSU

130 HUMAN GEOGRAPHY: THE CULTURAL LANDSCAPE 3 UNITS
C-ID GEOG 120
3 hours lecture
Introduction to the study of the dynamics and complex relationships between the Earth's people and the ever-changing world in which they live. Special attention given to the historical role of the human-environment relationship, as well as the influences of language, religion, and other cultural factors in shaping the world's many cultures. Topics investigated on a global, regional and local scale include: origin and diffusion of the world's major languages and religions; population and settlement patterns; political and economic systems; methods of livelihood; the role of technology in our rapidly changing world. Emphasis is on human-environment relations and understanding and appreciation of our diverse multicultural world. Local field trips link course materials to real-world phenomena.
AA/AS GE, CSU, CSU GE, IGETC, UC

GEOLOGY (GEOL)

104 EARTH SCIENCE 3 UNITS
C-ID GEOL 120
3 hours lecture
This physical science course studies the patterns and processes that define Earth's major physical systems, the basic energy and material flows by which these systems operate, and the comparative place of our planet within the larger solar system. Topics will be investigated at global, regional and local scales and will provide a general synthesis of the disciplines of astronomy, geology, physical geography, meteorology and oceanography. Environmental disturbance and climate change will be addressed within the context of the topics described above.
AA/AS GE, CSU, CSU GE, IGETC, UC

105 PHYSICAL GEOLOGY: EARTH SYSTEMS LABORATORY 1 UNIT
C-ID GEOG 111
Prerequisite: "C" grade or higher or "Pass" in GEOG 120 or GEOL 104 or equivalent or concurrent enrollment in either course
3 hours laboratory
This course is designed to explore the Earth's physical environment, complementing either the physical geography lecture course (GEOG 120) or the Earth Science lecture course (GEOL 104) through practical applications of materials covered in these courses. This laboratory course enhances the observational and analytical skills that are vital to understanding Earth's major physical and chemical systems including atmospheric, hydrospheric, lithospheric and biospheric processes and the Earth's place within the Solar System. Exercises will utilize the methods of scientific inquiry to explore the Geographic Grid, Earth-Sun relationships; weather and climate; the rock cycle; plate tectonics, including faulting, earthquakes, hot spot volcanism and plate boundary dynamics; erosional and depositional environments; landform genesis, identification and geomorphic change; soil and vegetation distributions and habitat analysis. Students gain experience with map interpretation/analysis, unit conversions and dimensional analysis, field work using GPS, compass, clinometer, and other specialized equipment. Special attention is given to the unique local setting of San Diego County especially as exhibited in the Cuyamaca College Nature Preserve where field experiences are incorporated into laboratory exercises on a regular basis. *Also listed as GEOG 121. Not open to students with credit in GEOG 121.*
AA/AS GE, CSU, CSU GE, IGETC, UC

110 PLANET EARTH 3 UNITS
C-ID GEOL 100
3 hours lecture
Introductory physical science course investigating the composition of the earth and the geologic processes by which it formed. Emphasis is placed on the unifying theory of plate tectonics and the associated activities of volcanism, earthquakes, and mountain building. Topics include crystals, minerals and rocks, their distribution within the planet, and the evolution of the earth across deep time. The sculpturing of the surface of the planet by wind, waves, streams, glaciers and landslides will also be considered.
AA/AS GE, CSU, CSU GE, IGETC, UC

111 PLANET EARTH LABORATORY 1 UNIT
C-ID GEOL 100L
Prerequisite: "C" grade or higher or "Pass" in GEOL 110 or equivalent or concurrent enrollment
3 hours laboratory
Physical science laboratory course to accompany and augment GEOL 110. Includes laboratory and field investigations of the Earth, emphasizing hands-on experience with minerals, rocks and landforms, as well as topographic and geologic maps.
AA/AS GE, CSU, CSU GE, IGETC, UC

122 REGIONAL FIELD STUDIES IN PHYSICAL GEOGRAPHY AND GEOLOGY OF DESERT ENVIRONMENTS 1 UNIT
Recommended Preparation: "C" grade or higher or "Pass" in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment
1 hour lecture, 1 hour laboratory
Are you interested in science and enjoy spending time outdoors? Explore the desert and learn about regional geology and geography with this field studies course! Regional Field Studies in Physical Geography and Geology of Desert Environments provides focused experience in geological and geographical field studies of desert environments in California and western North America. This course emphasizes use of the scientific process, observation, and interpretation of geologic and geographic phenomena in desert environments through direct experience in a field setting. This course centers around multi-day weekend field trips to desert environments in addition to on-campus meetings prior to and immediately following the field trips. Students must supply their own camping gear (sleeping bag, tent, etc.) and attend all class meetings and field trips. *Also listed as GEOG 122. Not open to students with credit in GEOG 122.*
CSU

GRAPHIC DESIGN (GD)

Repeat Limitation
Unless specifically required by a transfer institution for preparation for a specific major, students are limited to four enrollments in "Digital Art Foundations" courses related in content in the Grossmont-Cuyamaca Community College District. These courses include ART 171, 172, 175, GD 105, 126. Students intending to major in Art, Graphic Design, or a related major at a California State University or University of California campus that requires more than the limit should take documentation to the Admissions & Records Office for clearance.

105 FUNDAMENTALS OF DIGITAL MEDIA 3 UNITS
Recommended Preparation: Basic computer and file management skills
2 hours lecture, 3 hours laboratory
This course explores the digital software used for graphic design, multimedia, and web design, specifically the use of vector (Adobe Illustrator) and raster images (Adobe Photoshop). Using the design process, students will create projects that require the use and comprehension of various file formats and color modes used in print and web design. Input devices such as digital cameras and scanners will be used to enhance projects. The elements of art and principles of design will be introduced as students develop aesthetic compositional skills.
CSU, UC

110 GRAPHIC DESIGN PRINCIPLES 3 UNITS
C-ID ARTS 250
Prerequisite: "C" grade or higher or "Pass" in GD 105 or equivalent or two years verifiable industry experience
Recommended Preparation: "C" grade or higher or "Pass" in ART 124 or equivalent
2 hours lecture, 3 hours laboratory
Explores the fundamental concepts of graphic design and visual communication. Basic concepts, principles and elements of design are reinforced through creative problem solving. Text and visual elements such as photos and illustrations are integrated to create appropriate and aesthetic solutions to print graphics problems. Students will investigate career options and begin portfolio development.
CSU

115 INTRODUCTION TO MULTIMEDIA 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in GD 105 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent
2 hours lecture, 3 hours laboratory
This intensive introductory course is designed to teach foundational skills for students who have minimal or no experience in creating multimedia news packages. A hands-on introduction on how to use video, photography, data and other elements to successfully create effective visual and multimedia stories.
CSU, UC

125 TYPOGRAPHY 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent
2 hours lecture, 3 hours laboratory
This course explores the fundamental nature of typography as a reflection of society. Characters are examined as art forms and as carriers of language and ideas. Technical aspects of typography will be considered including function and production. Letterforms will be designed using both traditional and digital processes with an emphasis on developing a professional portfolio.
CSU

126 ADOBE PHOTOSHOP DIGITAL IMAGING 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD 105 or equivalent
2 hours lecture, 3 hours laboratory
Explores capturing, digitizing and editing images. Students will learn to digitize images and use industry standard software (Adobe Photoshop) to edit, manipulate, retouch, enhance and composite digital images. Explores digital workflows, color management, digital effects, and output methods used to achieve the best possible output from digital image files. Emphasis is on meeting aesthetic and technical requirements of the commercial arts and graphic design industry.
CSU

129 PAGE LAYOUT 3 UNITS
Prerequisite: Understanding and experience with digital image types and composition.
Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent
2 hours lecture, 3 hours laboratory
This course emphasizes the aesthetic and functional organization of text, charts, graphs, line art, illustrations and photos in multiple page documents for print and electronic applications. Uses traditional and digital processes to develop creative thumbnails, roughs, and comprehensive layouts. Emphasis is on preparing text and images for electronic

pre-press and for selecting printing options as well as for ebook and electronic publishing. Students will develop work for a professional portfolio.
CSU

130 PROFESSIONAL BUSINESS PRACTICES 3 UNITS
Recommended Preparation: Student should have a substantial body of completed design or web projects prior to enrollment in this class.
3 hours lecture
This course emphasizes professional business practices used in the graphic design industry including design studios, agencies and self-employment. Learn how to create a resume, market a portfolio, acquire clients, and set fees. Students will refine their design capabilities using text and images while learning how to perform as business professionals.
CSU

210 PROFESSIONAL DIGITAL PHOTOGRAPHY I 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD126 or equivalent, or experience using industry standard image editing software
2 hours lecture, 3 hours laboratory
Practical course intended for anyone interested in traditional photographic methods as they apply to digital photography. Students will learn to properly light, compose, expose, adjust, manipulate and print digital photographs. Explores advanced camera settings and file editing with Adobe Photoshop. Assignments will emphasize skills needed to produce high quality images for print and web display.
CSU

211 PROFESSIONAL DIGITAL PHOTOGRAPHY II 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD 210 or equivalent
2 hours lecture, 3 hours laboratory
Focuses on advanced photographic and digital imaging techniques, expanding on knowledge and skills acquired in GD 126 and 210. Covers various applications of commercial photography including portraiture, tabletop, still life and photo-illustration. Unlike most fine art oriented photography classes, this course will present aesthetic and technical aspects of photography as they pertain to graphic communication and commercial art.
CSU

212 PROFESSIONAL DIGITAL PHOTOGRAPHY III 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD 211 or equivalent
2 hours lecture, 3 hours laboratory
Project based course concentrates on advanced photographic shooting and post processing techniques, with an introduction to photoillustration. Students will learn to refine compositional and substantive aspects of photography as a means of communication. Course will cover a variety of tools and techniques for image enhancement including high dynamic range imagery (HDR), exposure compositing, and color management in a digital workflow.
CSU

217 WEB GRAPHICS 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent or basic computer and Internet skills and ability to create and upload a simple website, GD 126 or equivalent or ability to use Adobe Photoshop to create digital images
2 hours lecture, 3 hours laboratory
Focuses on the creation of attractive, usable web interfaces and graphic elements. Students will use Photoshop to design and develop common web design elements as they explore information design, screen design and navigation design.
CSU, UC

222 WEB ANIMATION 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent or basic computer and Internet skills and ability to create and upload a simple website
2 hours lecture, 3 hours laboratory
Covers design, development and implementation of web-based animation using animation software. Students will create common web animation projects such as advertisements and web interfaces.
CSU

223 ADVANCED WEB ANIMATION 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in GD 222 or equivalent
Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent or ability to create and upload a simple website
2 hours lecture, 3 hours laboratory
Develop interactive, rich media web animation applications. Includes principles of interaction and content design, ActionScript programming, and techniques to effectively incorporate animation, sound and graphics.
CSU

225 DIGITAL ILLUSTRATION 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent
2 hours lecture, 3 hours laboratory
Uses vector and raster image software to create digital illustrations. Applies design principles and computer technology to create graphic images in an aesthetic composition. Students will produce artwork based on contemporary illustration styles. Applicable for fine art, graphic design, and interactive design.
CSU, UC

230 GRAPHIC DESIGN WORK EXPERIENCE 1-4 UNITS
Prerequisite: 12 units in Graphic Design courses related to field in which work experience is sought and current resume highlighting graphic design experience and course-related study
75 hours paid or 60 hours non-paid work experience per unit
Work experience at a designated industry site in a graphic design occupational category for students seeking job experience in graphic design. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 12 units.*
CSU

HEALTH EDUCATION (HED)

105 HEALTH EDUCATION FOR TEACHERS 1 UNIT
1 hour lecture
Designed for multiple or single subject teacher candidates. Provides introductory knowledge of broad health-related issues relevant to K-12 curriculum. Topics include primary and secondary school health education curriculum design, basic legal issues of health education in California, discussion of community resources, behavior modification techniques, stress management, benefits of regular exercise, nutrition and eating disorders, disease prevention, childhood obesity, sexually transmitted diseases, contraception, substance abuse including alcohol and tobacco, safety in the home and school, and violence including gang and domestic violence. Meets the state of California health education requirement for the K-12 teaching credential.
CSU

120 PERSONAL HEALTH AND LIFESTYLES 3 UNITS
C-ID PHS 100
3 hours lecture
This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety.
AA/AS GE, CSU, CSU GE, UC, UC credit limit

201 INTRODUCTION TO PUBLIC HEALTH 3 UNITS
C-ID PHS 101
3 hours lecture
This course provides an introduction to the discipline of Public Health. Students will gain an understanding of the basic concepts and terminologies of public health, and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines is covered. Topics of the discipline include the epidemiology of infectious and chronic disease; prevention and control of diseases in the community including the analysis of the social determinants of health and strategies for eliminating disease, illness and health disparities among various populations; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management.
AA/AS GE, CSU, CSU GE, UC

202 HEALTH PROFESSIONS AND ORGANIZATIONS 3 UNITS
3 hours lecture
A review of health organizations and agencies that operate locally, regionally, nationally and internationally. Information regarding potential careers in medicine, allied health, and public health is included.
CSU

203 SUBSTANCE ABUSE AND PUBLIC HEALTH 3 UNITS
C-ID PHS 103
3 hours lecture
This course provides an overview of the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Students will be introduced to the concept of substance abuse and dependence, the definition of licit and illicit drugs, and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Political, social and economic factors involved in the supply and demand for drugs will be discussed. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed.
AA/AS GE, CSU, CSU GE, UC

204 HEALTH AND SOCIAL JUSTICE 3 UNITS
C-ID PHS 102
3 hours lecture
This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, race and gender shape health epidemics and policy development. The basic knowledge and skills necessary for advocating for health and social justice will be theoretically demonstrated.
AA/AS GE, CSU, CSU GE, IGETC, UC

251* HEALTHY LIFESTYLES: THEORY AND APPLICATION 3 UNITS
2 hours lecture, 3 hours laboratory
A combination of physical activity and lecture providing regular exercise to develop physical fitness and information about basic, sound nutrition as it pertains to weight control. Guidelines that promote lifetime exercise and a healthy lifestyle will be emphasized.
AA/AS GE, CSU, CSU GE

*Meets the activity requirement for graduation.

HISTORY (HIST)

100 EARLY WORLD HISTORY 3 UNITS
C-ID HIST 150
3 hours lecture
Examination of ancient to early-modern civilizations and the interconnections between diverse world societies to 1500. Included are Mesopotamia, Egypt, China, India, the classical West, early Islamic civilization, civilizations of Africa, and civilizations of the Americas and Oceania.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

101 MODERN WORLD HISTORY 3 UNITS
C-ID HIST 160
3 hours lecture
Examination of the civilizations, societies and global interrelationships of the peoples of Africa, the Americas, Asia, Europe, and Oceania since 1500.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

105 EARLY WESTERN CIVILIZATION 3 UNITS
C-ID HIST 170
3 hours lecture
Survey of Mediterranean and European cultures, thought and institutions from ancient times to 1650. Includes Greece, Rome, Medieval Europe, the Renaissance, and the Reformation.
AA/AS GE, CSU, CSU GE, IGETC, UC

106 MODERN WESTERN CIVILIZATION 3 UNITS
C-ID HIST 180
3 hours lecture
Survey of European cultures, thought and institutions from 1650 to the present. Includes Absolutism, Scientific Revolution, the Enlightenment, age of the French Revolution, 19th century ideologies, imperialism, the world wars, the Cold War, and contemporary Europe.
AA/AS GE, CSU, CSU GE, IGETC, UC

107* HISTORY OF RACE & ETHNICITY IN THE UNITED STATES 3 UNITS
3 hours lecture
An introduction to the historical and socio-cultural experiences of racial and ethnic groups and their roles in shaping society and culture in the United States, from pre-contact to the present. Focus will be on migration, colonization, racialization, discrimination, assimilation, social stratification, liberation movements, and the intersection of racial, ethnic, gender, sexual identities as they relate to African Americans, Asian Americans, Latinas/os/x, Native Americans, and Middle Eastern Americans. *Also listed as ETHN 107. Not open to students with credit in ETHN 107.*
AA/AS GE, CSU, CSU GE

108* EARLY AMERICAN HISTORY 3 UNITS
C-ID HIST 130
3 hours lecture
Survey of the early political, social and cultural development of the entire geographic area that is now the United States, with an emphasis on the origins of basic American institutions and ideals.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

109* MODERN AMERICAN HISTORY 3 UNITS
C-ID HIST 140
3 hours lecture
A historical survey of the political, social, economic and cultural development of the United States from 1865 to the present. Explores modern American institutions, ideals, ideologies, and laws, including explorations of the U.S. and California constitutions and interactions between federal, state, and local governments.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

114* COMPARATIVE HISTORY OF THE EARLY AMERICAS 3 UNITS
3 hours lecture
The Americas (North and South America, including the Caribbean) from pre-contact to the nineteenth century. Emphasis on ancient American civilizations and the interactions among Native American, European, and African cultures in the formation of new nations. The social, political, and cultural developments of the early United States, Latin America, and Canada and their political systems.
AA/AS GE, CSU, CSU GE, IGETC, UC

115* COMPARTIVE HISTORY OF THE MODERN AMERICAS 3 UNITS
3 hours lecture
A survey of the political, social, economic, and cultural development of the modern Americas. Emphasis on interactions among Native American, European, and African American cultures and the social, political, and economic transformations of the modern United States, Latin America and Canada from the early nineteenth century to the present.
AA/AS GE, CSU, CSU GE, IGETC, UC

118* U.S. HISTORY: CHICANO/ CHICANA PERSPECTIVES I 3 UNITS
3 hours lecture
Historical survey of Mexican Americans in the United States in which attention is given to social, political and economic background, with an emphasis on the origins of basic American institutions and ideals. Particular emphasis on the development of Spanish-speaking peoples' economic, social, political, and racialized experience in the United States, especially in the Southwest from the pre-contact period to the Mexican American War. *Also listed as ETHN 118. Not open to students with credit in ETHN 118.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

119* U.S. HISTORY: CHICANO/ CHICANA PERSPECTIVES II 3 UNITS
3 hours lecture
Historical survey of Mexican Americans in the United States in which attention is given to the social, political, and economic background, including explorations of the U.S. and California constitutions and interactions between federal, state, and local governments. Particular emphasis on the economic, social and political experiences of Mexican Americans and Latinas/os/x in the United States, including migration, colonization, racialization, discrimination, assimilation, social stratification, liberation movements, and the intersection of racial, ethnic, gender, sexual identities, especially in the Southwest from the Mexican-American War to the present. *Also listed as ETHN 119. Not open to students with credit in ETHN 119..*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

122* WOMEN IN EARLY AMERICAN HISTORY 3 UNITS
3 hours lecture
Survey of the social, political, cultural, economic and intellectual development of women in America from pre-contact to 1877 in the entire geographic area that is now the United States. Women's experiences are placed in the context of the origins of American institutions and ideals.
AA/AS GE, CSU, CSU GE, IGETC, UC

123* WOMEN IN MODERN AMERICAN HISTORY 3 UNITS
3 hours lecture
Survey of the social, political, cultural, economic and intellectual development of women in America from 1877 to the present in the entire area that is now the United States. Women's experiences are examined in the context of evolving American institutions.
AA/AS GE, CSU, CSU GE, IGETC, UC

124* HISTORY OF CALIFORNIA 3 UNITS
3 hours lecture
Survey of political, social and economic development of the State of California from pre-contact Native Americans, Spanish explorations and Mexican California to the present. Emphasis upon European exploration and interaction with California's Native Americans, Spanish colonization, Mexican California, statehood, late 19th century, pre-WWI Progressive Era, 1910s and 1920s, Depression Era, WWII, Post-WWII era, 1960s to the 1990s, and early 21st century. Unit of study in California state and local government is included.
AA/AS GE, CSU, CSU GE, IGETC, UC

130* U.S. HISTORY AND CULTURES: NATIVE AMERICAN PERSPECTIVES I 3 UNITS
3 hours lecture
This course covers the social, political, cultural, economic, and intellectual history of indigenous groups in North America from pre-history to 1850. Areas of focus include: Native American perspectives of native and non-native cultures, the influence of Native Americans on the Federal Constitution and the U.S. political system, the impact of legislation on Native Americans, and Native American resistance and adaptability in response to land encroachment, racial and ethnic discrimination, and assimilation strategies. *Also listed as ETHN 130. Not open to students with credit in ETHN 130.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

131* U.S. HISTORY AND CULTURES: NATIVE AMERICAN PERSPECTIVES II 3 UNITS
3 hours lecture
This course covers the social, political, cultural, economic, and intellectual history of indigenous groups in North America from 1850 to the present. Areas of focus include: Native American perspectives of native and non-native cultures, the portrayal and influence of Native Americans in popular culture, the influence of Native Americans on the California

State Constitution and government, the impact of State and Federal legislation on Native Americans, and Native American agency and resistance movements in the struggle for civil and political rights and indigenous sovereignty. *Also listed as ETHN 131. Not open to students with credit in ETHN 131.*

AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

132 KUMEYAAY HISTORY I: PRECONTACT - 1845 3 UNITS

3 hours lecture

Historical survey of the Kumeyaay Nation from prehistoric times to 1845. Focus will be on Kumeyaay perspectives of Kumeyaay and non-Kumeyaay cultures; Kumeyaay oral history as it relates to the Creation Story, bird songs, ceremonies, religion and peon games; tribal sovereignty; sociopolitical clan structures; and the evolution of Kumeyaay leadership. Special emphasis will be given to the health and morbidity of indigenous populations and their labor in relation to the Mission San Diego de Alcalá and historic ranchos in San Diego County. *Also listed as ETHN 132. Not open to students with credit in ETHN 132.*

AA/AS GE, CSU, CSU GE, IGETC, UC

133 KUMEYAAY HISTORY II: 1846 - PRESENT 3 UNITS

3 hours lecture

Historical survey of the Kumeyaay Nation from 1846 to the present. Focus will be on Kumeyaay perspectives of Kumeyaay and non-Kumeyaay cultures, creation of Kumeyaay reservations, Mission Indian Federation, Public Law 83-280, Indian self-determination, Indian Gaming Regulatory Act, contemporary tribal governments, landmark Indian Gaming court cases, and an overview of laws pertaining to Native Americans in the United States. Special emphasis will be given to contemporary issues affecting the Kumeyaay Nation and Kumeyaay tribal governments, including socioeconomic deficits, tribal sovereignty, blood quantum, tribal enrollment, demographic challenges, language loss and acquisition, historical trauma, and the growing equity gaps among tribes without casinos. *Also listed as ETHN 133. Not open to students with credit in ETHN 133.*

AA/AS GE, CSU, CSU GE, IGETC, UC

148 THE MODERN MIDDLE EAST 3 UNITS

3 hours lecture

A historical survey exploring the history of the modern Middle East. The course includes background material on the origin and spread of Islam, Islamic dynasties and civilizations. Major emphasis on the Ottoman Empire, the colonial era, rise of 20th century independent nation-states, creation of Israel and the Arab-Israeli conflict, 20th and 21st-century wars and conflicts, famous political/religious leaders, intellectual/scientific accomplishments, and artistic/literary works.

AA/AS GE, CSU, CSU GE, IGETC, UC

180* U.S. HISTORY: BLACK PERSPECTIVES I 3 UNITS

3 hours lecture

United States history with an emphasis on social, economic, political and cultural experiences of Black people. Traces the development of African American history from African origins through the period of Reconstruction, with a focus on agency, resistance, self-determination, and liberation. *Also listed as ETHN 180. Not open to students with credit in ETHN 180.*

AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

181* U.S. HISTORY: BLACK PERSPECTIVES II 3 UNITS

3 hours lecture

Examination of significant aspects of United States history from the aftermath of the Civil War to the present, including explorations of the U.S. and California constitutions and interactions between federal, state, and local governments. Emphasis is on the socio-economic, political, and cultural experiences of African Americans in the United States from Reconstruction to the present, with a focus on agency, resistance, self-determination, and liberation. *Also listed as ETHN 181. Not open to students with credit in ETHN 181.*

AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

275 HISTORICAL PERIOD 3 UNITS

3 hours lecture

In-depth study of an historical period. Reading, discussion, lecture and instructional media focuses on the forces contributing to the creation of the material studied and on the place of that material in relation to other disciplines in the humanities.

CSU, CSU GE, IGETC, UC

276 GEOGRAPHICAL AREA 3 UNITS

3 hours lecture

In-depth study of a geographical area. Reading, discussion, lecture and instructional media focuses on the forces contributing to the creation of the material studied and on the place of that material in relation to other disciplines in the humanities.

CSU, CSU GE, IGETC, UC

277 HISTORICAL THEME 3 UNITS

3 hours lecture

In-depth study of an historical theme. Reading, discussion, lecture and instructional media focuses on the forces contributing to the creation of the material studied and on the place of that material in relation to other disciplines in the humanities.

CSU, CSU GE, IGETC, UC

*Can be used to satisfy U.S. History, Constitution, and American Ideals graduation requirement for the CSU.

HUMANITIES (HUM)

110 PRINCIPLES OF THE HUMANITIES 3 UNITS

3 hours lecture

In this interdisciplinary humanities course, students will learn how to examine, compare, analyze, evaluate, interpret and discuss creative works within their cultural contexts. Examples for study will be selected from the world's great works of literature, drama, painting, sculpture, architecture, music, etc.

AA/AS GE, CSU, CSU GE, IGETC, UC

111 CULTURE, ART, & IDEAS OF THE UNITED STATES 3 UNITS

3 hours lecture

Humanities of the United States explored through film and television, music, dance, graphic novels, writing, photography, handicrafts (i.e. weaving, pottery, quilting, etc.), architecture, food, philosophy, and social institutions. Focus will be on the experiences and contributions of African Americans, Asian Americans, Latinas/os/x, Native Americans, and Middle Eastern Americans, with an emphasis on discrimination, social stratification, intersectionality, resistance, and liberation movements. *Also listed as ETHN 111. Not open to students with credit in ETHN 111.*

AA/AS GE, CSU, CSU GE

115 ARTS AND CULTURE IN LOCAL CONTEXT–SAN DIEGO 3 UNITS

3 hours lecture

This course offers an interdisciplinary survey of San Diego's history, art and culture. Focusing on San Diego's cosmopolitan cultural offerings, students will study characteristic elements of art media (such as architecture, sculpture, music, literature, theater), their creators, significant cultural sites, and our position in the broader context of world culture. Guest lectures by local artists and trips to various cultural sites (Balboa Park, Old Globe Theatre, San Diego Museum of Art, Copley Symphony Hall, Gaslamp District) will be integrated into the course to bring students into direct contact with the arts. Field trips and tours of local cultural sites are a required component of this class.

AA/AS GE, CSU, CSU GE, IGETC, UC

116 KUMEYAAY ARTS AND CULTURE 3 UNITS

3 hours lecture

This course is a seasonal survey of arts and culture of the Kumeyaay Nation in what is now commonly known as San Diego and Imperial Counties and Baja California. Students will study Kumeyaay songs and stories, dance, games, pottery, philosophy, spiritual beliefs and traditions, and the various uses of winter and spring plant resources. Guest lectures by Kumeyaay experts will be integrated into the course. Field trips to various cultural sites and events are a required component of this class.

AA/AS GE, CSU, CSU GE, IGETC, UC

117 KUMEYAAY ARTS AND CULTURE II 3 UNITS

3 hours lecture

This course is a seasonal survey of arts and culture of the Kumeyaay Nation in what is now commonly known as San Diego and Imperial Counties and Baja California. Students will study Kumeyaay uses of summer and fall plant resources, and participate in the harvest and construction of Tule boats, e`waa house, hunting and fishing tools, various types of baskets, and clothing and jewelry. Guest lectures by Kumeyaay experts will be integrated into the course. Field trips to various cultural sites and events are a required component of this class.

CSU

120 EUROPEAN HUMANITIES 3 UNITS

3 hours lecture

An integrated approach to European cultural values as expressed in representative masterpieces of literature, philosophy, drama, music, visual art and architecture.

AA/AS GE, CSU, CSU GE, IGETC, UC

140 HUMANITIES OF THE AMERICAS 3 UNITS

3 hours lecture

Integrated exploration of broadly representative examples of literature, philosophy, drama, music, visual art and architecture of the Americas–the geographical scope of which will include the United States, Canada, the Caribbean, and Latin America.

AA/AS GE, CSU, CSU GE, IGETC, UC

155 WORLD MYTHOLOGY THROUGH THE HUMANITIES 3 UNITS

3 hours lecture

Exploration of world mythologies through broader consideration of their place within the humanities. Students will examine a variety of myths, legends, folklore, and fairy tales, as well as relevant themes, symbols, archetypes, etc.

AA/AS GE, CSU, CSU GE, IGETC, UC

INTERDISCIPLINARY STUDIES (IS)

198 SUPERVISED TUTORING 0 UNIT
TBA hours
This course uses a variety of educational tools to assist students with various learning needs. The course may be used to strengthen prerequisite skills prior to enrolling in a specific course, or to receive supplemental assistance while enrolled in another course. This course may be taken with different content. **No fee/no credit/noncredit course.**

MATHEMATICS (MATH)

020 FOUNDATIONS FOR QUANTITATIVE REASONING 1 UNIT
Corequisite: MATH 120
1 hour lecture
This support course focuses on the skills and concepts needed for success in Quantitative Reasoning (QR). This course is for students concurrently enrolled in Math 120. Students will receive extra support in arithmetic, algebra, geometry, problem solving, technology, and study skills. **Pass/No Pass only. Non-degree applicable.**

060 FOUNDATIONS FOR ELEMENTARY STATISTICS 2 UNITS
Prerequisite: Appropriate placement
Co-requisite: MATH 160 or PSY 215
2 hours lecture
This support course focuses on the skills and concepts needed for success in transfer-level statistics. This course is for students concurrently enrolled in statistics at Cuyamaca College. Students will receive extra support in arithmetic, algebra, problem solving, technology, and study skills. **Pass/No Pass only. Non-degree applicable.**

076 FOUNDATIONS FOR PRECALCULUS 2 UNITS
Prerequisite: Appropriate placement
Co-requisite: MATH 176
2 hours lecture
Support for this course focuses on the skills and concepts needed for success in PreCalculus. This course is for students concurrently enrolled in PreCalculus (Math 176) at Cuyamaca College. Students will receive extra support in algebra, geometry, problem solving, technology, and study skills. **Pass/No Pass only. Non-degree applicable.**

078 FOUNDATIONS FOR CALCULUS FOR BUSINESS SOCIAL & BEHAVIORAL SCIENCES 2 UNITS
Prerequisite: Appropriate placement
Co-requisite: MATH 178
2 hours lecture
Support for this course focuses on the skills and concepts needed for success in Calculus for Business, Social & Behavioral Sciences (Math 178). This course is for students concurrently enrolled in Math 178 at Cuyamaca College. Students will receive extra support in algebra, geometry, problem solving, technology, and study skills. **Pass/No Pass only. Non-degree applicable.**

110 INTERMEDIATE ALGEBRA FOR BUSINESS, MATH, SCIENCE AND ENGINEERING MAJORS 5 UNITS
Prerequisite: Appropriate placement
5 hours lecture
The second of a two-course sequence in algebra. This course completes some topics from the first course, such as factoring and operations on rational and radical expressions, and includes the addition of new topics such as absolute value equations, exponential and logarithmic expressions and equations, conic sections, and an introduction to matrices and sequences and series. The concept of functions is developed including composition and inverses. Quadratic functions are covered in depth. Computational techniques developed in beginning algebra are prerequisite skills for this course. This course is appropriate for students with knowledge of beginning algebra or who have had at least two years of high school algebra but have not used it for several years. Graphing calculators are required for this course.
AA/AS GE

120 QUANTITATIVE REASONING 3 UNITS
Prerequisite: Appropriate mathematics placement
3 hours lecture
The students will survey the historical development of mathematics and apply topics such as logic, geometry, probability, statistics, problem solving, sequences and patterns, numeration systems, and personal finance to develop quantitative reasoning skills. Designed for students who do not intend to prepare for a career in science or business.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

121 QUANTITTIVE REASONING FOR CAREER EDUCATION 3 UNITS
3 hours lecture
A mathematics course designed to develop the computational skills needed in many Career Education (CE) programs. Topics include geometry, measurement, number sense, estimation, basic statistics, trigonometric functions, and critical thinking skills.
AA/AS GE, CSU

125 STRUCTURE AND CONCEPTS OF ELEMENTARY MATHEMATICS I 3 UNITS
C-ID MATH 120
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
3 hours lecture, 1 hour laboratory
In blending the mathematical topics of sets, whole numbers, numeration, number theory, integers, rational and irrational numbers, measurement, relations, functions and logic, the course will investigate the interrelationships of these topics using a problem-solving approach and appropriate use of technology.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

126 STRUCTURE AND CONCEPTS OF ELEMENTARY MATHEMATICS II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 125 or equivalent
3 hours lecture, 1 hour laboratory
In blending the mathematical topics of statistics, probability, measurement, coordinate geometry, plane geometry, solid geometry, logic, relations and functions, the course will investigate the interrelationships of these topics using a problem-solving approach and appropriate use of technology.
CSU, CSU GE, IGETC, UC credit limit

160 ELEMENTARY STATISTICS 4 UNITS
C-ID MATH 110
Prerequisite: "C" grade or higher in Math 110 or appropriate mathematics placement
4 hours lecture
The use of probability techniques, hypothesis testing, and predictive techniques to facilitate decision-making. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Applications using data from disciplines including business, social sciences, psychology, life science, health science, and education.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

170 ANALYTIC TRIGONOMETRY 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
3 hours lecture
Theoretical approach to the study of the trigonometric functions with emphasis on circular functions, trigonometric identities, trigonometric equations, graphical methods, vectors and applications, complex numbers, and solving triangles with applications. *Successful completion of MATH 170 and 175 is equivalent to the successful completion of MATH 176. Maximum of 7 units can be earned for successfully completing any combination of MATH 170, 175, 176.*
AA/AS GE, CSU, CSU GE

175 COLLEGE ALGEBRA 4 UNITS
C-ID MATH 151
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
4 hours lecture
College level course in algebra for majors in science, technology, engineering, and mathematics: polynomial, rational, radical, exponential, absolute value, and logarithmic functions; systems of equations; theory of polynomial equations; and analytic geometry. *Successful completion of MATH 170 and 175 is equivalent to the successful completion of MATH 176. Maximum of 7 units can be earned for successfully completing any combination of MATH 170, 175, 176.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

176 PRECALCULUS: FUNCTIONS AND GRAPHS 6 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
6 hours lecture
Preparation for calculus: polynomial, absolute value, radical, rational, exponential, logarithmic, and trigonometric functions and their graphs; analytic geometry, polar coordinates. *Successful completion of MATH 176 is equivalent to the successful completion of MATH 170 and 175. Maximum of 7 units can be earned for successfully completing any combination of MATH 170, 175, 176.*
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

178 CALCULUS FOR BUSINESS, SOCIAL AND BEHAVIORAL SCIENCES 4 UNITS
C-ID MATH 140
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent
4 hours lecture
Presents a study of the techniques of calculus with emphasis placed on the application of these concepts to business and management related problems. The applications of derivatives and integrals of functions including polynomials, rational, exponential and logarithmic functions

are studied. *Not open to students with credit in MATH 180.*

AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

180 ANALYTIC GEOMETRY AND CALCULUS I 5 UNITS

C-ID MATH 210, 900S (with MATH 280)

Prerequisite: "C" grade or higher or "Pass" in MATH 170 and 175, or MATH 176 or equivalent

5 hours lecture

Graphic, numeric and analytic approaches to the study of analytic geometry, limits and continuity of functions, and introductory differential and integral calculus. Applications involving analysis of algebraic, exponential, logarithmic, trigonometric and hyperbolic functions from a variety of disciplines including science, business and engineering. First of three courses designed to provide math, science, and engineering students with a solid introduction to the theory and techniques of analysis.

AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

245 DISCRETE MATHEMATICS 3 UNITS

C-ID MATH 160

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

3 hours lecture

Introduction to discrete mathematics. Includes basic logic, methods of proof, sequences, elementary number theory, basic set theory, elementary counting techniques, relations, and recurrence relations.

AA/AS GE, CSU, CSU GE, IGETC, UC

280 ANALYTIC GEOMETRY AND CALCULUS II 4 UNITS

C-ID MATH 220, 900S (with MATH 180)

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent

4 hours lecture

A second course in differential and integral calculus of a single variable: integration; techniques of integration; infinite sequences and series; polar and parametric equations; applications of integration. Primarily for science, technology, engineering and math majors.

AA/AS GE, CSU, CSU GE, IGETC, UC

281 MULTIVARIABLE CALCULUS 4 UNITS

C-ID MATH 230

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

4 hours lecture

The third of a three-course sequence in calculus. Topics include vector valued functions, calculus of functions of more than one variable, partial derivatives, multiple integration, Green's Theorem, Stokes' Theorem, and divergence theorem.

AA/AS GE, CSU, CSU GE, IGETC, UC

284 LINEAR ALGEBRA 3 UNITS

C-ID MATH 250, 910S (with MATH 285)

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

3 hours lecture

This course develops the techniques and theory needed to solve and classify systems of linear equations. Solution techniques include row operations, Gaussian elimination, and matrix algebra. Investigates the properties of vectors in two and three dimensions, leading to the notion of an abstract vector space. Vector space and matrix theory are presented including topics such as inner products, norms, orthogonality, eigenvalues, eigenspaces, and linear transformations. Selected applications of linear algebra are included.

AA/AS GE, CSU, CSU GE, IGETC, UC

285 DIFFERENTIAL EQUATIONS 3 UNITS

C-ID MATH 240, 910S (with MATH 284)

Prerequisite:"C" grade or higher or "Pass" in MATH 280 or equivalent

3 hours lecture

This course is an introduction to ordinary differential equations including both quantitative and qualitative methods as well as applications from a variety of disciplines. Introduces the theoretical aspects of differential equations, including establishing when solution(s) exist, and techniques for obtaining solutions, including series solutions, singular points, Laplace transforms and linear systems.

CSU, CSU GE, IGETC, UC

MUSIC (MUS)

Courses Related in Content (see pages 35-36)

001 MUSIC FUNDAMENTALS 4 UNITS

C-ID MUS 110

4 hours lecture

Basic elements of music. Notation, major and minor keys, intervals, triads and 7th chords with inversions. Musical terms and analysis of chord structures. Keyboard application.

CSU

052 CONCERT BAND FOR THE ADULT LEARNER 0 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 253 or equivalent

3 hours laboratory

This course is designed for mature students who are interested in improving existing skills or developing a higher degree of expertise in the performance of instrumental music. **This is a no-fee/no-credit course.**

058 CHOIR FOR THE ADULT LEARNER 0 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 259 or equivalent

3 hours laboratory

This course is designed for mature students who are interested in improving existing skills or developing a higher degree of expertise in the performance of choral music. **This is a no-fee/no-credit course.**

090 PREPARATORY PERFORMANCE STUDIES I .5 UNIT

1.5 hours laboratory

Preparation for audition into MUS 190. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. **Pass/No Pass only. Non-degree applicable.**

091 PREPARATORY PERFORMANCE STUDIES II .5 UNIT

1.5 hours laboratory

Continued preparation for audition into MUS 190. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. **Pass/No Pass only. Non-degree applicable.**

104 INTRODUCTION TO THE MUSIC INDUSTRY 3 UNITS

3 hours lecture

Survey of the music industry with an emphasis on individual career options, roles and responsibilities. Includes interaction with industry components and relationships between business personnel and the music artist.

CSU

105 MUSIC THEORY AND PRACTICE I 4 UNITS

C-ID MUS 120, 125

3 hours lecture, 3 hours laboratory

Introduction to music theory and ear-training. Study of harmonic concepts of the 18th and 19th centuries. Rhythmic and melodic ear-training. Keyboard application and sight singing.

CSU, UC

106 MUSIC THEORY AND PRACTICE II 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 105 or equivalent

3 hours lecture, 3 hours laboratory

Continuation of MUS 105 including both written and aural aspects of music theory. Four-part writing, 7th chords, cadences and non-chord tones. Rhythmic and melodic dictation and harmonic ear training. Sight singing. Analysis of Bach chorales and binary and ternary forms.

CSU, UC

108 ROCK, POP AND SOUL ENSEMBLE 1 UNIT

Prerequisite: Audition

3 hours laboratory

Study and performance of representative popular music compositions from the second half of the 20th century with an emphasis on rock, rhythm and blues, and pop music. Open to instrumentalists and singers.

CSU, UC

109 ROCK, POP AND SOUL ENSEMBLE 1 UNIT

Prerequisite: Audition

3 hours laboratory

Study and performance of representative popular music compositions from the second half of the 20th century with an emphasis on rock, rhythm and blues, and pop music. Open to instrumentalists and singers.

CSU, UC

110 GREAT MUSIC LISTENING 3 UNITS

C-ID MUS 100

3 hours lecture

Listening and reading survey course to acquaint students with fundamental elements of musical style. Covers repertoire from a variety of cultures and periods with primary emphasis on the Western concert tradition.

AA/AS GE, CSU, CSU GE, IGETC, UC

111 HISTORY OF JAZZ 3 UNITS

3 hours lecture

Listening and reading survey course covering the history of jazz from its origins to the present. Includes style periods, significant artists, the broad cultural context of jazz, and the development of critical listening skills.

AA/AS GE, CSU, CSU GE, IGETC, UC

115 HISTORY OF ROCK MUSIC 3 UNITS

3 hours lecture

Overview of rock and rock-related musical styles from the early 1950s to the present. Coverage includes related social and cultural trends, outstanding artists, the influence of technology on popular music, and relevant trends in the music industry. Basic musical concepts such as pitch, rhythm and form will be introduced and applied to the music under consideration.

AA/AS GE, CSU, CSU GE, IGETC, UC

116 INTRODUCTION TO WORLD MUSIC 3 UNITS

3 hours lecture

Designed to expand the student's perspective about the nature of music around the world and demonstrate the relationship between music in different cultures. Highlights elements common to all music. May include music of the cultures of India, China, Japan, Indonesia,

Africa, Pacific Islands, the Middle East, Europe, and the Americas.
AA/AS GE, CSU, CSU GE, IGETC, UC

117 INTRODUCTION TO MUSIC HISTORY AND LITERATURE 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 001 or equivalent
3 hours lecture
Survey of art music in Western civilization from the ancient period to the present. Musical styles will be studied within the context of concurrent developments in society, politics and other arts.
AA/AS GE, CSU, CSU GE, IGETC, UC

118 INTRODUCTION TO MUSIC 4 UNITS
4 hours lecture
Study of basic music theory including notation, rhythms, and sight-singing. Introduction to basic rhythm instruments and development of keyboard facility and vocal skill. Designed for preschool/elementary education majors and non-music majors.
CSU, UC

119 COOPERATIVE WORK EXPERIENCE IN MUSIC EDUCATION 1-4 UNITS
75 hours paid or 60 hours unpaid work experience per unit
Practical application of principles and procedures learned in the classroom to the various phases of music education. Work experience will be paid or unpaid at local middle or high school music programs. Placement assistance will be provided. Two on-campus sessions will be scheduled. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 unpaid hours per unit earned. May be taken for a maximum of 12 units.*
CSU

120 INTRODUCTION TO MUSIC TECHNOLOGY 3 UNITS
Recommended Preparation: "C" grade or higher or "Pass" in MUS 001 or equivalent
2 hours lecture, 3 hours laboratory
Introduction to the basic concepts and processes for editing digital audio and using the digital synthesizer and personal computer to perform, notate and record music. Students should have basic computer skills, basic piano or keyboard skills, and be able to read music.
CSU

121 MUSIC INDUSTRY SEMINAR 1 UNIT
3 hours laboratory
In this project-based class, students will develop and create promotional materials for a local musical artist or groups, and will collaborate to produce concerts of popular music. The course content combines work in recording, print, and electronic media as well as concert production.
CSU

122 MUSIC INDUSTRY SEMINAR 1 UNIT
3 hours laboratory
In this project-based class, students will develop and create promotional materials for a local musical artist or groups, and will collaborate to produce concerts of popular music. The course content combines work in recording, print, and electronic media as well as concert production.
CSU

123 HISTORY OF HIP-HOP CULTURE 3 UNITS
3 hours lecture
This is a survey course that will examine the origins and rise of Hip-Hop as an artistic form and global cultural phenomenon. It is designed for students who wish to examine and explore Hip-Hop culture, while developing background knowledge of Hip-Hop history from the early 1970's South Bronx to its national and international role today. The connections between rap music and the other elements of Hip-Hop culture will be explored and students will be challenged to think critically about rap music and its place in society. Controversial subjects such as censorship, racism, sexism, and racial politics in America will be discussed as they relate to the subject matter.
AA/AS GE, CSU, CSU GE

126 CLASS GUITAR I 2 UNITS
2 hours lecture
Beginning course in guitar for non-music majors. Fundamentals of music as related to the guitar including chords and reading staff notation.
CSU, UC

127 CLASS GUITAR II 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 126 or equivalent
2 hours lecture
Guitar for non-music majors. Continuation of MUS 126 with an emphasis on reading staff notation in closed positions, playing scales and chords in major and minor keys, and developing both left and right hand technique.
CSU, UC

132 CLASS PIANO I 3 UNITS
3 hours lecture
Note reading in treble and bass clefs. Major and minor key signatures. Scales, arpeggios and primary triads in major and minor keys. Transposition, improvisation and harmonization. Development of sight reading ability, two-handed coordination, correct fingering techniques, and proper use of weight and relaxation in production of tone.
CSU, UC

133 CLASS PIANO II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 132 or equivalent
3 hours lecture
Continuation of MUS 132. Scales in minor keys. Scales with hands together. Music literature performed in major and minor keys. Harmonization and sight reading in major and minor keys. Piano pieces in binary form with mixed texture including parallel, contrary and oblique motion.
CSU, UC

136 CHAMBER SINGERS 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of standard and contemporary choral literature (classics to jazz) for small choral ensemble. Includes performances on campus and in local schools and communities. Open to all singers in the community and students of the college.
CSU, UC

137 CHAMBER SINGERS 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of standard and contemporary choral literature (classics to jazz) for small choral ensemble. Includes performances on campus and in local schools and communities. Open to all singers in the community and students of the college.
CSU, UC

152 CONCERT BAND 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

153 CONCERT BAND 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

156 JAZZ ENSEMBLE 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

157 JAZZ ENSEMBLE 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

158 CHORUS 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study and performance of standard and contemporary choral literature for choral ensemble. Open to all singers in the community and students of the college.
CSU, UC

159 CHORUS 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study and performance of standard and contemporary choral literature for choral ensemble. Open to all singers in the community and students of the college.
CSU, UC

161 COOPERATIVE WORK EXPERIENCE IN MUSIC INDUSTRY 1-4 UNITS
75 hours paid or 60 hours unpaid work experience per unit
Practical application of principles and procedures learned in the classroom to the various phases of the music industry. Work experience will be paid or unpaid at local businesses that are part of the music industry such as recording studios, booking agencies, and music equipment manufacturers/retailers. Placement assistance will be provided. Two on-campus sessions will be scheduled. *Occupational cooperative work experience may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 unpaid hours per unit earned. May be taken for a maximum of 12 units.*
CSU

170 CLASS VOICE 2 UNITS
Recommended Preparation: Ability to read music
2 hours lecture
Designed to help the student learn to use the voice correctly. Principles of vocal placement, posture, balance, breath control and vocal tone are emphasized through individual performances.
CSU, UC

171 CLASS VOICE 2 UNITS
Recommended Preparation: Ability to read music
2 hours lecture
Designed to help the student learn to use the voice correctly. Principles of vocal placement, posture, balance, breath control and vocal tone are emphasized through individual performances.
CSU, UC

184 DIGITAL AUDIO RECORDING AND PRODUCTION 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 120 or equivalent
2 hours lecture, 3 hours laboratory
In-depth presentation of digital audio recording, editing and processing. Students will learn techniques for in-studio and live recording and will record and edit new musical recordings. Students should have a basic understanding of digital audio vocabulary and basic experience with using a computer to make/record music.
CSU

190 PERFORMANCE STUDIES .5 UNIT
C-ID MUS 160
Prerequisite: Audition
1.5 hours laboratory
Primarily for music majors. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. In-depth study of performances and techniques. Participation in class performances and student recitals is required.
CSU

191 PERFORMANCE STUDIES .5 UNIT
C-ID MUS 160
Prerequisite: Audition
1.5 hours laboratory
Primarily for music majors. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. In-depth study of performances and techniques. Participation in class performances and student recitals is required.
CSU

205 MUSIC THEORY AND PRACTICE III 4 UNITS
C-ID MUS 140, 145
Prerequisite: "C" grade or higher or "Pass" in MUS 106 or equivalent
3 hours lecture, 3 hours laboratory
Continuation of MUS 106. Chromatic harmony of the 18th and 19th centuries including secondary dominants, borrowed chords and altered chords. Rhythmic, melodic and harmonic dictation. Sight singing. Analysis of Bach chorales. Form analysis of Sonata-form, Minuet/Scherzo, Rondo, and Theme and Variations.
CSU, UC

206 MUSIC THEORY AND PRACTICE IV 4 UNITS
C-ID MUS 150, 155
Prerequisite: "C" grade or higher or "Pass" in MUS 205 or equivalent
3 hours lecture, 3 hours laboratory
Continuation of MUS 205. Harmony of the Post-Romantic and 20th century styles. Expanded tonality. Use of church modes, pentatonic, synthetic and dodecaphonic scales. Parallelism, pandiatonicism, twelve-tone technique, aleatory music and electronic music. Study of the 18th century two-part counterpoint. Ear-training and sight singing.
CSU, UC

208 ROCK, POP AND SOUL ENSEMBLE 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study and performance of representative popular music compositions from the second half of the 20th century with an emphasis on rock, rhythm and blues, and pop music. Open to instrumentalists and singers.
CSU, UC

209 TROCK, POP AND SOUL ENSEMBLE 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study and performance of representative popular music compositions from the second half of the 20th century with an emphasis on rock, rhythm and blues, and pop music. Open to instrumentalists and singers.
CSU, UC

221 MUSIC INDUSTRY SEMINAR 1 UNIT
3 hours laboratory
In this project-based class, students will develop and create promotional materials for a local musical artist or groups, and will collaborate to produce concerts of popular music. The course content combines work in recording, print, and electronic media as well as concert production.
CSU

222 MUSIC INDUSTRY SEMINAR 1 UNIT
3 hours laboratory
In this project-based class, students will develop and create promotional materials for a local musical artist or groups, and will collaborate to produce concerts of popular music. The course content combines work in recording, print, and electronic media as well as concert production.
CSU

226 CLASS GUITAR III 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 127 or equivalent
2 hours lecture
Guitar for non-music majors. Continuation of MUS 127 with an emphasis on high position reading, introductory chord and scale alterations, and technical development.
CSU, UC

227 CLASS GUITAR IV 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 226 or equivalent
2 hours lecture
Guitar for non-music majors. Continuation of MUS 226 with an emphasis on playing solos and accompaniments in various styles and idioms.
CSU, UC

232 CLASS PIANO III 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 133 or equivalent
3 hours lecture
Continuation of MUS 133. Multiple octave performance of major and minor scales. Authentic and plagal cadences. Reading of four-part chorales. Ensemble playing and accompaniment. Intermediate piano pieces in ternary form.
CSU, UC

233 CLASS PIANO IV 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in MUS 232 or equivalent
3 hours lecture
Continuation of MUS 232. Keyboard harmony and deceptive cadence. Reading an open score. Ensemble playing and accompaniment. Piano literature from the 18th through the 20th centuries.
CSU, UC

236 CHAMBER SINGERS 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of standard and contemporary choral literature (classics to jazz) for small choral ensemble. Includes performances on campus and in local schools and communities. Open to all singers in the community and students of the college.
CSU, UC

237 CHAMBER SINGERS 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of standard and contemporary choral literature (classics to jazz) for small choral ensemble. Includes performances on campus and in local schools and communities. Open to all singers in the community and students of the college.
CSU, UC

252 CONCERT BAND 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

253 CONCERT BAND 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

256 JAZZ ENSEMBLE 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

257 JAZZ ENSEMBLE 1 UNIT
Prerequisite: Audition
3 hours laboratory
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances.
CSU, UC

258 CHORUS 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study and performance of standard and contemporary choral literature for choral ensemble. Open to all singers in the community and students of the college.
CSU, UC

259 CHORUS 1 UNIT
C-ID MUS 180
Prerequisite: Audition
3 hours laboratory
Study and performance of standard and contemporary choral literature for choral ensemble. Open to all singers in the community and students of the college.
CSU, UC

270 CLASS VOICE 2 UNITS
Recommended Preparation: Ability to read music
2 hours lecture
Designed to help the student learn to use the voice correctly. Principles of vocal placement, posture, balance, breath control and vocal tone are emphasized through individual performances.
CSU, UC

271 CLASS VOICE 2 UNITS
Recommended Preparation: Ability to read music
2 hours lecture
Designed to help the student learn to use the voice correctly. Principles of vocal placement, posture, balance, breath control and vocal tone are emphasized through individual performances.
CSU, UC

290 PERFORMANCE STUDIES .5 UNIT
C-ID MUS 160
Prerequisite: Audition
1.5 hours laboratory
Primarily for music majors. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. In-depth study of performances and techniques. Participation in class performances and student recitals is required.
CSU

291 PERFORMANCE STUDIES .5 UNIT
C-ID MUS 160
Prerequisite: Audition
1.5 hours laboratory
Primarily for music majors. Designed to enhance the musical progress of students who are currently receiving the equivalent of fifteen one-half hour lessons per semester of individual vocal or instrumental instruction. In-depth study of performances and techniques. Participation in class performances and student recitals is required.
CSU

NATIVE AMERICAN LANGUAGES (NAKY)

120 KUMEYAAY I 4 UNITS
4 hours lecture
Introduction to the Kumeyaay language and the culture of its speakers. Facilitates the practical application of the language in everyday oral communication at the beginning level. Since the focus is on basic communication skills, the class will be conducted in Kumeyaay as much as possible. While becoming familiar with the Kumeyaay speaking world, students will learn structures that will enable them to function in Kumeyaay in everyday contexts.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 KUMEYAAY II 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in NAKY 120 or equivalent
4 hours lecture
Continuation of NAKY 120. Students will continue to develop oral skills based on practical everyday situations and contexts.
AA/AS GE, CSU, CSU GE, IGETC, UC

220 KUMEYAAY III 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in NAKY 121 or equivalent
4 hours lecture
Continuation of NAKY 121. Students will develop increasingly advanced oral, listening and speaking skills in the Kumeyaay language.
AA/AS GE, CSU, CSU GE, IGETC, UC

NUTRITION (NUTR)

155 INTRODUCTION TO NUTRITION 3 UNITS
(Formerly HED 155)
3 hours lecture
Introduction to the basic principles of nutrition and its relationship to good health. Evaluation of current nutritional information (and misinformation) with an emphasis on critical thinking to determine optimal dietary choices. Study of the major dietary goals and guidelines. Examination of weight maintenance techniques, eating disorders, food labeling, food safety, and special needs at various stages in the life cycle. Not open to students with credit in HED 155.
AA/AS GE, CSU, CSU GE, UC

158 NUTRITION FOR FITNESS AND SPORTS 3 UNITS
(Formerly HED 158)
3 hours lecture
Investigates the effects of nutrition and various dietary regimens on athletic performance, physical fitness and general health. Compares the physiological effects of optimal nutrition vs. inadequate nutrition for the general population as well as athletes. Cultural, sociological and psychological influences will be examined. Discussion of "fads" and dietary supplements is included. Not open to students with credit in HED 158.
CSU, CSU GE

255 SCIENCE OF NUTRITION 3 UNITS
(Formerly HED 255)
C-ID NUTR 110
Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 and CHEM 115 or 120 or equivalent
3 hours lecture
Establishes the relationship between foods and science through the study and integration of chemistry, biology and nutrition science. The metabolism and functions and sources of nutrients will be covered in detail to correlate the role they have in promotion of health and disease prevention. The challenges that occur during the human life cycle and how nutrient needs change will be studied. Includes evaluation from a scientific perspective of current concepts, controversies, and dietary recommendations. Nutritional issues as they relate to weight maintenance, eating disorders, food labeling, food safety and special needs at various stages in the life cycle will be thoroughly examined. Not open to students with credit in HED 255.
CSU, CSU GE, UC

OCEANOGRAPHY (OCEA)

112 INTRODUCTION TO OCEANOGRAPHY 3 UNITS
3 hours lecture
Physical science course which examines major aspects of the marine environment. Topics include the origin of the oceans, plate tectonics, seafloor features, seawater properties, ocean climate, currents, waves, tides, coastal landforms, marine ecology, pollution, and resources. The history and development of oceanography and the present and future importance of the oceans are also discussed.
AA/AS GE, CSU, CSU GE, IGETC, UC

113 OCEANOGRAPHY LABORATORY 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in OCEA 112 or equivalent or concurrent enrollment
3 hours laboratory
Hands-on oceanographic laboratory experience to accompany and augment OCEA 112. Includes laboratory and field investigations of the marine environment emphasizing the geological, chemical, physical and biological aspects of the ocean.
AA/AS GE, CSU, CSU GE, IGETC, UC

ORNAMENTAL HORTICULTURE (OH)

****UC credit limit: all CADD courses, ENGR 119, ENGR 129, OH 200, OH 201 combined: maximum credit, one course***

102 XERISCAPE: WATER CONSERVATION IN THE LANDSCAPE 2 UNITS
2 hours lecture
Water management principles and practices as applied to the landscape. Topics include plant selection, landscape design principles for water conservation, irrigation system selection and management, soil preparation and management, and current topics and issues of California and United States water conservation efforts.
CSU

105 EDIBLES IN URBAN LANDSCAPES 1.5 UNITS
1.5 hours lecture
Covers the basics of cultivating edible plants in small scale urban settings, including annual and perennial vegetables as well as shrubs and trees that produce edible fruit. San Diego's climate allows for the production of many tropical and sub-tropical edibles as well as deciduous trees that require some winter chill. Topics include suitable crops, planting techniques, irrigation, fertilizers, maintenance, pests and diseases, and harvest and storage requirements.
CSU

114 FLORAL DESIGN I 3 UNITS
2 hours lecture, 3 hours laboratory
Theory and practice of basic geometric floral design, identification of flowers and foliages, and practical skills necessary for employment in the floral industry. Fresh, silk and dried flowers will be used.
CSU

116 FLORAL DESIGN II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in OH 114 or equivalent
2 hours lecture, 3 hours laboratory
Theory and practice of parallel, vegetative, and contemporary line designs for the retail floral industry. Students will use fresh flowers, silks, dried flowers, foliages, organic and inorganic materials for creating floral designs with an emphasis on European influence and trends.
CSU

117 WEDDING DESIGN I 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in OH 114 or equivalent
2 hours lecture, 3 hours laboratory
Theory and practice of numerous styles of wedding bouquets and corsages including church and reception floral designs. Emphasis is on the skills, mechanics and speed necessary in the floral industry.
CSU

118 SPECIAL OCCASION FLORAL DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in OH 114 or equivalent or one year high school floral design or trade experience
2 hours lecture, 3 hours laboratory
Learn to create unique floral arrangements used for parties, weddings, funerals and gala events. Arrangements will focus on the use of unusual and exotic flowers, containers and special mechanical props.
CSU

120 FUNDAMENTALS OF ORNAMENTAL HORTICULTURE 3 UNITS
2 hours lecture, 3 hours laboratory
Study of plant structure and function. Topics include basic principles of soil science and fertilizer requirements, and the growth of plants in regard to the environmental factors of water, light and temperature. The lab provides an overview of various skills needed in all fields of ornamental horticulture including pruning, basic equipment operation, fertilizer application, and general nursery skills.
CSU

121 PLANT PROPAGATION 3 UNITS
C-ID AG-EH 116L
2 hours lecture, 3 hours laboratory
Principles of plant propagation from seed, cutting, budding, grafting, layering, division and tissue culture. Greenhouses, cold frames, mist chambers and other propagating structures will be discussed along with stock selection, use of rooting hormones, proper sanitation procedures, and protection of young seedlings from disease. Lab exercises include propagation of plant material by various methods and working with various structures, tools and equipment common to plant propagation.
CSU, UC

130 PLANT PEST CONTROL 3 UNITS
C-ID AG-EH 120XT
2 hours lecture, 3 hours laboratory
Identification and control of insects, mites, spiders, snails, weeds and diseases that affect ornamental plants with an emphasis on their phylogenetic relationships, habits, habitats and important characteristics affecting the health of ornamental plants. Control methods will stress the relationships with predators and integrated pest management. The course will include study material for the Qualified Applicator Certificate and License.
CSU

140 SOILS 3 UNITS
2 hours lecture, 3 hours laboratory
Study of soil formation, characteristics, and classification with an emphasis on the management of various soil types with regard to pH, salinity, texture, organic matter control and other variables. The lab will include investigation of soil conditions, problems and management solutions common to soils in Southern California.
CSU, UC

150 LANDSCAPE ARCHITECTURE I 3 UNITS
2 hours lecture, 3 hours laboratory
The course focuses on principles of landscape architecture for public and residential projects with an emphasis on the creation of usable, pleasant outdoor spaces. Topics include strategies to create cohesive site and planting plans using industry drafting standards. The lab emphasizes hands-on design and drafting exercises.
CSU

151 LANDSCAPE ARCHITECTURE II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in OH 150 or equivalent
2 hours lecture, 3 hours laboratory
Principles of landscape architecture for public and residential projects with an emphasis on the creation of usable, pleasant outdoor spaces. Focuses on cohesive set of construction drawings (site plan, planting plan, grading plan, lighting plan, and basic construction details) using industry drafting standards. The lab emphasizes hands-on design exercises and drafting of landscape projects using hand graphics and computer-generated drawings.
CSU

170 PLANT MATERIALS: TREES AND SHRUBS 3 UNITS
3 hours lecture
Identification, cultural requirements, and landscape uses of ornamental trees and shrubs common to the California landscape.
CSU, UC

174 TURF AND GROUND COVER MANAGEMENT 3 UNITS
2 hours lecture, 3 hours laboratory
Building, care and maintenance of turf grasses and ground covers in parks and landscaping. Includes soil preparation, planting, fertilizing, maintenance of common and special turf grasses and ground covers, and pest and disease problems and their control.
CSU

180 PLANT MATERIALS: ANNUALS AND PERENNIALS 3 UNITS
3 hours lecture
Identification, cultural requirements, and landscape value of common annuals and perennials used as bedding plants, annual color, and in the commercial floral industry.
CSU, UC

200 INTRODUCTION TO COMPUTER-AIDED LANDSCAPE DESIGN 3 UNITS
2 hours lecture, 3 hours laboratory
Introduction to computer-aided landscape design using AutoCAD software. Creation of site plans, landscape plans, sprinkler plans, contour maps and landscape estimates. Elevation and perspective drawings are also created. *Also listed as CADD 200. Not open to students with credit in CADD 200.*
*CSU, *UC credit limit*

201 ADVANCED COMPUTER-AIDED LANDSCAPE DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD/OH 200 or equivalent
2 hours lecture, 3 hours laboratory
Use of computer-aided landscape design software for the application of graphics, symbols, patterns, layouts, text and scales for the development of design drawings, concept plans, construction documents, and cost estimates for residential landscape projects. *Also listed as CADD 201. Not open to students with credit in CADD 201.*
*CSU, *UC credit limit*

220 LANDSCAPE CONSTRUCTION: CONCRETE AND MASONRY 3 UNITS
C-ID AG-EH 132X
2 hour lecture, 3 hours laboratory
Study of landscape construction methods and materials. Topics include: landscape contract law; concrete flat work including stamped concrete; brick, block and stone masonry; and proper design and construction of retaining and free standing walls. Grading and installation of plant material will also be covered.
CSU

221 LANDSCAPE CONSTRUCTION: IRRIGATION AND CARPENTRY 3 UNITS
2 hours lecture, 3 hours laboratory
Study of landscape construction methods and materials. Topics include: irrigation and drainage plan reading, materials and components, installation and construction, installation and troubleshooting of control valves and control clocks; basic materials and methods for construction of decks, overhead structures, wooden fences and gates; code and design requirements for irrigation, drainage and landscape structures.
CSU

222 JAPANESE GARDEN DESIGN AND CONSTRUCTION 1 UNIT
.5 hour lecture, 1.5 hours laboratory
An introduction to Japanese garden design concepts and construction methods. The course will cover the historical development of Japanese gardens and, based on the 11th century garden design book *Sakuteiki,* design concepts and construction of garden elements such as stone compositions, streams, ponds, waterfalls, Zen-influenced stone gardens (dry landscape garden), water-basins, introduction to traditional pruning and other basic design, construction and maintenance techniques.

225 LANDSCAPE CONTRACTING 3 UNITS
3 hours lecture
Covers the practices in applying standard techniques in landscape construction and estimating for landscape trades. Reviews the rules, regulations and licensing laws governing landscape contractors set forth by the State of California. Includes an exploration of the field of landscape contracting and business practices associated with the landscape industry.
CSU

235 PRINCIPLES OF LANDSCAPE IRRIGATION 4 UNITS
4 hours lecture
Principles of hydraulics as applied to landscape irrigation systems, including static and dynamic pressures, pipe flows and velocities, pipe sizing, water hammer, pump selection and use. Introduction to system components including valves, backflow prevention devices, controllers, and pumps and pipe.
CSU

238 IRRIGATION SYSTEM DESIGN 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in OH 235 or equivalent or concurrent enrollment
2 hours lecture, 3 hours laboratory
Introduction to basic design and technical skills required to produce professional irrigation system designs. Building on the knowledge acquired in OH 235, students will design complete spray and low-volume systems, calculate hydraulic parameters and schedules, prepare details and specifications, practice presentation skills, analyze working designs, learn head spacing and pipeline layout, and specify equipment using manufacturers' catalogs. A design studio environment is used (including team building and mentoring exercises) to prepare students for entry-level employment in the irrigation design field.
CSU

240 GREENHOUSE PLANT PRODUCTION 3 UNITS
2 hours lecture, 3 hours laboratory
Study of greenhouse plant production. Emphasis on the programming of greenhouse crops common to Southern California. The course will cover equipment, structures, environmental control, estimation of crop production requirements, and production and sales of common greenhouse crops.
CSU

250 LANDSCAPE WATER MANAGEMENT **2 UNITS**
1 hour lecture, 3 hours laboratory
Water management principles and practices for urban landscapes including water audit methods and certification, irrigation scheduling, water budgets, water use monitoring, and laws and regulations pertaining to urban landscape irrigation and runoff.
CSU

255 SUSTAINABLE URBAN LANDSCAPE PRINCIPLES AND PRACTICES **2 UNITS**
Recommended Preparation: "C" grade or higher or "Pass" in OH 120, 170 or equivalent
2 hours lecture
Principles and practices of sustainable landscape design, construction and maintenance. The course provides a basic understanding of the holistic function of the landscape in the context of sustainability. Using a comprehensive systems approach, learn to investigate, analyze, and apply sustainable environmental practices to a project site. Practice communicating ideas, research, and solutions, creatively and confidently via oral presentations.
CSU, UC

260 ARBORICULTURE **3 UNITS**
2 hours lecture, 3 hours laboratory
Introductory course in the study and practice of arboriculture: the knowledge and care of individual trees living in populated areas. The course will familiarize students with the principles and practices of selecting, establishing, and maintaining trees, including tree biology, planting, pruning, diagnosis and preventative care, hazard evaluation, safe work practices, and tree valuation methods. The course can be used to prepare for the International Society of Arboriculture Certification Exam, and can provide Continuing Education units for those already certified.
CSU, UC

263 URBAN FORESTRY **1 UNIT**
1 hour lecture, .5 hour laboratory
Introduces students to the theory and practice of conducting detailed tree inventories, management of public trees, tree evaluation for hazard assessment and risk reduction programs, legal aspects of trees, and appraisal of value methods for trees. Students will also learn site evaluation, benefits of tree volunteer organizations, priority action plans, and emergency response plans.
CSU

264 SAFE WORK PRACTICES IN TREE CLIMBING AND ARBORICULTURE **1 UNIT**
.5 hour lecture, 1.5 hours laboratory
Study and training in the current accepted arboricultural practices in tree climbing and tree work with a chainsaw. Course content includes safety standards and procedures for: personal protective equipment, climbing equipment identification and preparation, pre-climb tree inspection, proper use of climbing equipment, safe operation and maintenance of chainsaws. The course can be used to help with preparation for the International Society of Arboriculture Certified Tree Worker Climber Specialist Exam, and can provide Continuing Education units for those already certified.
CSU

265 GOLF COURSE AND SPORTS TURF MANAGEMENT **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in OH 174 or equivalent or concurrent enrollment
2 hours lecture, 3 hours laboratory
Advanced study in the specialization of golf course and athletic field management. Includes specialized turf management techniques, specialized equipment, budget development, scheduling requirements, and administrative considerations.
CSU

266 SCIENCE IN PRACTICE FOR ARBORICULTURE **1 UNIT**
1 hour lecture
An overview of the scientific concepts of arboriculture, especially as applied to the knowledge required of an International Society of Arboriculture Certified Arborist. Individuals who attain this certification are expected to apply current scientific knowledge and best management practices to the evaluation and care of trees.
CSU

275 DIAGNOSING HORTICULTURAL PROBLEMS **3 UNITS**
Recommended Preparation: "C" grade or higher or "Pass" in OH 120, 130, 170 or equivalent
2 hours lecture, 3 hours laboratory
Explores methods for positive identification and understanding of symptoms for accurate diagnosis of plant problems in the landscape and nursery. Biotic and abiotic causal agents including cultural influences, nutrient deficiencies and toxicities, pest and disease problems, soil salinity, aeration, drainage and irrigation problems will be discussed. Control and correction of disorders will be determined through an understanding of the organism or function involved.
CSU

290 COOPERATIVE WORK EXPERIENCE EDUCATION **1-4 UNITS**
75 hours paid or 60 hours unpaid work experience per unit
Practical application of principles and procedures learned in the classroom to the various phases of horticulture. Work experience will be paid or unpaid at local nurseries and landscape-related companies. Placement assistance will be provided. Two on-campus sessions will be scheduled. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 unpaid hours per unit earned. May be taken for a maximum of 12 units.*
CSU

PARALEGAL STUDIES (PARA)

100 INTRODUCTION TO PARALEGAL STUDIES **3 UNITS**
3 hours lecture
This course provides a historical perspective of the law and the profession of paralegal. The main focus is the role of the paralegal in the law office including client contact, ethical responsibilities, investigative fact finding, law office management, and legal restrictions. Students will be introduced to legal research and writing, substantive and procedural law, the court systems, and legal terminology.
CSU

110 CIVIL LITIGATION PRACTICE AND PROCEDURES **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
3 hours lecture
The initial phase of an action, the issues of jurisdiction, the complaint and the discovery process will be examined. Court procedures, "Fast Track" and alternatives to litigation such as arbitration and mediation will be discussed. The basic elements of a tort claim will be reviewed as well as the Federal and State Rules of Evidence. Emphasis is placed on the paralegal's role and ethical and professional responsibilities in discovery procedures including e-discovery and trial practice.
CSU

120 INTRODUCTION TO ADMINISTRATIVE LAW **2 UNITS**
2 hours lecture
This course is intended to be an introduction to Administrative Law and the role of the paralegal in various administrative agencies. Statutory law, case law, and administrative rules will be utilized to develop, for the student, an understanding of the role and authority of administrative agencies. Students completing this course will have the foundation to advance into the areas of Social Security, Worker's Compensation, and Labor and Employment Law.
CSU

121 SOCIAL SECURITY DISABILITY LAW **1 UNIT**
1 hour lecture
This course is intended to be an introduction to Social Security Disability Law and the role of Paralegals in the Social Security Administration. Statutory law, case law and Social Security rules will be utilized to develop an understanding of the role and authority of the Social Security Administration. Students will also be able to assist applicants with the processing of their disability applications and claims. Students completing this course will have the foundation to advance into other specialty areas of Administrative Law.
CSU

125 BUSINESS ORGANIZATIONS **1 UNIT**
1 hour lecture
Fundamentals of the formation of business entities such as sole proprietorships, partnerships, limited liability companies and corporations are included. Emphasis will be on formation, maintenance, taxation, termination of business entities, and the ethical constraints on paralegals.
CSU

130 LEGAL RESEARCH AND WRITING **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
3 hours lecture
Includes in-depth legal research, writing research reports and subject matter reports on legal issues, case briefings, and citations using the uniform system of citation The Bluebook.
CSU

132 COMPUTER ASSISTED LEGAL RESEARCH (CALR) **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
3 hours lecture
The study of computer software programs designed specifically for use in law offices and legal environments, including but not limited to specific applications such as calendaring, and time and billing programs. The course focuses on legal research using electronic sources.
CSU

135 BANKRUPTCY LAW **3 UNITS**
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
3 hours lecture
The United States Federal Bankruptcy Code (as amended) will be the foundation of this examination of bankruptcy law and practice. Students will be exposed to the jurisdictional and filing requirements for bankruptcy cases under Chapters 7, 11 and 13 of the Bankruptcy Code, and will learn pertinent rules of federal procedure

associated with bankruptcy case filings. The focus will be on "consumer" Chapters 7 and 13.
CSU

140 INTRODUCTION TO CRIMINAL LAW AND PROCEDURES 1 UNIT
1 hour lecture
The California Penal Code and Rules of Criminal Procedure will be the foundation of this preliminary-examination of the substantive and procedural laws in a criminal case. Students will be exposed to the basics of the criminal justice system from the elements of offenses through post-conviction remedies. The drafting of documents associated with criminal matters will be included.
CSU

145 ESTATE PLANNING 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
2 hours lecture
Recommended Preparation: Familiarity with Canvas learning platform, basic computing, rudimentary understanding of contracts and property law.
Overview of the subject of planning an owner's estate, including a review of the customary means of accomplishing estate planning objectives including wills, trusts, taxation, asset protection, and gift-giving programs.
CSU

146 PROBATE AND ADMINISTRATION OF ESTATES 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
1 hour lecture
Overview of Probate and Administration of Estates, including the law of wills, estates and estate administration including testate and intestate estates, and the law of descent and distribution will be discussed as well as conservatorships.
CSU

150 FAMILY LAW (DIVORCE, SEPARATION, NULLITY, AND PATERNITY) 2 UNITS
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
2 hours lecture
Recommended Preparation: Familiarity with Canvas learning platform, basic computing.
Family law matters such as legal separation, dissolution of marriage, nullity and paternity are included. The law in California regulating such matters and the drafting of appropriate documents will be emphasized.
CSU

151 FAMILY LAW (CUSTODY, VISITATION, SUPPORT) 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
Recommended Preparation: PARA 150
1 hour lecture
This course will cover Family Law matters such as child custody and visitation, child and spousal support are included. California law regulating these matters and the drafting of appropriate documents will be emphasized.
CSU

160 PERSONAL INJURY 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
1 hour lecture
Study of the essentials of tort actions with an emphasis on personal injury and other forms of negligence. Special attention will be given to the elements of a cause of action in negligence. Theories of recovery, defenses, case handling, witness interviewing, working with insurance carriers, and evidence requirements under current California law will be reviewed. Students will review the particular ethical constraints on personal injury paralegals.
CSU

170 WORKERS' COMPENSATION 1 UNIT
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
1 hour lecture
Overview of California's Workers' Compensation statutes, including the concept of no-fault insurance and the administration of contested compensation claims for death, disability, and vocational rehabilitation. Students will compute awards based upon current benefit formulae.
CSU

175 ELECTRONIC DISCOVERY: PRACTICE AND PROCEDURE 1 UNIT
Recommended Preparation: PARA 100 or PARA 110
1 hour lecture
This course explores the developing issues, rules and practices involving the application of e-discovery in litigation and general practice. Students will learn about the evolution of electronic discovery, its current use, and how the rules of civil procedure, evidence and case law affect this aspect of litigation. This course will deal with matters a paralegal and the legal team should consider when handling Electronically Stored Information (ESI) prior to and during the litigation process as well as managing the cost of production and processing. Students will study the ethics issues implicit in e-discovery.
CSU

199 SPECIAL STUDIES OR PROJECTS IN PARALEGAL STUDIES 1-3 UNITS
48-54 hours (1 unit), 96-108 hours (2 units), 144-162 hours (3 units)
Individual study, research or projects under instructor guidance. Written reports and periodic conferences required. Content and unit credit to be determined by student/instructor conferences and the Office of Instruction. *May be repeated with different content for a maximum of 9 units.*
(see page 40, 199 Courses-Special Studies)

250 INTERNSHIP 1-4 UNITS
Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent
75 hours paid or 60 hours unpaid work experience per unit
Practical work experience in a cooperating law office or corporate legal department. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 nonpaid hours per unit earned. May be taken for a maximum of nine units in Paralegal.*
CSU

PERSONAL DEVELOPMENT–SUCCESS SERVICES (PDSS)

080 EDUCATIONAL ASSESSMENT AND PRESCRIPTIVE PLANNING .5 UNIT
.5 hour lecture
Designed to assess, identify and diagnose learning strengths and weaknesses for the purpose of identifying specific learning disabilities. Guidelines mandated by the California Community Colleges Chancellor's Office. *Learning Disabilities Eligibility and Service Model*, will be utilized to determine eligibility for Learning Disabilities Services. An orientation to the Learning Disabilities Program will be provided as well as prescriptive planning. A pre- and post-conference will be held with a qualified and certificated Disabled Students Programs and Services (DSPS) Specialist. **Pass/No Pass only. Non-degree applicable.**

081 SELF-ADVOCACY 1 UNIT
1 hour lecture
Designed for students who want to learn more about self-advocacy. Involves prescriptive instruction emphasizing personal empowerment, support systems, understanding one's strengths, and legal and ethical issues including awareness of disabilities. *May be taken for a maximum of 4 units.* **Pass/No Pass only. Non-degree applicable.**

085 ADAPTED COMPUTER BASICS 1 UNIT
1 hour lecture, 1 hour laboratory
Individualized course of study for students with disabilities. Designed to acquaint students with basic assistive technology and techniques that may improve their ability to participate in general activities, programs and classes offered by the college and improve their potential for success in college. *May be taken for a maximum of 4 times.* **Pass/No Pass only. Non-degree applicable.**

087 ADAPTED COMPUTER STUDIES 1 UNIT
1 hour lecture, 1 hour laboratory
Individualized course of study for students with disabilities. Provides in-depth, individualized instruction in assistive technology and techniques to maximize independent use of assistive and mainstream computer hardware/software. This course is intended to improve students' ability to participate in general activities, programs and classes offered by the college and improve their potential for success in college-level courses. *May be taken for a maximum of 4 units.* **Pass/No Pass only. Non-degree applicable.**

090 LEARNING STRATEGIES PRACTICUM 1 UNIT
1 hour lecture
This course is designed for students with specialized learning needs. Emphasis is on the development and implementation of specific learning strategies in a developmental learning environment utilizing specialized software programs to assist students' academic performance. May be taken for a maximum of 4 units. **Pass/No Pass only. Non-degree applicable.**

092 MATH STRATEGIES FOR STUDENTS WITH DISABILITIES 1 UNIT
1 hour lecture
Instruction in strategies to improve success in developmental math courses for students with disabilities. Included in the course are test taking strategies, techniques to deal with math anxiety, textbook reading skills, ways to improve note taking and memory, and effective homework practices. Students will identify various aspects of their learning styles and use the information to develop study strategies that are appropriate for a math course. Students with disabilities enrolled in Math 110 would benefit from this course. **Pass/No Pass only. Non-degree applicable.**

096 COGNITIVE COMMUNICATION SKILLS AND STRATEGIES 1 UNIT
1 hour lecture
Students with cognitive communication deficits will receive specialized instruction in attention, concentration, thought organization, memory strategies, social pragmatics skills, organization and time management skills, and maximizing related communication skills. Emphasizes the development of skills and functional compensatory strategies to enhance disabled students' opportunities for academic success. *May be taken for a maximum of 4 units.* **Pass/No Pass only. Non-degree applicable.**

PHILOSOPHY (PHIL)

110 A GENERAL INTRODUCTION TO PHILOSOPHY 3 UNITS
C-ID PHIL 100
3 hours lecture
In this basic orientation, students will explore, compare, analyze, evaluate and discuss a variety of principle questions addressed in philosophy, such as: What is the purpose of my existence? Can I know anything with certainty? Do I really have a free will? Can we prove that God exists? Why should I be moral? Whose self-interest counts?, etc. Issues covered will encompass relevant philosophical perspectives from Western and other major world cultures, and include contributions of women and minority cultures to the realm of philosophy.
AA/AS GE, CSU, CSU GE, IGETC, UC

115 HISTORY OF PHILOSOPHY I: ANCIENT 3 UNITS
C-ID PHIL 130
3 hours lecture
Survey of ancient philosophy with emphasis on the development of philosophy from the Pre-Socratics through Plato and Aristotle, to the medieval period.
AA/AS GE, CSU, CSU GE, IGETC, UC

117 HISTORY OF PHILOSOPHY II: MODERN AND CONTEMPORARY 3 UNITS
3 hours lecture
Survey of philosophy from the Renaissance to the 20th century including the development of modern scientific processes as well as empiricism, rationalism, idealism, etc.
AA/AS GE, CSU, CSU GE, IGETC, UC

125 CRITICAL THINKING 3 UNITS
3 hours lecture
Introduction to critical thinking with an emphasis on analyzing and constructing both inductive and deductive arguments. Critical reasoning will be applied to a variety of situations such as making sound decisions, evaluating claims and assertions, avoiding fallacious reasoning, etc.
AA/AS GE, CSU, CSU GE, UC

130 LOGIC 3 UNITS
3 hours lecture
Study of correct thinking comprising both deductive and inductive inference and principles of scientific method. Application of fundamental principles of logic to practical problems.
AA/AS GE, CSU, CSU GE, UC

140 PROBLEMS IN ETHICS 3 UNITS
C-ID PHIL 120
3 hours lecture
Study of values as they affect the individual and society. Conduct as expressed by ethical standards and natural law, problems and theories of beauty and value.
AA/AS GE, CSU, CSU GE, IGETC, UC

141 BIOETHICS 3 UNITS
3 hours lecture
In this orientation to biomedical ethics, students will explore ethical dilemmas common in the medical field including but not limited to organ transplantation, use of human beings and animals in research, genetic and reproductive technologies, abortion, euthanasia, and delivering healthcare. By considering how concepts such as justice, autonomy, caring, truth-telling, and resource allocation figure into such ethical dilemmas, the student will become familiar with how ethical detion making takes place in the medical field.
AA/AS GE, CSU, UC

160 AMERICAN PHILOSOPHY 3 UNITS
3 hours lecture
Study of the main traditions of American philosophical thought with an emphasis on the philosophers, their works, and systems of philosophy peculiar to the United States. Includes American philosophy from the earliest time to the present.
AA/AS GE, CSU, CSU GE, IGETC, UC

170 PHILOSOPHY OF RELIGION: A CROSS-CULTURAL INTRODUCTION 3 UNITS
3 hours lecture
In this introductory course, students will explore cross-cultural perspectives on topics such as the nature and grounds of religious belief, the relation between religion and ethics, the nature and existence of God/ultimate reality, the problem of evil, the validity of religious experience, and religious pluralism versus religious exclusivism. The examination of issues will take into account the diversity of religious thought evident in the world today.
AA/AS GE, CSU, CSU GE, IGETC, UC

PHYSICS (PHYC)

110 INTRODUCTORY PHYSICS 4 UNITS
3 hours lecture, 3 hours laboratory
Simple treatment of basic physics principles and phenomena with an emphasis on relating them to events and processes of everyday living. Study of the description and cause of various kinds of motion, conservation laws, hot and cold bodies with heat exchange, sound in music and hearing, light and color perception, electricity and some of its practical uses, observation of atomic particles from radiation sources, and other subjects. There is no math prerequisite; the main emphasis is on understanding the concepts rather than doing many mathematical manipulations.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

130 FUNDAMENTALS OF PHYSICS 4 UNITS
C-ID PHYS 105, C-ID PHYS 100S(with PHYC 131)
Prerequisite: "C" grade or higher or "Pass" or concurrent enrollment in MATH 180 or equivalent
3 hours lecture, 3 hours laboratory
A mathematical and philosophical introduction to basic physical phenomena including force, linear and rotational motion, momentum, work and energy, simple harmonic motion and wave behavior, heat and thermodynamics using calculum, trigonometry and algebra-based problem solving. Laboratory experience is an integral part of this course.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

131 FUNDAMENTALS OF PHYSICS 4 UNITS
C-ID PHYS 110, C-ID PHYS 100S(with PHYC 130)
Prerequisite: "C" grade or higher or "Pass" in PHYC 130 or equivalent
3 hours lecture, 3 hours laboratory
A mathematical and philosophical introduction to basic physical phenomena including electricity, magnetism, optics and modern physics using calculus, trigonometry and algebra-based problem solving. Laboratory experience is an integral part of this course.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

190 MECHANICS AND HEAT 5 UNITS
C-ID PHYS 205, C-ID PHYS 200S (with PHYC 200 & 210)
Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent or concurrent enrollment
4 hours lecture, 3 hours laboratory
This course covers linear and rotational kinematics and dynamics, equilibrium, work, energy, momentum, gravitation, simple harmonic motion, thermal properties of matter, and thermodynamics. This course is the first of a three semester sequence intended for students majoring in physical sciences and engineering.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

200 ELECTRICITY AND MAGNETISM 5 UNITS
C-ID PHYS 210, 200S (with PHYC 190 & 210)
Prerequisite: "C" grade or higher or "Pass" in PHYC 190 or equivalent; "C" grade or higher or "Pass" in MATH 280 or equivalent
Recommended Preparation: Concurrent enrollment in MATH 281
4 hours lecture, 3 hours laboratory
Course focus is on the electric and magnetic behavior of matter. The primary emphasis is on Maxwell's Equations and their applications. This course is part of a three semester sequence intended for students majoring in physical sciences and engineering.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

201 MECHANICS AND WAVES 5 UNITS
C-ID PHYS 205, C-ID PHYS 200S (with PHYC 202, 203)
Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent
4 hours lecture, 3 hours laboratory
This is the first course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science majors. The course assumes no previous physics study, but makes extensive use of algebra, trigonometry, geometry, and calculus. Topics include linear and rotational kinematics and dynamics, energy and energy conservation, linear and angular momentum and their conservation laws, fluid dynamics, and gravitation, and wave motion.
AA/AS GE, CSU, CSU GE, IGETC, UC

202 ELECTRICITY, MAGNETISM, AND HEAT 5 UNITS
C-ID PHYS 210, C-ID PHYS 200S (with PHYC 201, 203)
Prerequisite: "C" grade or higher or "Pass" in PHYSICS 201 or equivalent; and "C" grade or higher or "Pass" or concurrent enrollment in MATH 280 or equivalent
4 hours lecture, 3 hours laboratory
This is the second course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science students. The topics of heat, electricity, and magnetism are introduced at the beginning level with reliance upon students' ability to apply topics introduced in Physics 201. The laboratory provides emphasis on measurements using gas laws and of electric and magnetic fields, DC and AC circuits, and oscilloscope techniques.
AA/AS GE, CSU, CSU GE, IGETC, UC

203 LIGHT, OPTICS, AND MODERN PHYSICS 5 UNITS
C-ID PHYS 215, C-ID PHYS 200S (with PHYC 201, 202)
Prerequisite: "C" grade or higher or "Pass" in PHYSICS 202 or equivalent; and "C" grade or higher or "Pass" or concurrent enrollment in MATH 281 or equivalent
4 hours lecture, 3 hours laboratory
This is the third course of a three-semester, calculus level sequence of physics courses designed for engineering, physics, mathematics, and science students. The topics of optics, quantum mechanics, special relativity, and atomic and nuclear physics are introduced at the beginning level with reliance upon ability to apply topics introduced in Physics 201 and Physics 202. The laboratory provides experiments in optics, interference and diffraction, and nuclear physics.
AA/AS GE, CSU, CSU GE, IGETC, UC

210 WAVE MOTION AND MODERN PHYSICS 5 UNITS
C-ID PHYS 215, 200S (with PHYC 190 & 200)
Prerequisite: "C" grade or higher or "Pass" in PHYC 190 or equivalent; "C" grade or higher or "Pass" in MATH 281 or equivalent or concurrent enrollment
4 hours lecture, 3 hours laboratory
Course focuses on hydrostatics, hydrodynamics, wave behavior, geometric and physical optics, relativity, light as a particle, matter as a wave, the hydrogen atom and the Schrodinger Equation, electrical conductivity of solids, lasers, and nuclear physics. This course is part of a three semester sequence intended for students majoring in physical sciences and engineering.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

POLITICAL SCIENCE (POSC)

120 INTRODUCTION TO POLITICS AND POLITICAL ANALYSIS 3 UNITS
C-ID POLS 150
3 hours lecture
The primary aim of this course is to assist the student/citizen in the development of a set of skills which can be helpful in analyzing political situations in the world today. In order to accomplish this objective, students will be introduced to the basic approaches, perspectives, techniques and models of the political scientist. Accordingly, this course covers some universal aspects of political stability and change, ideologies, conflicts, institutions, political economy and issues.
AA/AS GE, CSU, CSU GE, IGETC, UC

121* INTRODUCTION TO U.S. GOVERNMENT AND POLITICS 3 UNITS
C-ID POLS 110
3 hours lecture
Analysis of the evolution of the structures and functions of the U.S. and California political systems from the time of the nation's founding to the current day in what is now the United States. Emphasis is on the continuity and uniqueness of the American political experience and how that experience has derived from other political cultures. This will be examined in the context of the larger cultural, economic, and sociological forces shaping the U.S. political system. Attention will be given to significant events affecting the evolution of the U.S. political system since its founding. The development and evolution of the U.S. Constitution and policy making role of traditional political institutions such as the presidency, the Congress, and the judiciary will be explored. The impact of other political forces such as mass movements, the media, the bureaucracy, interest groups, and ethnic and social groups will be examined. Topics will be illustrated through reference to actual political events occurring as the course progresses.
AA/AS GE, CSU, CSU GE, IGETC, UC

124 INTRODUCTION TO COMPARATIVE GOVERNMENT AND POLITICS 3 UNITS
C-ID POLS 130
3 hours lecture
Analysis of the political systems of selected developed, transitional and developing countries of the world in order to understand the importance of political development, political institutions, political culture, political actors, political processes, and political change for the dynamics of today's global society.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 INTRODUCTION TO INTERNATIONAL RELATIONS 3 UNITS
C-ID POLS 140
3 hours lecture
Survey of the field of international relations. Students will be introduced to the major theories of international relations and will learn to apply them to contemporary problems in world politics. Issues examined include global peace and security, international political economy, international law and organization, sustainable development, and human rights.
AA/AS GE, CSU, CSU GE, IGETC, UC

140* INTRODUCTION TO CALIFORNIA GOVERNMENTS AND POLITICS 3 UNITS
3 hours lecture
Examination of the structure and functions of California state and local governments and politics. Attention will be given to the evolution of the principal features, organization, and operation of state and local governments within the framework of U.S. federalism from the time of the nation's founding. Emphasis is on the role of significant events, major ethnic groups, and major social groups in the development of the political structures and processes of California state and local governments and contemporary political issues.
AA/AS GE, CSU, CSU GE, IGETC, UC

165 INTRODUCTION TO THE POLITICS OF RACE AND GENDER 3 UNITS
3 hours lecture
This course is an introduction to the politics of race and gender. The course offers an overview of the identity, status, and power of Women, Native Americans, African Americans, Latina/o Americans, and Asian Americans from an intersectionality perspective. *Also listed as ETHN 165. Not open to students with credit in ETHN 165.*
AA/AS GE, CSU, CSU GE

166 INTRODUCTION TO NATIVE AMERICAN POLITICS AND POLICY 3 UNITS
3 hours lecture
This course introduces students to Native American politics and policy from the treaty making process that formed the foundation of contemporary tribal sovereignty to legal cases and precedents that impact Native American lands and people. The course will also explore how Native people have both petitioned for access into the American polity and actively resisted assimilation. Emphasis will be given to twelve recognized Kumeyaay tribal governments in the United States and four recognized Kumeyaay/Kumiai tribal governments in Baja California, Mexico. *Also listed as ETHN 166. Not open to students with credit in ETHN 166.*
AA/AS GE, CSU

170 INTRODUCTION TO POLITICAL SCIENCE RESEARCH METHODS 3 UNITS
C-ID POLS 160
3 hours lecture
This course focuses on the scientific study of politics, research ethics, theory construction and hypothesis generation, research design, conceptualization, operationalization, and measurement of political concepts, and data collection and management of political data. Qualitative and quantitative empirical analyses will be introduced, including interpreting results of regression models for binary, ordinal, categorical, and count outcomes.
AA/AS GE, CSU, CSU GE, IGETC, UC

180 INTRODUCTION TO PUBLIC POLICY 3 UNITS
3 hours lecture
This course focuses on public policy, including the policy process: problem identification, policy analysis, strategy and policy development, policy enactment, and policy implementation. The course will examine the application of these concepts to policy areas, such as children, families, and communities, criminal justice, democracy and voting rights, economic and budgetary, education and literacy, energy and environment, health and human services, immigrant rights, infrastructure and transportation, mobility and opportunity, science and technology, and water.
AA/AS GE, CSU

*Meets part of the American Institutions requirement. See CSU General Education Breadth under Degree Requirements & Transfer Information for complete requirements and different options, or visit www.assist.org.

PSYCHOLOGY (PSY)

120 INTRODUCTORY PSYCHOLOGY 3 UNITS
C-ID PSY 110
3 hours lecture
Introduction to the facts and theories which seek to explain and understand human thought and behavior including such topics as personality, psychotherapy, learning, memory, interpersonal relationships, adjustment and biological influences.
AA/AS GE, CSU, CSU GE, IGETC, UC

125 CROSS-CULTURAL PSYCHOLOGY 3 UNITS
3 hours lecture
Introduction to theories and research findings regarding cultural influences on human behavior and cognitive processes (lifespan development, abnormal behavior and mental health, drug use, self-concept, emotion, gender schemas and gender roles, social behavior, perception, learning, intelligence and memory). By providing students with a non-judgmental understanding of how culture influences human behavior, they will be more equipped to interact in a world where there is increasing contact among different cultures.
AA/AS GE, CSU, CSU GE, IGETC, UC

134 HUMAN SEXUALITY 3 UNITS
C-ID PSY 130
3 hours lecture
Review of the biological, psychological and social aspects of human sexuality including sexuality throughout the lifespan, individual and cultural variations, homosexuality, communication and relationships, sex therapy, sex roles, morality, contraception, and sexually transmitted diseases (STDs).
AA/AS GE, CSU, CSU GE, IGETC, UC

138 SOCIAL PSYCHOLOGY 3 UNITS
C-ID PSY 170
3 hours lecture
Examination of the individual's perception of and reaction to other people and social influences. Topics such as attitude formation, prejudice and discrimination, helping behavior, aggression, conformity, obedience, cooperation and conflict reduction, and group behavior are explored. *Also listed as SOC 138. Not open to students with credit in SOC 138.*
AA/AS GE, CSU, CSU GE, IGETC, UC

140 PHYSIOLOGICAL PSYCHOLOGY 3 UNITS
C-ID PSY 150
Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent
3 hours lecture
Examination of the relationships between bodily processes and aspects of behavior. Review of fundamental research methods and major research findings in physiological psychology. Application of experimental methods in psychology, physiology and related disciplines to the understanding of perceptual processes, the control of movement, sleep and waking, reproductive behaviors, ingestive behaviors, emotion, learning, language and mental disorders are explored.
AA/AS GE, CSU, CSU GE, IGETC, UC

150 DEVELOPMENTAL PSYCHOLOGY 3 UNITS
C-ID PSY 180
Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent
3 hours lecture
Overview of psychological research and theory involving the lifespan approach to human behavior and cognition. Explores the biological, emotional, social and cognitive development from infancy through childhood, adolescence and adulthood. Topics include influences of drugs and disease on prenatal development, child-rearing methods, temperaments and personality, childhood disorders, development of language and thinking, gender roles, friendship, family and relationships, parenting and aging. *Not open to students with credit in PSY 165.*
AA/AS GE, CSU, CSU GE, IGETC, UC

170 ABNORMAL PSYCHOLOGY 3 UNITS
C-ID PSY 120
3 hours lecture
Overview of psychological research and theory involving the causes and treatment of abnormal behavior. The major disorders include anxiety disorders (such as phobias, panic attacks, obsessive-compulsive), mood disorders (such as depression and bipolar), schizophrenic disorders, and personality disorders. Also includes child/adolescence disorders (such as ADHD and eating disorders), substance abuse, mental retardation, sexual disorders, and the effects of stress on the body.
AA/AS GE, CSU, CSU GE, IGETC, UC

201 ACADEMIC AND CAREER OPPORTUNITIES IN PSYCHOLOGY 1 UNIT
Prerequisite: "C" grade or higher in PSY 120 or equivalent
1 hour lecture
The study of career options in the field of Psychology. Emphasis is placed on the needs of Psychology majors identifying career-related strengths and interests while providing information on post-baccalaureate options in psychology and related fields, and identification of career-related strengths and interest. Recommended after completion of thirty (30) units. **Pass/No Pass only.**
CSU

205 RESEARCH METHODS IN PSYCHOLOGY 3 UNITS
C-ID PSY 200
Prerequisite: "C" grade or higher or "Pass" in PSY 120, and 215 or Math 160 or equivalent
3 hours lecture
Introduction to scientific methodology in psychology. Emphasis is placed on descriptive, experimental, and applied research. Students will learn 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.
CSU, UC

211 COGNITIVE PSYCHOLOGY 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent
3 hours lecture
A general introduction to the principles of cognition. This course examines theoretical and research approaches to the study of cognitive neuroscience, perception, attention, memory, knowledge, visual imagery, language acquisition and development, problem solving and decision making.
AA/AS GE, CSU, CSU GE, IGETC, UC

215 STATISTICS FOR THE BEHAVIORAL SCIENCES 4 UNITS
C-ID SOCI 125
Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate mathematics assessment
3.5 hours lecture, 1.5 hours laboratory
Methods and experience in defining and solving quantitative problems in the behavioral sciences. Emphasis is on the design of experiments and the application of a variety of parametric and nonparametric techniques to the analysis of data.
AA/AS GE, CSU, CSU GE, IGETC, UC credit limit

220 LEARNING 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent
3 hours lecture
Examination of the basic principles and research in animal and human learning.
AA/AS GE, CSU, CSU GE, IGETC, UC

REAL ESTATE (RE)

190 REAL ESTATE PRINCIPLES 3 UNITS
3 hours lecture
Real Estate Principles is a fundamental real estate course covering the basic laws and principles of California real estate. It provides the student with understanding, background and the terminology necessary for advanced study in further specialized real estate courses. This course will benefit both the consumer and career-minded individual. It is designed to be of assistance to those preparing for the real estate license examination.
CSU

191 REAL ESTATE PRACTICE 3 UNITS
3 hours lecture
Day-to-day operation in real estate roles and brokerage including listing, prospecting, advertising, financing, sales techniques, escrow, and ethics.
CSU

192 REAL ESTATE FINANCE 3 UNITS
3 hours lecture
Analysis of real estate financing including lending policies and problems in financing transactions in residential, apartment, commercial and special purpose properties. Methods of financing properties are emphasized.
CSU

193 REAL ESTATE LEGAL ASPECTS 3 UNITS
3 hours lecture
Study of the law governing real property, its sale, lease, hypothecation or other conveyance. Instruments utilized in conveyance or lease of such property will be examined.
CSU

194 REAL ESTATE APPRAISAL 3 UNITS
3 hours lecture
Introductory course covering the purposes of appraisals, the appraisal process, and the different approaches, methods and techniques used to determine the value of various types of property. Emphasis is on residential and single-unit property.
CSU

197 REAL ESTATE ECONOMICS 3 UNITS
3 hours lecture
Study of the economic factors which determine the market and location of real property investments.
CSU

201 REAL ESTATE PROPERTY MANAGEMENT 3 UNITS
3 hours lecture
Study of property management and problem areas associated with operating income-producing property.
CSU

204 REAL ESTATE OFFICE ADMINISTRATION 3 UNITS
Recommended Preparation: Completion of Real Estate Principles
3 hours lecture
This course is a study of the administration, supervision and management of a real estate brokerage office. Students will be exposed to the principles underpinning the management of a real estate brokerage office as well as participate in various job shadowing experiences..
CSU

250 REAL ESTATE INTERNSHIP 1-4 UNITS
75 hours paid or 60 hours unpaid work experience per unit
Practical work experience in the real estate industry. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of twelve units in Real Estate.*
CSU

RELIGIOUS STUDIES (RELG)

120 WORLD RELIGIONS 3 UNITS
3 hours lecture
Introduction to the teachings, major figures, attitudes and practices of world religions.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 SCRIPTURES OF WORLD RELIGIONS 3 UNITS
3 hours lecture
The study of religions based on scriptures selected from Eastern and Western religions.
AA/AS GE, CSU, CSU GE, IGETC, UC

160 INTRODUCTION TO THE HEBREW BIBLE: THE FIRST TESTAMENT 3 UNITS
3 hours lecture
Introductory survey of the contents, themes, literary genres, canons, historical background, and modern critical methods for analysis and interpretation of the Hebrew scriptures.
AA/AS GE, CSU, CSU GE, IGETC, UC

170 INTRODUCTION TO CHRISTIANITY **3 UNITS**
3 hours lecture
This course will provide an introduction to the Christian religion, with a focus on the history of its development. Its scriptures, rituals, and beliefs will be examined, as well as important persons, groups, and events which have developed among the Roman, Orthodox, and Protestant communities of Christianity.
AA/AS GE, CSU, CSU GE, IGETC, UC

SCIENCE (SCI)

100 SUCCESS IN SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS (STEM) **3 UNITS**
3 hours lecture
You can be a scientist! Begin building your scientific identity as a Science, Technology, Engineering and Mathematics (STEM) professional, developing the specific knowledge, thinking and learning skills and strategies, and habits of mind necessary to have a successful career in STEM. Working individually and in teams, students will learn and use skills and strategies to investigate and solve scientific scenarios, practicing the ways that scientific thinking is used to solve problems, and develop the critical thinking ability necessary to be successful in future STEM courses. The skills and knowledge you will gain in this course will be demonstrated through the production of scientific presentations and an e-portfolio that will show your new knowledge, skills and abilities.
CSU

SOCIAL WORK (SW)

110 SOCIAL WORK FIELDS OF SERVICE **3 UNITS**
3 hours lecture
A generalist perspective that introduces students to the profession of social work and the major fields of practice. Explores the relevance of social work to current social issues. Students will identify and understand the implications of social work practice with diverse populations. This includes, but may not be limited to, the impact of cultural diversity, racism, sexism, disabilities, ageism, homophobism and other forms of discrimination, and the need for and provision of basic human services. Strategies for fulfilling the professional responsibility of the social worker to create an equitable society will be identified and developed.
CSU

120 INTRODUCTION TO SOCIAL WORK **3 UNITS**
3 hours lecture
Students will use a social problems approach to describe how poverty, child abuse, substance abuse, health and mental health issues, sexism, racism, other forms of discrimination, crime and other social issues affect people. Provides a framework for analyzing policy issues and for making informed civic decisions on social issues. Students are asked to volunteer at a social service/community service agency to observe and report on how social workers attempt to assess and address social problems.
CSU

SOCIOLOGY (SOC)

114 INTRODUCTION TO RACE & ETHNICITY **3 UNITS**
C-ID SOCI 150
3 hours lecture
An introduction to the sociological analysis of ethnicity, race, and immigration in the United States. Topics include the history of racialized and minoritized groups in the United States, patterns of interaction between racial and ethnic groups, colonialism, immigration, identity formation, prejudice, discrimination, ethnocentrism, racism, institutional racism, social movements for civil rights, liberation and decolonization, and the intersection of race and ethnicity with other forms of difference. *Also listed as ETHN 114. Not open to students with credit in ETHN 114.*
AA/AS GE, CSU, CSU GE, IGETC, UC

120 INTRODUCTORY SOCIOLOGY **3 UNITS**
C-ID SOCI 110
3 hours lecture
Introductory study of the major concepts, theoretical approaches, and methods of sociology. Topics include social structure, culture, social control, deviance, social stratification, globalization, ethnic and race relations, gender, sexuality, social institutions, social interaction, socialization and social change. Course objectives include the ability to apply sociological ideas to everyday life.
AA/AS GE, CSU, CSU GE, IGETC, UC

125 MARRIAGE, FAMILY AND ALTERNATIVE LIFESTYLES **3 UNITS**
C-ID SOCI 130
3 hours lecture
An introduction to the sociological analysis of families, marriages and intimate relationships. Family life and intimate relationships in contemporary American society are examined from the perspectives of different ethnic and racial groups with a focus on the intersectionality of race, class, gender and sexuality. Emphasis is placed on the analysis of the family's relationship to economic structures, political institutions and belief systems in different socio-cultural and historical contexts. Topics include: history of the family, family diversity and inequality, socialization, sexuality, child and intimate partner violence and abuse, courtship, interracial friendships and romantic relationships, singlehood, marriage, communication patterns, parenting, adoption, divorce, remarriage, step-families, widowhood, aging, and the future of the family.
AA/AS GE, CSU, CSU GE, IGETC, UC

130 CONTEMPORARY SOCIAL PROBLEMS **3 UNITS**
C-ID SOCI 115
3 hours lecture
Identification and analysis of contemporary social problems including the role of power and ideology in the definition of social problems, their causes and consequences, evaluations of proposed solutions, and methods of intervention. Additional topics will vary.
AA/AS GE, CSU, CSU GE, IGETC, UC

138 SOCIAL PSYCHOLOGY **3 UNITS**
3 hours lecture
Examination of the individual's perception of and reaction to other people and social influences. Topics such as attitude formation, prejudice and discrimination, helping behavior, aggression, conformity, obedience, cooperation and conflict reduction, and group behavior are explored. *Also listed as PSY 138. Not open to students with credit in PSY 138.*
AA/AS GE, CSU, CSU GE

140 SEX AND GENDER ACROSS CULTURES **3 UNITS**
C-ID SOCI 140
3 hours lecture
An introduction to the sociological analysis of sex, gender, and sexual orientation in a variety of socio-economic and cultural contexts. The course examines the impact sex, gender, and sexual orientation have on the lives of men and women from different cultures in the areas of work, ethnicity, kinship, sexuality, politics, religion, health, arts, sports and communication. Gender and sexual relations in the contemporary USA are examined from the perspectives of different ethnic and racial groups.
AA/AS GE, CSU, CSU GE, IGETC, UC

150 LATINX SOCIOLOGY **3 UNITS**
3 hours lecture
This course is an in-depth sociological examination of Latinx/Hispanic communities in the United States. Topics include family structure, gender roles and sexuality; religion; economics; racialization, racism; intersectionality, social movements; U.S./Mexico border issues and immigration policy; and education. Emphasis is placed on social interactions, politics of identity formation, and social processes impacting the status of U.S. Latinx/Hispanics. This course is intended for sociology majors or any student interested in the social sciences. *Also listed as ETHN 150. Not open to students with credit in ETHN 150.*
AA/AS GE, CSU, CSU GE

SPANISH (SPAN)

120 SPANISH I **5 UNITS**
C-ID SPAN 100
5 hours lecture
Introduction to the Spanish language and the cultures of its speakers. Designed for students with very little or no knowledge of Spanish. Facilitates the practical application of the language in everyday oral and written communication at the beginning level. Since the focus will be on basic communication skills, the class will be conducted in Spanish as much as possible. Students will learn structures that will enable them to function in Spanish in everyday contexts while becoming familiar with the Spanish speaking world.
AA/AS GE, CSU, CSU GE, IGETC, UC

121 SPANISH II **5 UNITS**
C-ID SPAN 110
Prerequisite: "C" grade or higher or "Pass" in SPAN 120 or two years of high school Spanish or equivalent
5 hours lecture
Continuation of SPAN 120. Continues to develop oral and written skills based on practical everyday needs.
AA/AS GE, CSU, CSU GE, IGETC, UC

141 SPANISH AND LATIN AMERICAN CULTURES **3 UNITS**
3 hours lecture
Survey of the major characteristics of Spanish, Latin American and Chicano cultures as reflected in literature, the arts, philosophy and folklore.
AA/AS GE, CSU, CSU GE, IGETC, UC

145 HISPANIC CIVILIZATIONS **3 UNITS**
3 hours lecture
General overview of the characteristics and cultures of Hispanic civilizations as reflected in literature, philosophy, architecture, and the arts of Spain and Latin American countries. This course may have an emphasis on a selected Hispanic country or countries.
AA/AS GE, CSU, CSU GE, UC

220 SPANISH III 5 UNITS
C-ID SPAN 200
Prerequisite: "C" grade or higher or "Pass" in SPAN 121 or three years of high school Spanish or equivalent
5 hours lecture
Continuation of SPAN 121. Continues to develop oral, listening, reading and writing skills in order to acquire proficiency in Spanish.
AA/AS GE, CSU, CSU GE, IGETC, UC

221 SPANISH IV 5 UNITS
C-ID SPAN 210
Prerequisite: "C" grade or higher or "Pass" in SPAN 220 or four years of high school Spanish or equivalent
5 hours lecture
Continuation of SPAN 220. Continues to develop oral, listening, reading and writing skills in order to improve proficiency in Spanish.
AA/AS GE, CSU, CSU GE, IGETC, UC

250 CONVERSATIONAL SPANISH I 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in SPAN 121 or 220 or 221 or three years of high school Spanish or equivalent
3 hours lecture
Develop oral, reading, writing and listening skills with an emphasis on oral proficiency.
AA/AS GE, CSU, CSU GE, IGETC, UC

251 CONVERSATIONAL SPANISH II 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in SPAN 250 or four years of high school Spanish or equivalent
3 hours lecture
Continues to develop oral, reading, writing and listening skills with an emphasis on oral proficiency.
AA/AS GE, CSU, CSU GE, IGETC, UC

SURVEYING (SURV)

127 SURVEY DRAFTING TECHNOLOGY 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent
2 hours lecture, 4 hours laboratory
Professional Civil Engineering/Surveyor's office method drafting course that applies the basic skills and techniques acquired in CADD 115. Land surveying, land development procedures, legal descriptions, topographical analysis, earthworks, geographic control and subdivision processes will be covered. ***Also listed as CADD 127. Not open to students with credit in CADD 127.***
CSU

218 PLANE SURVEYING 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in MATH 170 or 176, or equivalent or concurrent enrollment
2 hours lecture, 6 hours laboratory
Use, care and adjustment of surveying instruments. Fundamental surveying methods, traverse measurements, and area computations. Introduction to horizontal and vertical curves, stadia, and construction layout. Introduction to topographic mapping. Earth work computations. *Also listed as ENGR 218. Not open to students with credit in ENGR 218.*
CSU, UC

220 BOUNDARY CONTROL AND LEGAL PRINCIPLES 3 UNITS
Prerequisite: "C" grade or higher or "Pass" in SURV/ENGR 218 or equivalent
3 hours lecture
Legal and professional aspects of surveying such as U.S. public land surveys, property surveys, title search, report laws affecting a surveyor, resurveys or surveys based on the deed or record, and the new divisions of land.
CSU

240 ADVANCED SURVEYING 4 UNITS
Prerequisite: "C" grade or higher or "Pass" in SURV/ENGR 218 or equivalent
3 hours lecture, 3 hours laboratory
Topographic, hydrographic and geodetic surveying. Precise equipment and control surveying, city and land surveys. Astronomical observations. State plane coordinates system. Route location and layout, transition, horizontal and vertical curves. Introduction to electronic and photogrammetric methods. U.S. Public Land Surveys and legal descriptions, and an introduction to Global Positioning Systems (G.P.S.).
CSU, UC

THEATRE ARTS (THTR)

110 INTRODUCTION TO THE THEATRE 3 UNITS
C-ID THTR 111
3 hours lecture
Provides students with the analytic tools of theatre and a working knowledge of all areas included in the process of producing a play. Through lectures, attendance at selected performances, and in-class projects, students will be introduced to the theatre arts as a reflection of the synthesis of the arts and a definition of the humanities in Western Civilization. Recommended for students interested in theatre who want to have a better understanding of how this art form continues to help shape society.
AA/AS GE, CSU, CSU GE, IGETC, UC

WATER/WASTEWATER TECHNOLOGY (WWTR)

See Center for Water Studies

WORK EXPERIENCE (WEX)

110 GENERAL COOPERATIVE WORK EXPERIENCE EDUCATION 1-3 UNITS
75 hours paid or 60 hours non-paid work experience per unit
Supervised work experience to assist students in acquiring desirable work habits, attitudes and career awareness. Jobs may or may not be directly related to students' educational goals. *Occupational cooperative work experience credit may accrue at the rate of one to eight units per semester for a total of sixteen units, and students must work 75 paid hours or 60 non-paid hours per unit earned. May be taken for a maximum of 6 units.*

Faculty, Administration and Classified Personnel

Full-Time Faculty & Administration

ANNESS, ROBERT
Associate Professor, Chemistry
B.S., Ohio State University
M.A., San Diego State University
Ph.D., San Diego State University/University of California, San Diego

ARMENTA, SOPHIA
Associate Professor, Counseling
B.A., San Diego State University
M.A., Point Loma Nazarene University

ARROYO, ANNALINDA
Assistant Professor, Mathematics
B.S., San Diego State University
M.S., Rensselaer Polytechnic Institute

ASHAK, LIZA
Assistant Professor, Counseling, EOPS
B.A., California State University, Monterey Bay
M.A., Point Loma Nazarene University

AUBRY, MICHAEL
Associate Professor, Business
B.S., San Diego State University
M.B.A., National University
Ph.D., Alliant International University

BARNER, JOHNNY
Assistant Professor, Counseling, DSPS
B.A., San Diego State University
M.S., San Diego State University

BARNES, JULIANNA
President
B.A., University of California, San Diego
M.A., San Diego State University
Ed.D., San Diego State University

BLYUMIN, AMALIYA
Professor, Counseling
B.A., San Diego State University
M.A., San Diego State University
Ed.D., Argosy University, San Diego

BOUTON, FABIENNE
Associate Professor, Biology
B.A., San Diego State University
M.S., San Diego State University

BRAZIL, LINDY
Professor, English
B.A., University of California, Irvine
M.A., Claremont Graduate School

BROWN, BRIANNA
Assistant Professor, English
M.A, San Diego State University
B.A., Cal Poly State University, San Luis Obispo
Ed.D., San Diego State University

BUCKY, MARVELYN
Professor, English
B.A., San Diego State University
M.A., San Diego State University

CAMPUZANO, MICHELLE
Assistant Professor, Counseling
B.A., San Diego State University
M.S., National University

CARBONI, CUAUHTÉMOC
Dean, Athletics, Kinesiology & Health Education
A.S., Victor Valley College
B.S., Humboldt State University
M.S., Humboldt State University
Ph.D., University of New Mexico

CASTANEDA GARCIA, IGNACIO
Assistant Professor, Automotive Technology
A.S., Cuyamaca College

COLLS, GUILLERMO
Associate Professor, English as a Second Language
B.A., Biola College
M.A., San Diego State University

COX, CARMEN
Associate Professor, English
B.A., California State University, Fullerton
M.A., University of San Diego
Ph.D., University of California, Riverside

CURTIS, DANIEL
Associate Professor, Mathematical Sciences
B.A., California State University, San Marcos
M.A., University of California, San Diego

DUDZIK, KIMBERLY
Interim Dean, Math, Science & Engineering
B.S., Michigan State University
M.S., San Diego State University

DUTNALL, ROBERT
Assistant Professor, Chemistry
B.S., University of Aberdeen
Ph.D., University of Cambridge

ECKERT, P. SCOTT
Professor, Mathematical Sciences
B.S., Cal Poly State University, San Luis Obispo
M.S., Oregon State University, Corvallis

ELLIOTT, BRYAN
Associate Professor, Mathematical Sciences
B.S., Cal Poly State University, Pomona
M.S., University of California, San Diego

FRANCO, JOSUE
Assistant Professor, Political Science
A.A., Cerritos College
B.A., University of California, Merced
M.A., University of California, Merced
Ph.D., University of California, Merced

GARCIA, MICHELLE
Associate Professor, Biology
B.S., San Diego State University
M.S., University of California, Berkeley

GAZALE, JANE
Associate Professor, Arabic
M.A., San Diego State University

GODFREY, JULIE
Associate Professor, Environmental Health and Safety Management
B.S., San Diego State University

GONZALEZ, FRANCISCO
Director, Campus Facilities, Operations & Maintenance
B.A., Cal Poly State University, San Luis Obispo

GONZALEZ-MEEKS, MORIAH
Associate Professor, History
B.A., California State University, Long Beach
M.A., San Diego State University
M.A., San Diego State University

GRAHAM, MARY
Associate Professor, English
B.A., University of California, Riverside
M.F.A., San Diego State University

GUTIERREZ, KARLA
Associate Professor, Spanish
B.A., San Diego State University
M.A., San Diego State University

HAJJ, DONNA
Professor, Counseling
B.S., Christian Heritage College
M.A., National University

HALSTED, LAUREN
Interim Dean, Arts, Humanities and Social Sciences
B.A., University of California, Santa Barbara
M.A., San Francisco State University
Ed.D., San Diego State University

HAMMOND, COURTNEY
Associate Professor, Philosophy
B.A., Loyola Marymount University
M.A., University of California, Riverside
Ph.D., Emory University

HANNIBAL, JIM
Associate Professor, Automotive Technology
A.S., Cuyamaca College

HAYS, BRIANNA
Senior Dean, Institutional Effectiveness, Success & Equity
B.A., California State University, Stanislaus
M.S., San Diego State University

HERNANDEZ, NICOLE
Assistant Professor, Child Development
B.A., San Diego State University
M.S., San Diego State University

HERRIN, SCOTT
Associate Professor, Health Education
B.S., University of Southern Mississippi
M.S., University of Southern Mississippi
Ed.D., San Diego State University

HOSLEY, TICEY
Associate Professor, Counseling, Articulation Officer
B.A., University of California, Berkeley
M.A., University of San Diego
Ph.D., Claremont Graduate University and San Diego State University

JABOUR, TANIA
Associate Professor, English
B.A., University of San Diego
M.A., University of California, San Diego
Ph.D., University of California, San Diego

JACOB-ALMEIDA, RACHEL
Associate Professor, Sociology
B.A., University of California, Berkeley
M.A., University of California, San Diego

JENNINGS, NANCY
Professor, Communication
B.A., San Francisco State University
M.A., San Diego State University

JERJIS, RAAD
Associate Professor, Counseling
B.A., San Diego State University
B.A., San Diego State University
M.A., San Diego State University
M.S., San Diego State University

JIMENEZ, RICHARD
Assistant Professor, Biology
B.S., University of California, Irvine
Ph.D., University of Pennsylvania

JONES, NICOLE
Dean, Counseling Services
B.S., California State University, Long Beach
M.S., San Diego State University

JOSEPHSON, BRIAN
Associate Professor, Alternate Media/High Tech Center Access Specialist
B.A., San Diego State University
M.Ed., San Diego State University
Certificate in Rehabilitation Technology, San Diego State University

KEELEY, NICOLE
Associate Professor, Counseling, EOPS
B.A., University of La Verne
M.A., University of San Diego

KUTZMAN, MISHA
Assistant Professor, Engineering
B.S., University of Washington
M.S., University of Washington

MANCILLAS-GOMEZ, MANUEL
Associate Professor, English as a Second Language
B.A., University of California, Los Angeles
M.A., Grand Canyon University

MARRUJO, KAREN
Assistant Professor, English
B.A., San Diego State University
M.F.A., San Diego State University

MARSHALL, TAMMI
Associate Professor, Mathematical Sciences
B.A., San Diego State University
M.A., San Diego State University
Ed.D., San Diego State University

McCOMBS, BRADLEY
Associate Professor, Automotive Technology
B.S., Brigham Young University

McGREGOR, KRISTIN
Associate Professor, English
B.A., Trinity University
M.A., San Diego State University

McLEMORE, LARRY
Dean, Career & Technical Education
A.S., Northwest Kansas Technical College
B.S., Pittsburg State University
M.S., Pittsburg State University

MIRANDA, JESÚS
Dean, Student Equity & Engagement
B.A., University of California, Riverside
M.A., San Diego State University
M.S., San Diego State University
Ph.D., St. John's University

MORRIN, CYNTHIA
Professor, Personal Deveopment, Counseling
B.A., San Diego State University
M.A., Point Loma Nazarene University

MUÑOZ, ALICIA
Interim Vice President, Instruction
B.A., University of California, Berkeley
M.A., San Francisco State University

MURRAY, KEENAN
Assistant Professor, Engineering
B.S., University of California, San Diego
Ph.D., Michigan Technological University

NAVO, CHRISTOPHER
Associate Professor, Mathematical Sciences
B.S., San Diego State University
M.A., San Diego State University

NETTE, KATHRYN
Professor, Biology
B.S., Douglass College
Ph.D., Rutgers University

NEWMAN, PATRICIA
Associate Professor, Business Office Technology
B.S., University of South Dakota
M.A., San Diego State University

NEYLON-CRAFT, V. LYN
Professor, English, English as a Second Language
B.A., San Diego State University
B.A., San Diego State University
M.A., United States International University
M.A., California State University, Dominguez Hills
Ph.D., University of California, Riverside

NGUYEN, MYLINH
Associate Professor, Counseling
M.A., University of San Diego
Ph.D., Walden University

NICHOLS, TERRIE
Associate Professor, Mathematical Sciences
B.A., San Diego State University
M.A., San Diego State University

O'BYRNE, CHRISTOPHER
Associate Professor, Business
B.S., Lehigh University
M.B.A., Lehigh University
M.S., San Diego State University

OROZCO, AGUSTIN
Associate Dean, Student Services and Special Programs
B.A., University of California, San Diego
M.A., San Diego State University

PANGANIBAN, RACHELLE
Associate Professor, Disabled Students Programs and Services Counselor
M.S., California State University, Northridge

PENUNURI, CHRISTIANNE
Director, College & Community Relations
B.A., University of California, Riverside
M.A., San Diego State University
M.P.A., San Diego State University

PHILLIPS, TIMOTHY
Associate Professor, Computer and Information Science
B.A., San Diego State University
M.B.A., San Diego State University

POLAKOSKI, RACHEL
Assistant Professor, Mathematical Sciences
B.A., San Diego State University
M.A., San Diego State University

PULIDO, LILIA
Associate Professor, Counseling
B.A., California State University, Stanislaus
M.A., San Diego State University

RAFFO, LAMIA
Associate Professor, Mathematical Sciences
B.A., San Diego State University
M.A., San Diego State University

REED, JO ELLEN
Interim Dean, Learning & Technology Resources
B.S.Ed., University of Arizona
M.A., San Diego State University

REYES, RAY
Director, Financial Aid
B.S., San Diego State University

ROBINSON, JESSICA
Vice President, Student Services
A.A., Cuyamaca College
B.A., San Diego State University
M.S.W., San Diego State University
Ed.D., San Diego State University

RODRIGUEZ, STANLEY
Assistant Professor, Kumeyaay Studies
B.A., National University
M.A., National University
Ed.D., University of California, San Diego/ California State University, San Marcos

ROTTKE, LEAH
Assistant Professor, Ornamental Horticulture
B.A., University of California, San Diego
M.S., Washington State University

SAGHAFI, CYRUS
Associate Professor, CADD Technology
B.S.ME, Polytechnic of Central London
M.S.ME, Washington University
Ph.D., Technical University, Germany

SALAZAR, MARISSA
Assistant Professor, Psychology
B.A., Cal Poly State University, Pomona
M.A., San Diego State University
Ph.D., University of California, San Diego/San Diego State University

SALGADO, NICOLE
Interim Vice President, Administrative Services
B.A., San Diego State University
M.A., University of California, Irvine

SEPULVADO, JAMES
Associate Professor, Music
B.M., San Diego State University
M.Ed., National University

SHARON, CURTIS
Associate Professor, Computer and Information Science

SIMPSON, MIRIAM
Associate Professor, Physics
B.A., University of California, Berkeley
M.S., University of California, San Diego

SMITH, TAYLOR
Associate Professor, Music
M.A., Claremont Graduate University
Ph.D., Claremont Graduate University

STAMBACH, SCOTT
Assistant Professor, Physics
B.S., University of Buffalo
M.S., University of California, San Diego
M.A., University of California, San Diego

THISS, PATRICK
Associate Professor, Exercise Science & Health
B.A., San Diego State University
M.A., San Diego State University
Ph.D., Northcentral University

THURMAN, GLENN
Associate Professor, Astronomy, Physics
B.S., San Diego State University
M.S., San Diego State University
M.S., San Diego State University
Ph.D., University of California, San Diego; San Diego State University

TOMASCHKE, JENNIFER
Associate Professor, Exercise Science
A.A., San Diego Community College District
A.A., San Diego Community College District
B.A., University of California, San Diego
M.Ed., Boston University

TORRES, OSVALDO
Associate Professor, Counseling
B.A., University of California, Riverside
M.S., San Diego State University

UTGAARD, PETER
Professor, History
B.A., Southern Illinois University
M.A., Southern Illinois University
Ph.D., Washington State University

VAKNIN, LAUREN
Dean, Student Affairs
B.A., Pepperdine University
M.A., Santa Clara University
Ed.D., San Diego State University

VEGA, GREGORY
Director, Admissions & Records
B.A., University of California, San Diego
M.Ed., Pepperdine University

VIERSEN, BETH
Professor, Disabled Student Programs and Services Specialist
B.A., San Diego State University
M.A., National University
Master's Certification, San Diego State University

WEINERT, STEPHEN
Associate Professor, Psychology
B.A., San Diego State University
M.A., San Diego State University

WIER, NANETTE
Associate Professor, Communication
B.A., San Diego State University
M.A., San Diego State University

WOJTKOWSKI, ROBERT
Associate Professor, Exercise Science
B.A., San Jose State University
M.A., San Jose State University

WOODS, LAURIE
Assistant Professor, English as a Second Language
B.A., University of California, San Diego
M.A., San Diego State University

YASSI, ASMA
Assistant Professor, Counseling, CalWORKs
B.S., San Diego State University
M.A., Point Loma Nazarene University

YOUNG, JOSEPH
Associate Professor, Water/Wastewater Technology
B.S., San Diego State University

ADMINISTRATOR EMERITUS
Glyn Rowbotham

FACULTY EMERITI
Therese Botz, Ed.D.
Paul Carmona, Ph.D.
Charles Charter
James Custeau
Jan Ford
Marsha Fralick, Ed.D.
Susan Haber
Jerry Humpert, Ed.D.*
Charles L. Hyde
Peter Larson
Teresa McNeil, Ed.D.
Kathleen McWilliams*
Bradford Monroe
George A. Murphy
Angela Nesta
Dave Raney
Jerry Riley
William Tester
Samuel S. Turner
Jose Villareal, Ph.D.
Anthony Zambelli, J.D.

PRESIDENT EMERITI
Samuel M. Ciccati, Ph.D.
Wallace F. Cohen, Ed.D.*

CUYAMACA COLLEGE PRESIDENTS

Wallace F. Cohen, Ed.D.*	1978-1982
Samuel M. Ciccati, Ph.D.	1984-1994
Sherrill L. Amador, Ph.D.	1995-2002
Geraldine M. Perri, Ph.D.	2002-2008
Mark J. Zacovic, Ph.D.	2011-2015
Julianna M. Barnes, Ed.D.	2015-Present

*Deceased

Classified & Supervisor Personnel

ABDULAHAD, HIAM
Student Services Assistant

ABDULLAH, FATIMA
Computer Lab Technician III

ADAMS, ALYSHA
Child Development Center Assistant, Senior

ADAMS, JAMIE
Athletic Trainer

AHMADIAN, ARIANE
Admissions & Records Specialist

AL-SHAIKH, RABIE
Assistant College Cashier

AL-SHAIKH, RANA
Program Specialist - EOPS/CARE

ALLEN, MICHAEL
Financial Aid Advisor

ALLEN, SARA
CalWORKs Program Specialist

ALLEN, VAUNETTE
Interim Master Class Scheduler

ANDREWS, ADAM
Instructional Media Services Technician, Sr.

ARABU, LANA
CalWORKS Account Clerk

ASBURY, NANCY
Administrative Assistant III

ASHLEY, SHERYL
CalWORKs Program Specialist

ATTAR, GEORGE
Custodial Services Supervisor

AYALA, RAFAEL
Research and Planning Analyst

AYERS, DEBRA
Admissions & Records Specialist

BAQUIAL, WYATT
Student Services Specialist - EOPS/CARE

BARERRA, CARLOS
Maintenance Supervisor

BENSON III, VERNON
Athletic Facilities Technician

BERTRAM, DEREK
Specialty Lab Technician III - Music

BROWN, KEVIN
Student Services Specialist, High School and Community Relations

BROWN, MARCELLA
Student Services Specialist-Assessment

BUDDE, BRITTNEY
Intermin Administrative Assistant III

BURNETT, DAVID
Science Lab Technician IV - Life Sciences & Biotechnology

BUSTOS VALDOVINOS, YESENIA
Admissions & Records Assistant

CABRAL, KATIE
Research and Planning Analyst

CALLEROS, SILVESTRE
Custodian

CASILLAS, VIOLETA
Science Lab Technician III - Chemistry

CENTANINO, ALEJANDRO
Specialty Lab Technician II - English as a Second Language

CISNEROS, EDGAR
Custodian

COFFEY, ERIN
Administrative Assistant III

CONNOLLY, LYMAN
Athletic Trainer

COOPER, BRYAN
Interim Instructional Computer Facilities Supervisor

CORTEZ, WALTER
Specialty Lab Technician IV - Automotive

COSSANO, MARK
Library Technician III

CRUME, MICHAEL
Grounds Supervisor

CUELLAR, BRIEANNA
Counseling and Assessment Center Supervisor

CRUZ, TINA
Interim Child Development Center Coordinator

DAVIS, RAMON
Grounds Maintenance Worker

DELOS SANTOS, MAX
General Maintenance Worker

DIAZ, LACI
Administrative Assistant IV

DIBELLA, LISA
Evaluations Advisor

DOWNING, PAULINA
Evaluations Advisor

EMADIAN, REBECCA
Admissions & Records Specialist

ENCISO, RAUL
Program Specialist, EOPS

ERICKSON, MICHAEL
Interim Business Services Supervisor

EVELAND, JANET
Specialty Lab Technician I - CADD

FAUCETT-GIOSCIA, KIMBERLY
Administrative Assistant III

FIEHLER-ROOSE, TAYLOR
Tutoring Center Specialist

FLEMING, PAMELA
Financial Aid Advisor

FLETCHER, ANTHONY
Custodian

FLORES, WILLIAM
Custodian

FRITZ, CATHERINE
Student Services Specialist - Counseling and Asessment

GAGNON, CURTIS
Custodian

GALVAN, MARTHA
Financial Aid Advisor

GEARHART, MARIA
Library Technician II

GEOOLA, FARAMARZ
Computer Lab Technician I

GOMEZ, VIRGINIA
Specialty Lab Technician II

GRECO, VICKI
Child Development Center Training Specialist

HILL, ELIZABETH
Science Lab Technician II - Chemistry

HUGHES, SHIRLEY
Financial Aid Supervisor

JACOBS, DIANA
Specialty Lab Technician I - Business Office Technologies

JAMES-CERVANTES, ALEXANDER
Custodian

JONES, DANTE
Tutoring Center Specialist – Learning & Technology Resources

KAHLER, JULIE
Instructional Operations Supervisor

KAKOS, ANMAR
Clerical Assistant

KANNO, DALEA
Administrative Assistant III

LABARRE, JENNIE
Computer Lab Technician II

LAVAN, BILLIE
College Cashier

LEE, SAMANTHA
Tutoring Center Specialist

LINDSAY, PETER
Grounds Maintenance Worker, Sr.

LONG, CATHY
Library Technician III

MENDOZA, CYNTHIA
Child Development Center Training Specialist

MOORE, FRANK
Interim, Instructional Design Technology Specialist

MOORE, JENNIFER
Learning Assistance Center Specialist

MOSA, NICOLE
Computer Lab Technician II

MURGUIA, JESSICA
Student Success Coordinator

NEAL, JAMES
Instructional Media Services Technician, Sr.

NIEVES-CORTEZ, VERONICA
Tutoring Center Specialist

NOBLE, TERRI
Library Technician II

NUNEZ, EMILIO
Admissions & Records Assistant, Sr.

NYA, PATRICE
Budget Analyst

ODESH, AMAL
Computer Lab Technician I

OLSON, DONNA
Science Lab Technician II - Physical and Natural Sciences

ORENA, ALDRIN
Custodian

OSBORNE, JOSEPH
Custodian

PETERSEN, RUSSELL
Specialty Lab Technician IV - Automotive

POLE, ARIAN
Financial Aid Advisor

RIDULFO, DEBRA
Administrative Assistant IV

RODRIGUEZ, STEPHANIE
Administrative Assistant III

ROSE, RAYMOND
Web Development Support Specialist

SAENZ, VANESSA
Admissions & Records Specialist, Sr., International Students

SAHAGUN, LAURA
Financial Aid Advisor

SANDOVAL, REGINA
Financial Aid Assistant, Sr.

SETZER, ROBERT
Specialty Lab Technician III – Theatre Production Design

SHABA, LAYLA
Specialty Lab Technician I - Business Office Technologies

SHINKAN, JUDY
Printing Operations Assistant, Sr.

SMITH, MEGAN
Science Lab Technician II – Biology

STREETER, MICHAEL
Custodian

SUNDSTROM, FRANK
Mail Processor

SUTO, RIEKO
Health Services Nurse

THOMAS, JOHN
Ornamental Horticulture Coordinator

TOMA, ANDRE
Business Services Assistant

TREVINO, CORINA
Administrative Assistant III

VALVA, CHRISTOPHER
Custodian

VANSTONE, VICKI
Administrative Assistant III

VAZQUEZ RAMOS, MARIA
Science Lab Technician II, Chemistry

VEJAR, LAILA
Custodian, Sr.

WILLIAMS, ERNEST
Scholarship Specialist

WILSON, VALERI
Executive Assistant III

WORRELL, NATALIJA
Child Development Center Technician

YALDEKKO, LEKAA
Student Services Specialist - DSPS

YALDO, AMELIA
Child Development Center Aide

YOUSIF, ANGHAM
Specialty Lab Technician III - Office Administration

ZAKARIA, EVA
Computer Lab Technician I

Index

A

B

C

D

E

F

G

H

I

K

L

M

N

O

P

R

S

T

U

V

W

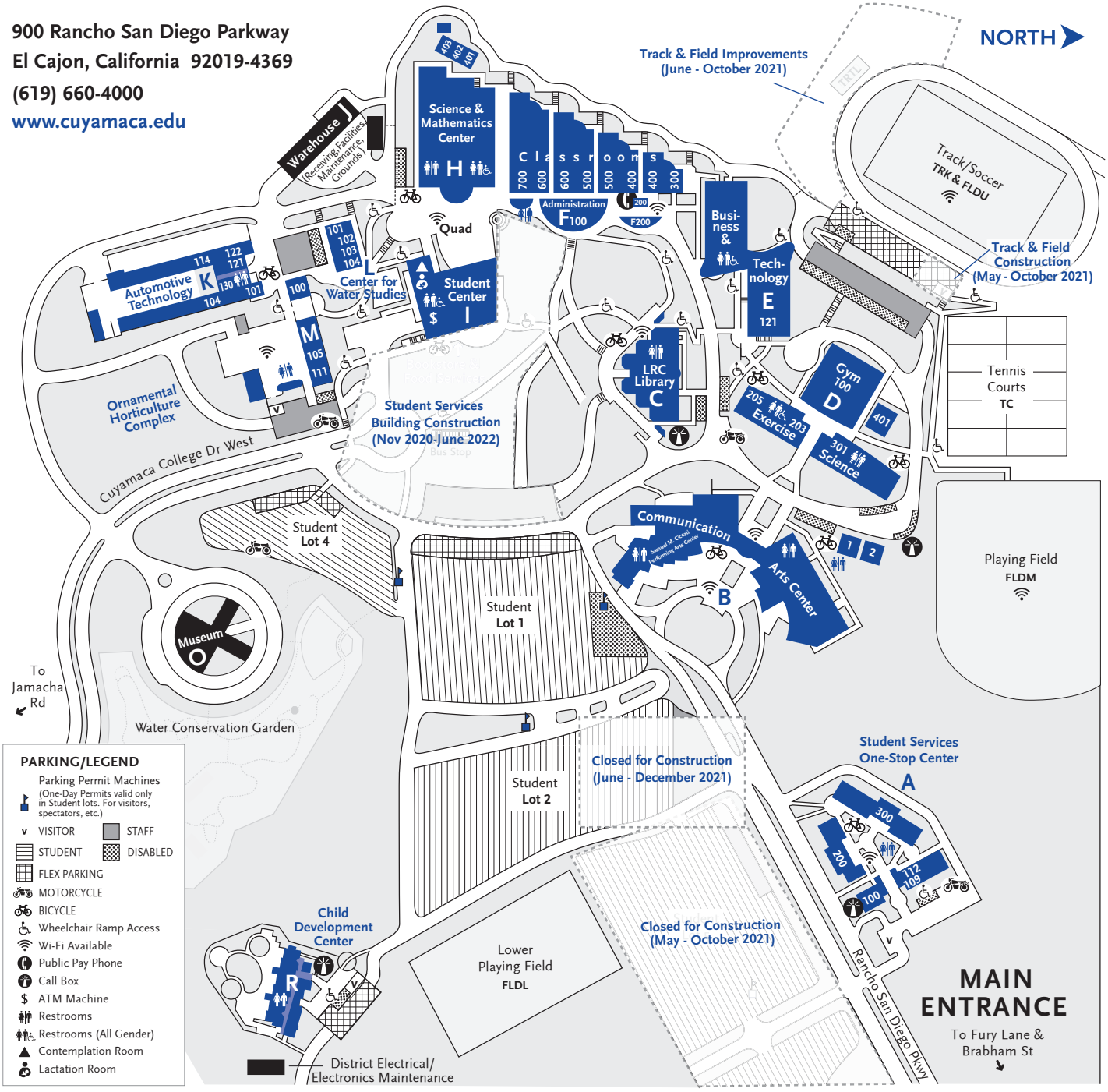
Z

PRODUCTION COORDINATOR, EDITOR: Julie Kahler

GRAPHIC DESIGNER, COVER DESIGN: Alyssa McNees

CUYAMACA COLLEGE

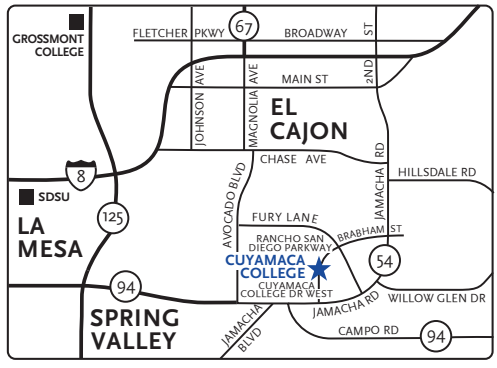
900 Rancho San Diego Parkway
El Cajon, California 92019-4369
(619) 660-4000
www.cuyamaca.edu



PARKING/LEGEND

- Parking Permit Machines (One-Day Permits valid only in Student lots. For visitors, spectators, etc.)
- V VISITOR
- STAFF
- STUDENT
- DISABLED
- FLEX PARKING
- MOTORCYCLE
- BICYCLE
- Wheelchair Ramp Access
- Wi-Fi Available
- Public Pay Phone
- Call Box
- $ ATM Machine
- Restrooms
- Restrooms (All Gender)
- Contemplation Room
- Lactation Room

Academic Resource Center - C Bldg
Adjunct Faculty Offices - B, E and F Bldgs
Administration - F Bldg
Admissions & Records - A Bldg
Automotive Technology - K Bldg
Bookstore - Student Center
CalWORKs - A Bldg
Campus & Parking Services (CAPS) - A Bldg
CARE - A Bldg
Career Center - I Bldg
Cashier - A Bldg
Center for Water Studies - L Bldg
Child Development Center - R Bldg
Computer Labs/Tech Mall (Student use) - E Bldg
Counseling - A Bldg
DSPS - A Bldg
DSPS Hi Tech Center - C Bldg
Duplicating (Faculty Support Services) - F Bldg
Environmental Training Center (ETC) - F Bldg
EOPS - A Bldg
Financial Aid - A Bldg
Fitness Center - D Bldg
Food Services - I Bldg
Gym - D Bldg
Harvest Pantry - Annex 1
Health & Wellness Center - I Bldg
Heritage of the Americas Museum - O Bldg
High School & Community Relations - A Bldg
Institutional Effectiveness, Success & Equity - E Bldg
Library (LRC) - C Bldg
Mailroom - F Bldg
NextUP - A Bldg
Ornamental Horticulture - M Bldg
Pathway Academy - Annex 1
Placement Center- A Bldg
Samuel M. Ciccati Performing Arts Center - B Bldg
Sheriff's Office - A Bldg
STEM Achievement Center - H Bldg
Student Affairs - I Bldg
Student Center - I Bldg
Switchboard - F Bldg
Transfer Center - A Bldg
UP! - A Bldg
Veterans Center - I Bldg
Writing Center - B Bldg
Word Processing (Faculty Support Services) - F Bldg



WWW.CUYAMACA.EDU

CUYAMACA
·COLLEGE·