

# CUYAMACA COLLEGE

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# 2023-2024 CATALOG



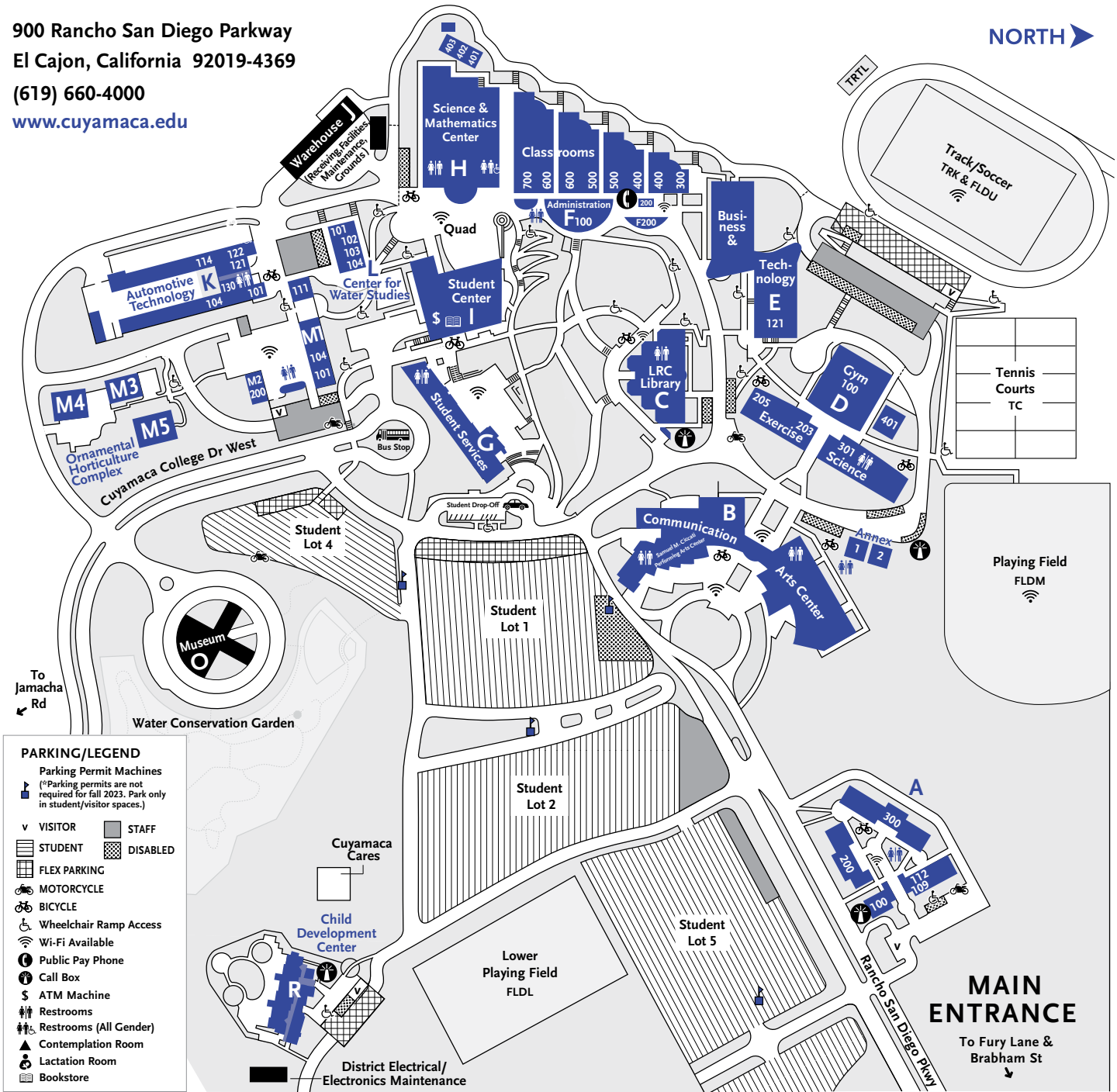
CUYAMACA  
· COLLEGE ·

[www.cuyamaca.edu](http://www.cuyamaca.edu)



# CUYAMACA COLLEGE

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



**PARKING/LEGEND**

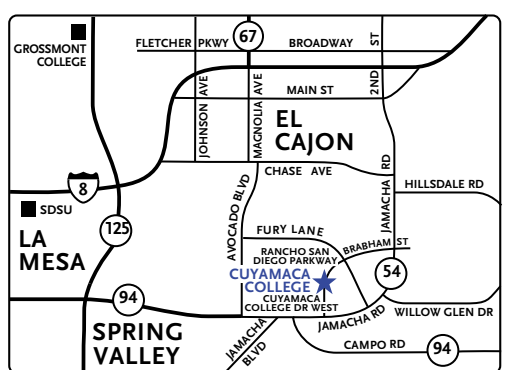
Parking Permit Machines  
 (\*Parking permits are not required for fall 2023. Park only in student/visitor spaces.)

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  
 ■ Bookstore

- Academic Resource Center - C Bldg
- Administration - F Bldg
- Admissions & Records - G Bldg
- Automotive Technology - K Bldg
- Bookstore - Student Center
- CalWORKS - G Bldg
- Campus & Parking Services (CAPS) - A Bldg
- CARE - G Bldg
- Career Center I Bldg
- Cashier - G Bldg
- Center for Water Studies - L Bldg
- Child Development Center - R Bldg
- Computer Labs/Tech Mall - E Bldg
- Counseling - G Bldg
- Cuyamaca Cares - Next to R Bldg

- DSPS - G Bldg
- DSPS Hi Tech Center - C Bldg
- Duplicating (Faculty Support Services) - F Bldg
- Environmental Training Center (ETC) - F Bldg
- EOPS - G Bldg
- Financial Aid - G Bldg
- Fitness Center - D Bldg
- Food Services - I Bldg
- Gym - D Bldg
- Health & Wellness Center - I Bldg
- Heritage of the Americas Museum - O Bldg
- High School & Community Relations - G Bldg

- Institutional Effectiveness, Success & Equity - E Bldg
- Library (LRC) - C Bldg
- Mailroom - F Bldg
- Ornamental Horticulture - M Bldg
- Placement Center - G 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
- Together We Rise! Center - Annex 2
- Transfer Center - G Bldg
- Veterans Center - I Bldg
- Writing Center - B Bldg



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## Cuyamaca College

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El Cajon, CA 92019-4369  
Phone: (619) 660-4000  
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## Grossmont-Cuyamaca Community College District Governing Board

Elena Adams  
Debbie Justeson  
Desiree Klaar  
Brad Monroe  
Julie Schorr

## Student Members

Courtney Etnyre  
Cesar D. Nuñez

## Chancellor

Lynn Ceresino Neault, Ed.D.

## Cuyamaca College President

Dr. Jessica Robinson, MSW

## 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](http://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.

## Disclaimer

The Grossmont-Cuyamaca Community College District and Cuyamaca College have made every reasonable effort to determine that everything stated in this catalog is accurate. Courses and programs offered, fees charged, together with other matters contained herein, are subject to change without notice by the administration of the Grossmont-Cuyamaca Community College District or Cuyamaca College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the District and the College. The District and the

College further reserve the right to add, amend or repeal any of their rules, regulations, policies and procedures.

## Production Coordinator, Editor

Julie Kahler

## Graphic Designer, Cover Design

Michael Delgado



## President's Message



seeking a certificate, or looking to update or learn new skills for a job change, we are ready for you.

On behalf of the Cuyamaca College team, welcome! You belong here.

Dr. Jessica Robinson, MSW  
President

A handwritten signature in black ink that reads "Jessica Robinson". The signature is written in a fluid, cursive style.

Dear Students,

Welcome to Cuyamaca College! As one of the two colleges in the Grossmont-Cuyamaca Community College District, it is our pleasure to serve San Diego's East County region.

Our faculty, staff, and administration take pride in providing a personalized experience for every student. Collectively, we are committed to your success and helping you to attain your goals.

In this catalog you will find information that help you to make decisions about your academic and career path. I encourage you to meet with your counselor early to develop a plan that will help you to meet your goals quickly and with all the support you need. At Cuyamaca College, we pride ourselves on providing you direct access to math and English courses that accelerate your time to completion. We know that completing these courses early in your academic career leads to success.

Cuyamaca College has been changing the lives of our students since we first opened our doors in the fall of 1978. The faculty, staff, and administration are deeply committed to the transformational benefit of higher education. Whether you are planning to transfer to a university,



# Academic Calendar

## Fall 2023

Event	Date
Application Deadline (for registration appointment time)	April 14
Registration	May 1 - August 20
Payment Deadline for Registration Fees	Refer to Class Schedule
Professional Development - Organizational Meetings	August 14 - 18
<b>Semester Length/First 8-Week Classes Begin</b>	<b>August 21</b>
Program Adjustment (Add/Drop Period Full Semester Classes)	August 21 - September 3
Last Day to Drop Full Semester Classes without a "W"	September 3
Last Day to Apply for Refund for Full Semester Classes	September 3
Holiday (Labor Day)	September 4 <sup>1</sup>
Census Day (Full Semester Classes)	September 5
National Voter Registration Day <sup>2</sup>	September 19
Last Day to Apply for Fall 2023 Degree/Certificate	October 13
Last Day to Apply for P/NP (First 8-Week Session)	Last Day of Instruction
First 8-Week Session Ends	October 14
Second 8-Week Session Begins	October 16
First 8-Week Session Instructor Grade Deadline	October 19
Holiday (Veterans Day)	November 10 - 11 <sup>1</sup>
Last Day to Drop Semester-Length Classes (with "W")	November 12
Thanksgiving Recess	November 20 - 25
Holiday (Thanksgiving)	November 23, 24, 25 <sup>1</sup>
Last Day to Apply for P/NP	Last Day of Instruction
<b>Final Examinations</b>	<b>Last Day of Instruction</b>
End of Second 8-Week Session & Semester Length Classes	December 16
Fall Semester Ends	December 16
Winter Recess (for students)	December 17 - January 28
Instructor Grade Deadline	December 21
College and District Offices Closed	December 22 - January 1 <sup>1</sup>

<sup>1</sup> College and District Offices Closed.

<sup>2</sup> See additional voter information at General Information (p. 13).

## Spring 2024

Event	Date
Application Deadline (for registration appointment time)	October 27
Registration	November 13 - January 28
Payment Deadline for Registration Fees	Refer to Class Schedule

Interession 2024	January 2 - 27
Holiday (Martin Luther King Day)	January 15 <sup>1</sup>
Professional Development - Organizational Meetings	January 22 - 26
<b>Semester Length/First 8-Week Classes Begin</b>	<b>January 29</b>
Program Adjustment (Add/Drop Period Full Semester Classes)	January 29 - February 11
Last Day to Drop Full Semester Classes without a "W"	February 11
Last Day to Apply for Refund for Full Semester Classes	February 11
Census Day (Full Semester Classes)	February 12
Holiday (Lincoln's Birthday Observed)	February 16, 17 <sup>1</sup>
Holiday (Washington's Birthday Observed)	February 19 <sup>1</sup>
Last Day to Apply for Spring 2024 Degree/Certificate	March 8
Last Day to Apply for P/NP (First 8-Week Session)	Last Day of Instruction
First 8-Week Session Ends	March 23
Spring Recess	March 25 - 30
First 8-Week Session Instructor Grade Deadline	March 28
Spring Holiday	March 29 - 30 <sup>1</sup>
Second 8-Week Session Begins	April 1
Last Day to Drop Semester-Length Classes (with "W")	April 28
Last Day to Apply for P/NP	Last Day of Instruction
<b>Final Examinations</b>	<b>Last Day of Instruction</b>
End of Second 8-Week Session & Semester Length Classes	May 25
Spring Semester Ends	May 25
Holiday (Memorial Day)	May 27 <sup>1</sup>
Cuyamaca Commencement	May 29
Grossmont Commencement	May 30
Instructor Grade Deadline	May 30

<sup>1</sup> College and District Offices Closed.

Dates listed are subject to change. Please see <https://www.cuyamaca.edu/academics/class-schedules-catalog-and-self-service/academic-calendar/index.php> (<https://www.cuyamaca.edu/academics/class-schedules-catalog-and-self-service/academic-calendar/>) for the most current calendar.

## College and District Administration

### Cuyamaca College Administration

Jessica Robinson, Ed.D., President

Nicole Salgado, Vice President, Administrative Services

Alicia Muñoz, Interim Vice President, Instruction

Brianna Hays, Interim Vice President, Student Services

Brianna Hays, Senior Dean, Institutional Effectiveness, Success & Equity,

Christianne Penunuri, Director, College & Community Relations

Lauren Halsted, Ed.D., 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)

Anthony Campbell, Dean, Athletics, Kinesiology & Health Education, (Kinesiology/Fitness Center, Health Education)

George Dowden, 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)

Agustín Orozco, Dean, Counseling Services

Jessica Hurtado Soto, Dean, Learning & Technology Resources

Tammi Marshall, Ed.D., Interim Dean, Math, Science & Engineering, (Mathematical Sciences, Science/Engineering)

Lauren Vaknin, Ed.D., Dean, Student Affairs

Jesús Miranda, Ph.D., Dean, Student Equity & Engagement

Keith Turner, Interim Associate Dean, Student Services & Special Programs

(Open Position), Director, Admissions & Records

Francisco Gonzalez, Director, Campus Facilities, Operations & Maintenance

Ray Reyes, Director, Financial Aid

Michael Gilchrist, Manager, Campus Bookstore

## Grossmont-Cuyamaca Community College

### District Administration

Lynn Ceresino Neault, Ed.D., Chancellor

Sahar Abushaban, Vice Chancellor, Business Services

Linda Beam, Interim Vice Chancellor, Human Resources

Nancy Lim, Associate Vice Chancellor, Business Services

Barbara Gallego, Interim Associate Vice Chancellor, Educational Support Services

Craig Leedham, Ph.D., Associate Vice Chancellor, Human Resources

Kerry Kilber Rebman, 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

Michele Clock, Director, Public Information, Government Relations & Community Relations

Cynthia K. Nagura, Director, Community & Workforce Partnerships

Jerry Williamson, Director, Computer Services

Pamela Wright, Director, Enterprise Systems

Nashona Andrade, Director, Human Resources

Lana Arabu, 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 & 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

The name “Cuyamaca College” was selected with the vision of an institution that exemplifies the “community” in community college. Decades later, the commitment to this vision is stronger than ever. Cuyamaca College actively promotes equity and social justice by employing educational strategies that build upon the strengths of our diverse socio-cultural student population. We are committed to establishing a pathway to social and economic mobility through our comprehensive range of programs, certificates, degrees, transfer opportunities, and career prospects.

### The History of the Campus

Cuyamaca College, alongside its sister campus, Grossmont College, make up the

The Grossmont-Cuyamaca Community College District: A prestigious pair that have been serving the community for over six decades.

The name for the college reflects the region’s history and heritage. According to Dr. Stan Rodriguez, Kumeyaay Studies coordinator and Santa Ysabel Kumeyaay Elder, Cuyamaca” is a word originating from the Kumeyaay language, meaning “Are you standing behind the rain clouds?” It is perhaps a reference to the location of the college at the base of Mt. Miguel, one of the highest points in San Diego County. San Diego is home to eighteen reservations, more than any other county in the country, twelve reservations are of the Kumeyaay people. The name “Cuyamaca” is a tribute to the land upon which the campus is built, acknowledging and honoring the people which have lived in the area for thousands of years.

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.

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 has just over 12,740 students, and provides around 195 degrees and certificates, including both academic and career pathways.

### 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 flagship programs – Automotive Technology and Ornamental Horticulture – and the naming of Dr. Samuel Ciccati as the college’s second president. During Dr. Ciccati’s tenure, the college established what is today known as “The Grand Lawn.” The lawn was the first green area established on campus and completed in partnership with the California Conservation Corps. During an “all hands day” faculty and staff brought tools and worked between classes and on breaks to clear the area in preparation for the Corps crew to dig trenches for irrigation and a company to spray seed.

The following years marked the expansion in earnest of Rancho San Diego and by fall 1988, Cuyamaca’s enrollment had reached 3,600 students. In the late 1980s, the campus began nearly twenty years of expansion with the opening of the Learning Resource Center, a 30,000-

square-foot, glass-covered building with distinctive architecture that houses the college library and other educational resources.

Soon thereafter, in the 1990s, the privately-funded Heritage of the Americas Museum opened, as well as 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. In 1994, Rancho San Diego Parkway opened as the new main entrance, providing better access to the campus.

That year, Dr. Sherrill Amador also began her tenure as college president and she helped to facilitate the Joint Powers Agreement between the college and area water districts to open the Water Conservation Garden on the campus – a must-visit for all home gardening and landscaping enthusiasts. Also under Dr. Amador’s tenure was the opening a one-stop Student Services Center and the unveiling of the Child Development Center. The whimsical facility serves as both a childcare facility for the campus and community, and a learning laboratory 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 into the digital age and adding several new buildings: the Science and Technology Center (now the Science and Mathematics Building), the Student Center, the Business and Technology buildings, and 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, and business forums.

In 2006, the neighboring Kumeyaay Community College partnered with Cuyamaca College to provide Kumeyaay Studies language courses, eventually growing into an accredited Kumeyaay Studies degree program in 2016. The program was the first in the state offering a degree focused on language, culture, and history of a specific Native American group.

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. Also in 2012, Cuyamaca College was one of three community colleges in the state to receive the inaugural Energy and Sustainability Award from the California Community College Board of Governors. The college was recognized for its sustainable landscaping initiatives.

In 2013, the college was 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, and it secured its spot again in 2014 as a repeat winner of the coveted award.

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 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. Cuyamaca College was the first community



college in California to embrace this approach and support faculty in this effort. Cuyamaca College received the prestigious Dr. John W. Rice Diversity & Equity Award as well as national recognition as the only California community college selected as a finalist for the 2019 *Examples of Exceleñica* by Exceleñica in Education.

In January 2019, the college opened the premier water and wastewater training facilities in California. The program was established in collaboration with the industry and will train the next generation of water professionals.

In March 2020, government mandated Covid-19 regulations were set into place and Cuyamaca College transformed all instruction and operations online for the first time in its history. Using innovation and technology, the college continued to support students with counseling services, basic rights support including food and housing, and quality instruction.

On July 18, 2022, Dr. Jessica Robinson MSW was named interim president of Cuyamaca College, after serving as the vice president of student services since 2018. Less than a year later, she would be named the college's seventh president and the first alumna to lead the college.

In 2022, Cuyamaca College was named "Best for Vets" by The Military Times and was recognized again for its efforts to support student success in English courses. As a Champion for Excelling in Equitable Course Placement in Campus-wide English Enrollment, Cuyamaca College provides every Latinx and Black student with access to and support in transfer-level English. Cuyamaca College would receive this award again in 2023.

The new heart of campus, the Student Services Building (G-Building), officially opened its doors on February 9, 2023. Funded by Prop V, the 36,374 square foot building serves as the front door to campus with a welcome center, drop off circle, courtyard and housing all student services. The building fundamentally changes the way in which students engage in with the campus.

Cuyamaca College continues to serve diverse communities with personalized attention and a commitment to equity, excellence, and social justice. Yesterday, today and tomorrow, Cuyamaca College remains unwavering in its mission to meet the comprehensive educational and workforce training needs of East County.

## 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 high-quality educational programs and services that meet the needs of the diverse communities we serve.

### Mission

The Grossmont-Cuyamaca Community College District provides high-quality, equitable learning opportunities to eastern San Diego County and beyond. We prepare students to meet changing community and workforce needs, while advancing social justice and

economic mobility.

## Values

- **Diversity** – Value and invite multiple perspectives in discussions and decision making; create space for historically excluded and marginalized voices to be amplified.
- **Equity** – Ensure students who have historically been marginalized and excluded have the opportunity to succeed in higher education by calling attention to patterns of inequity in student outcomes and actively working to eliminate equity gaps in student access and success. Commit to ensuring employees who have historically been marginalized and excluded have the opportunity to succeed in their profession.
- **Student-Centeredness** – Ensure the student experience is at the forefront of our decision-making in programs, services, processes, and policies, creating opportunities and clear pathways for students to reach their educational goals.
- **Creativity and Innovation** – Value the capacity for ingenuity and originality on our campuses and within our communities.
- **Pursuit of Excellence and Continuous Improvement** – Pursuit of Excellence and Continuous Improvement – Strive to continuously reflect, learn, and improve to ensure excellence in our programs, services, and operations.
- **Integrity** – Commit to acting and speaking truthfully and responsibly and holding ourselves and others accountable to this standard.
- **Mutual Respect** – Strive to build a community of inclusiveness, compassion, empathy, and learning marked by mutual respect and consideration of our differences.

## 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 should engage in inclusive conduct and should 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 (such as bullying, threatening, or disparaging remarks) 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, and an awareness of the potential impact on students.

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](http://www.afrotc.com) (<http://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](http://www.gcccd.edu/public-safety) (<http://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

The District will not be requiring students to purchase parking permits for the 2023-2024 fall and spring semesters. At this time students and visitors may park in any available student parking space. Restrictions include, but are not limited to, parking in a fire lane, staff parking, disabled placard misuse, and timed spaces. These areas will still be enforced and cited accordingly. This notice is effective through June 30, 2024 and includes summer session.

**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](mailto: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, G-100 building, window. For more information please visit the MTS website at [www.sdmts.com](http://www.sdmts.com) (<http://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> (<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> (<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, hybrid (partially online), and HyFlex (on campus or via Zoom). Some 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](http://www.cuyamaca.edu/academics/online-learning.php) (<http://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
- **Bri Hays, M.S.**  
Interim Vice President, Student Services  
Cuyamaca College  
900 Rancho San Diego Parkway  
El Cajon, CA 92019  
(619) 660-4301
- **Linda Beam**  
Interim Vice Chancellor, Human Resources  
Title IX Coordinator  
8800 Grossmont College Drive  
El Cajon, CA 92020  
(619) 644-7572
- **Michael Salvador**  
Diversity, Equal Opportunity and Title IX Officer  
District Office

8800 Grossmont College Drive  
El Cajon, CA 92020  
(619) 644-7039

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), Building G-200, 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: <http://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 or student 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 online, email, and in-person formats through various campus locations as well as through the Cuyamaca Virtual Tutoring Center. For more information and/or to request an appointment, please click on the blue "Tutoring" link in your course Canvas container, email [cuyamaca.tutoring@gcccd.edu](mailto:cuyamaca.tutoring@gcccd.edu), visit the Tutoring website at [www.cuyamaca.edu/tutoring](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), or leave a voicemail at (619) 660-4525.

## Voter Registration

Register to Vote at [www.sos.ca.gov/elections/voter-registration/](http://www.sos.ca.gov/elections/voter-registration/) (<http://www.sos.ca.gov/elections/voter-registration/>)

For information on early voting dates, please access the Registrar of Voters website at [www.sdvote.com/](http://www.sdvote.com/) (<http://www.sdvote.com/>).

### Voter Registration Dates:

**September 19, 2023** – National Voter Registration Day

**November 7, 2023** – City of Chula Vista Special Vacancy Election

### Last Day to Register to Vote:

- **In Person:** 15 days before Election Day
- **By Mail:** Postmarked 15 days before Election Day
- **Online:** 15 days before Election Day

*You can also "conditionally" register and vote at your county elections office after the 15-day voter registration deadline.*

*All dates can be verified online at the Secretary of State ([www.sos.ca.gov/elections/](http://www.sos.ca.gov/elections/)) or county election office ([www.sdvote.com](http://www.sdvote.com/) (<http://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 Self-Service [www.cuyamaca.edu](http://www.cuyamaca.edu) (<http://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](http://www.cuyamaca.edu) (<http://www.cuyamaca.edu>) to access the online application.
2. **Create Self-Service Account:** Once your application is processed, please login to Self-Service 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. 06/02/2002 would be 060202). If you are having difficulty, please visit: [www.cuyamaca.edu/admissions/](http://www.cuyamaca.edu/admissions/) (<http://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 Self-Service. You may access the online orientation by signing into Self-Service, 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 Self-Service 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 Self-Service 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 and 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 Self-Service. Self-Service 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 Self-Service 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](http://www.cuyamaca.edu/admissions/high-school-students.php) (<http://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 Self-Service, students are encouraged to meet with a counselor for proper Math and English placement guidance. 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 G-200 in the Student Services Building. For questions regarding Math and English placement, visit the Placement page of the Cuyamaca website at [www.cuyamaca.edu/placement/](http://www.cuyamaca.edu/placement/) (<http://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 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.
- Group 3: Pathway Academy (formerly First Year Experience), UMOJA, Puente.
- Group 4: Continuing students with 45-90 GCCCD degree-applicable units.
- Group 5: Approved Petitions for a better priority.
- Group 6: Middle College.
- Group 7: First-time to college students who have completed an orientation, assessment, and developed a student education plan.
- Group 8: Continuing students with 12 or more units but not more than 44.5 GCCCD degree-applicable units.
- Group 9: Continuing students with 0-11.5 GCCCD units.
- Group 10: New applicants who have applied but not gone through the matriculation process.
- Group 11: 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](http://www.enrollmentverify.org) (<http://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](http://www.cuyamaca.edu/admissions/deadlines/index.php) (<http://www.cuyamaca.edu/admissions/deadlines/>). 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. **The District will not be requiring students to purchase parking permits for the 2023-2024 fall and spring semesters.** At this time students and visitors may park in any available student parking space. Restrictions include, but are not limited to, parking in a fire lane, staff parking, disabled placard misuse, and timed spaces. These areas will still be enforced and cited accordingly. This notice is effective through June 30, 2024 and includes summer session.

Fee	Amount
Enrollment Fee (Mandatory)	\$46 per unit (fees are subject to change)
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 <sup>1</sup>	\$12
Student Benefit Sticker - Summer <sup>1</sup>	\$6
Health Fee (Mandatory) - Fall & Spring <sup>2</sup>	\$20
Health Fee (Mandatory) - Summer & Intersession <sup>2</sup>	\$17
Student Center Construction Fee (Mandatory) <sup>3</sup>	\$1 per unit to a maximum of \$5
Student Representation Fee (Optional)	\$2
Nonresident Students - above fees plus	\$332 per unit
International Students - above fees plus	\$332 per unit

<sup>1</sup> **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.

<sup>2</sup> **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.

<sup>3</sup> Student Center Construction Fee is not applicable for summer session.

**Grossmont-Cuyamaca Promise Program:** **Free** college for first year students! Go to [www.MyCollegePromise.net](http://www.MyCollegePromise.net) (<http://www.MyCollegePromise.net>) to find out how!

**Zero Textbook Cost** sections are designated with the ZTC symbol in the PDF version of the class schedule, and Self-Service (<https://selfservice.gcccd.edu/Student/Courses/>), 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.

**Low Textbook Cost** sections are designated with the LTC symbol in the PDF version of the class schedule, and Self-Service (<https://selfservice.gcccd.edu/Student/Courses/>). The total cost of books, textbooks, and/or other instructional resources for this section will not exceed \$40.00.

**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 Center no later than the first day of a term.
2. Submit a completed Veterans Center Worksheet to the Veterans Center.
3. Provide all additional information needed to Veterans Center 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/cte-college-credit/index.php](http://www.gcccd.edu/cte-college-credit/index.php) (<https://www.gcccd.edu/cte-college-credit/>)

## 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:
  - a. Fall Semester – June 1
  - b. 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/](http://www.cuyamaca.edu/admissions/deadlines/) (<http://www.cuyamaca.edu/admissions/deadlines/>) and click on "Short-term Class deadlines"

## Noresident 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.

### 1. 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.

### 2. Determination of Residence

- a. Residence. To determine a person's place of residence, the following rules are observed:
  - i. Every person has, in law, a residence.
  - ii. Every person who is married or 18 years of age, or older, and not precluded from doing so, may establish residence.
  - iii. There can only be one residence.
  - iv. 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.
  - v. A residence cannot be lost until another is gained.
  - vi. Residence can be changed only by the union of act and intent.
  - vii. 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:
  - i. A married minor may establish their own residence.
  - ii. If the parents are permanently separated, the residence of the minor is the residence of the parent with whom the minor lives.

- iii. If both parents are deceased, and there is no court-appointed guardian, the minor may establish their own residence.
- iv. 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.
- v. 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.

### 3. 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:

- i. Carrying on of a business or employment in California.
- ii. Maintaining active savings and checking accounts in California banks.
- iii. Ownership of residential property or continuous occupancy of rented or leased property in California.
- iv. 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:
    - i. Filing California State income taxes as a nonresident or filing income taxes as a resident in another state.
    - ii. Maintaining a driver's license in another state.
    - iii. Maintaining vehicle registration in another state.
    - iv. Maintaining voter registration and voting in another state.

- v. Attending an out-of-state institution as a resident of that state.
  - vi. 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.*
- i. 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.
  - ii. 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.
  - iii. 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.
  - iv. 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 through 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.
  - v. 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.
  - vi. 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.
- vii. 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.
- viii. 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.
- ix. 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.
- x. 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.
- xi. Absence due to Military Service; California Education Code 99130. Subject to applicable federal, state, and institutional refund and withdrawal policies, when a student is called to active military duty during an academic term, the student may choose one of the following options:
1. The student may withdraw from the institution, retroactively to the beginning of the academic term, with a full refund of tuition and fees.
  2. If at least 75% of the academic term has been completed, the student may request that the faculty member assign a grade for the course based on the work the student has completed. The faculty member shall make the final decision as to whether to grant the student request.
  3. If the faculty member assigns a grade of Incomplete for the student's course work, the student shall have a minimum of 4 weeks after returning to the institution to complete the course requirement.
  4. Readmission Procedures
    - a. Any student whose absence from the institution is necessitated by reason of service in the uniformed



services shall be entitled to readmission to the institution if:

- i. The cumulative length of absence does not exceed 5 years.
  - ii. No more than 3 years after the completion of the period of service has passed.
  - iii. No more than 2 years have passed since the end of the period that is necessary for recovery from illness or injury resulting from service.
- b. At the end of Active-duty Service, upon request, the student shall be readmitted with the same academic level and academic program, if possible.
- xii. A person who is an apprentice, as defined in Section 3077 of the Labor Code, will be entitled to resident classification.
  - xiii. 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:
    1. Holding of a provisional public school credential and enrollment in courses necessary to obtain another type of credential authorizing service in the public schools.
    2. Holding a public school credential issued pursuant to Section 44250 and enrollment in courses necessary to fulfill credential requirements.
    3. Enrollment in courses necessary to fulfill the requirements for a fifth year of education prescribed by subdivision (b) of Section 44259.
  - xiv. 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.
  - xv. 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:
    1. 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.
    2. Such absence from California was for a period of not more than four years.
    3. 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.

#### 4. Review and Appeal of Classification

- a. 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.

#### 5. 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.

#### 6. 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.

#### 7. 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.

## Self-Service

Self-Service is our online student portal, where students can complete the orientation, placement and advising. After completing the three items, the next step is to register (enroll) in classes via Self-Service. Students can pay their tuition/sign up for a payment plan, purchase a parking permit, order official transcripts, view grades by term and check the status of their financial aid and scholarships.

## 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 Parchment to accept transcript orders over the Internet. Students may request official transcripts through Self-Service or by the Parchment 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 \$2.55 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](http://www.naces.org) (<http://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.

## AB13 (VACA) Affidavit for Eligible Veterans & Dependents (Veterans Access, Choice, and Accountability Act)

Veterans or dependents of an eligible Veteran who meet the following requirements shall be exempt from paying nonresident tuition at Cuyamaca College. A "covered individual" for purposes of compliance with the VACA Act and Education Code Section 68075.7 is defined as:

1. A veteran eligible for educational assistance under either the Montgomery GI Bill-Active Duty (MGIB-AD) or Post[1]9/11 GI Bill education benefit programs who resides (lives) in California (regardless of his/her formal state of residence) and enrolls in the

community college within three years of discharge from a period of active duty service of 90 days or more.

2. A spouse or child eligible for transferred education benefits under either the Montgomery GI Bill-Active Duty (MGIB-AD) or Post-9/11 GI Bill education benefit programs who resides (lives) in California (regardless of his/her formal state of residence) and enrolls in the community college within 3 years of the transferor's discharge from a period of active duty service of 90 days or more.
3. A spouse or child eligible for benefits under the Marine Gunnery Sergeant John David Fry Scholarship (provides Post-9/11 GI Bill benefits to the children and surviving spouses of service members who died in the line of duty while on active duty) who resides (lives) in California (regardless of his/her formal state of residence) and enrolls in the community college within three years of the Service member's death in the line of duty following a period of active duty service of 90 days or more.
4. After expiration of the three year period following discharge or death as described in 38 U.S.C. 3679(c), a student who qualifies under the applicable requirements above shall maintain "covered individual" status as long the student remains continuously enrolled at the community college, even if the student enrolls in multiple programs, and the student shall continue to be exempt from paying nonresident tuition and other fees that are exclusively applicable to nonresident students. "Continuously enrolled" means enrolled for at least the fall and spring semesters of an academic year (pursuant to California Code of Regulations, Title 5 Section 55701, the academic year does not include summer or other intersessions).

Under this exemption, students are not eligible to receive a CCCPG waiver. Students will still be classified as a non-resident but given an exemption from paying non-resident tuition.

### **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-121.

### 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.

## 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 Bldg G-300 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. 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 on the second level of the Student Center.

## 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.

## 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 Bldg G-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](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/care/index.php) (<http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/care/>).

## 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. All counseling services are available in-person and online. We are located in G-200 of the Student Services Building. Learn more about our services at [www.cuyamaca.edu/counseling](http://www.cuyamaca.edu/counseling) (<http://www.cuyamaca.edu/counseling/>).

### 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 Rising 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 & 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 Ridgeway 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 Bldg G-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](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php) (<http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/>).

## 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 Bldg G-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](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/unlimited-potential-up-program.php) (<http://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) or the California Dream Act application (CADAA). Cuyamaca College will attempt to meet the need by offering assistance through the financial aid programs available.

### Grossmont-Cuyamaca Promise Program

**Free** college for qualified students! Go to Grossmont-Cuyamaca College Promise ([gcccd.edu](https://www.gcccd.edu)) (<https://www.gcccd.edu/promise/>) 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](http://www.bie.edu) (<http://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](http://www.csac.ca.gov) (<http://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 is an entitlement or a competitive grant administered by the California Student Aid Commission (CSAC). It is targeted toward students with high GPAs and moderate income. This grant pays for tuition at tuition charging institutions. Most students are not eligible to receive funding while enrolled at a community college. Community college students have their grants put on "community college reserve" for up to three years. Once the students transfer to a tuition charging institution, their grant will be activated. Students who have one or more dependent children age 17 or younger that they support can receive funding at community colleges for the living allowance.

**Cal Grant B:** Cal Grant B is an entitlement or a competitive grant. It provides a living allowance for low-income student and tuition payment for students' second through fourth year of study at tuition charging institutions. For the current academic year maximum amount for the living allowance see the California Student Aid Commission's website at [csac.ca.gov](https://www.csac.ca.gov/) (<https://www.csac.ca.gov/>).

**Cal Grant C:** Cal Grant C is a competitive grant for vocational students who are enrolled in programs from nine months to two years in length. For the current academic year maximum amount for a book stipend see the California Student Aid Commission's website at [csac.ca.gov](https://www.csac.ca.gov/) (<https://www.csac.ca.gov/>).

**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 by encouraging full time enrollment. The SSCG award is \$1298 for enrollment of 12-14.5 units per semester. The SSCG award is \$4000 for enrollment of 15 or more units. Funding is limited. The 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/](http://chafee.csac.ca.gov/) (<http://chafee.csac.ca.gov/>).

**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, groundskeeper, 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 \$531 to \$7,395 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 \$500 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](http://www.cuyamaca.edu/financial-aid/index.php) (<http://www.cuyamaca.edu/financial-aid/>).

## 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.

## 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 I-223 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 ( $\$1,500 \times 52\% = \$780$ ). 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<sup>1</sup> for the 2023-24 academic year are based on enrollment of six (6) or more units at Cuyamaca College:

Housing Status	Living with parent(s)	Living away from parent(s)
Fees <sup>1</sup>	\$1,342	\$1,342
Books and Supplies	\$1,200	\$1,200

Food and Housing	\$10,000	\$19,100
Personal Expenses	\$3,500	\$4,300
Transportation	\$1,500	\$1,500
<b>Total</b>	<b>\$17,542</b>	<b>\$27,442</b>

<sup>1</sup> Amounts subject to change. Contact the Financial Aid Office or go to [www.cuyamaca.edu/financial-aid/index.php](http://www.cuyamaca.edu/financial-aid/index.php) (<http://www.cuyamaca.edu/financial-aid/>) 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 Building G, 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](http://www.cuyamaca.edu/student-support/health-and-wellness-center/index.php) (<http://www.cuyamaca.edu/student-support/health-and-wellness-center/>)) 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](mailto:cuyamacahealthandwellness@gmail.com), eSARS ([web4.gcccd.edu/Cuyamaca/eAdvising/Health/Login.aspx](https://web4.gcccd.edu/Cuyamaca/eAdvising/Health/Login.aspx)) (<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](https://web4.gcccd.edu/Cuyamaca/eAdvising/Health/Login.aspx)) (<https://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](http://www.cuyamaca.edu/student-support/health-and-wellness-center/mental-health-counseling.php)) (<http://www.cuyamaca.edu/student-support/health-and-wellness-center/mental-health-counseling.php>)). Students can submit a question to a Registered Nurse via the Student Portal here: <https://gcccd.medicatconnect.com/login.aspx>. 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 G-100 or call (619) 660-4264, [cuyamaca.outreach@gcccd.edu](mailto: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](mailto: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 such as login issues for student email, campus network, campus Wi-Fi, library database, or Canvas.

Phone: (619) 660-4395

Email: [c-helpdesk@gcccd.edu](mailto:c-helpdesk@gcccd.edu)

Web: [www.cuyamaca.edu/helpdesk/](http://www.cuyamaca.edu/helpdesk/) (<http://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).

## NextUp! Program or Cooperating Agencies Foster Youth Educational Support (NextUp! Or CAFYES)

NextUp 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 NextUp program is in the EOPS Office located in the Student Services Bldg G-300. Contact NextUp 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](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php) (<http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/>).

## 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! Pathway Academy is located in the Together We Rise Annex 2 Center. Please visit our webpage for more information: [www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/pathway-academy/index.php](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/pathway-academy/index.php) (<http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/pathway-academy/>)

## Queer Student Center

It is the mission of the Cuyamaca College Queer Student Center to prioritize LGBTQIA2s+ students and create an environment that enhances the well-being of its community, sees strength in individuality, and promotes dignity and pride. We focus on the basic rights of our LGBTQIA2s+ students and offer assistance with housing resources, food resources, and resources for mental wellness. The Queer Student Center also serves as a safe space for students to study, hold study groups, and attend workshops facilitated by the Queer Student Center staff. Students who are in need of advocacy with social services are welcome to visit the Queer Student Center. The center is located in Room I-107, Phone: (619) 660-6517.

## Resources for Immigrant Students of Education (RISE)

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 Annex 2 center. 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](http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/index.php) (<http://www.cuyamaca.edu/student-support/additional-support-and-assistance-programs/eops/>)

## 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, in the Student Services Building, Room G-104. 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. The community college is the crucial link between the K-12 system and four-year academic institutions and the Transfer Center works closely with student services and instruction to strengthen the transfer process at Cuyamaca College.

The Transfer Center provides a variety of services including: hosting four-year university representatives, online counseling, transfer fairs, application workshops and Transfer Achievement Celebration to honor those students who have been admitted to the four-year university. For additional information visit [www.cuyamaca.edu/transfer](http://www.cuyamaca.edu/transfer) (<https://www.cuyamaca.edu/transfer/>) or email us at [Cuyamaca.transfer@gcccd.edu](mailto:Cuyamaca.transfer@gcccd.edu).

## Tutoring

We Make Good Students Better! Tutoring services are 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 online, email, and in-person formats through various campus locations as well as through the Cuyamaca Virtual Tutoring Center. For more information and/or to request an appointment, please click on the blue “Tutoring” link in your course Canvas container, email [cuyamaca.tutoring@gcccd.edu](mailto:cuyamaca.tutoring@gcccd.edu), visit the Tutoring website at [www.cuyamaca.edu/tutoring](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), or leave a 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](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), email [Cuyamaca.tutoring@gcccd.edu](mailto: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](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), email [Cuyamaca.tutoring@gcccd.edu](mailto: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](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), email [Cuyamaca.tutoring@gcccd.edu](mailto: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. For additional information please visit [www.cuyamaca.edu/umoja](http://www.cuyamaca.edu/umoja) (<http://www.cuyamaca.edu/umoja/>).

## Umoja Program Benefits

- Career, Academic and Personal Counseling
- 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](http://www.cuyamaca.edu/student-support/cuyamaca-cares/index.php) (<http://www.cuyamaca.edu/student-support/cuyamaca-cares/>)

For more information, students can contact:

- Pam Fleming, Financial Aid Homeless Youth Liaison  
Financial Aid Office (619) 660-4291  
[Pam.Fleming@gcccd.edu](mailto:Pam.Fleming@gcccd.edu)
- Kaylin Rosal, Cuyamaca Cares Coordinator  
[Cuyamaca.Cares@gcccd.edu](mailto: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](http://www.cuyamaca.edu) (<http://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

Continuous Enrollment is defined as attendance in one semester or two quarters within an academic year at a California Community College, California State University, or a University of California campus. An official grade (e.g. A,B,C,D, F,W, EW, PNP, Inc.), must be noted on the permanent record or official transcript. Students who do not attend at least one semester during an academic year or miss two consecutive semesters are not eligible for "continuing student" status. Summer sessions can be used to establish catalog rights as well as to maintain 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 *Self-Service*. 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:

Code	Title	Units
ART-120	Two-Dimensional Design	3
ART-124	Drawing I	3
ASTR-110	Descriptive Astronomy	3
AUTO-284	Level I Inspector Training Emission Control License	2
CADD-115	Engineering Graphics	3
GD-110	Graphic Design Principles	3
MUS-118	Introduction to Music	4
MUS-232	Class Piano III	3
MUS-233	Class Piano IV	3

## 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 the Director of Admissions & Records have 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 *Self-Service* at [www.cuyamaca.edu](http://www.cuyamaca.edu) (<http://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:

Grade	Meaning
A+	Excellent
A	
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	<p>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.</p>	NP	<p>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.</p> <p>I</p> <p>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.</p> <p>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.</p> <p>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.</p>
MW	<p>Military Withdrawal awarded to active or reserve military personnel upon receipt of military orders compelling a withdrawal from courses.</p>	IP	<p>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.</p>
P	<p>Pass formerly CR (Credit), (C or higher) units are not calculated in GPA.</p>	RD	<p>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>

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:

Grade	Grade Points per Unit Earned
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 earned

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

- 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
- 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:

- 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.
- Veteran Affairs certification for Chapters 30, 31, 32, 33, 35 and 1606.

### Fall or Spring Semester

Time	Units
Full-time	12
Three-quarter time	9 - 11-1/2
One-half time	6 - 8-1/2
One-quarter time	3 - 5-1/2

### Summer Session

Calculated on an individual class basis. Contact the Veterans Certifying Official in the Veterans Center for detailed information.

- International students with an "F-1" visa issued by Cuyamaca College. Requirement: 12 or more units a semester.
- 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.
- 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.
- 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.
- Financial Aid – Enrollment status for financial aid purposes are as follows:

Time	Units
Full-time	12 or more
3/4 time	9 - 11.5
1/2 time	6 - 8.5
Less than 1/2 time	0.5 - 5.5

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. Students who challenge a prerequisite or corequisite after the start of the semester should speak with the Placement Center.



For more information about prerequisite clearance and challenges, please visit [cuyamaca.edu/prereqs](http://www.cuyamaca.edu/prereqs) (<http://www.cuyamaca.edu/prereqs/>)

## 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 two semesters. 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.

- 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 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.
- Intercollegiate athletics courses and their accompanying conditioning courses.
- 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.

### Studio Arts Foundation

Course	Cuyamaca College	Grossmont College
ART 120	ART-120	ART-120
ART 129	ART-129	ART-129
ART 148	ART-148	

### Digital Arts Foundation

Course	Cuyamaca College	Grossmont College
ART 171		ART-171
ART 172		ART-172
ART 175		ART-175
GD 105	GD-105	
GD 126	GD-126	

### Digital Arts-Drawing and Illustration

Course	Cuyamaca College	Grossmont College
ART 177	ART-177	ART-177
ART 184		ART-184

ART 240		ART-240
GD 225	GD-225	

### Human Figure Drawing

Course	Cuyamaca College	Grossmont College
ART 230	ART-230	ART-230
ART 231	ART-231	ART-231
ART 232	ART-232	
ART 233	ART-233	
ART 240	ART-240	ART-240

### Drawing Foundations

Course	Cuyamaca College	Grossmont College
ART 124	ART-124	ART-124
ART 125	ART-125	ART-125
ART 224	ART-224	
ART 225	ART-225	
ART 241	ART-241	
ART 242	ART-242	

### Painting Foundations

Course	Cuyamaca College	Grossmont College
ART 121	ART-121	ART-121
ART 220	ART-220	ART-220
ART 221	ART-221	ART-221
ART 222	ART-222	ART-222

### Watercolor Painting

Course	Cuyamaca College	Grossmont College
ART 135	ART-135	
ART 235	ART-235	
ART 236	ART-236	

### Photography Foundations

Course	Cuyamaca College	Grossmont College
PHOT 150		PHOT-150
PHOT 151		PHOT-151
GD 210	GD-210	
GD 211	GD-211	
GD 212	GD-212	

### Printmaking

Course	Cuyamaca College	Grossmont College
ART-210	ART-210	ART-210
ART-211	ART-211	ART-211

### Total Body Fitness

Course	Cuyamaca College	Grossmont College
ES 004ABC		ES-004A, ES-004B, ES-004C
ES 006ABC		ES-006A, ES-006B, ES-006C
ES 011	ES-011	

ES 019ABC	ES-019A, ES-019B, ES-019C	
ES 021ABC		ES-021A, ES-021B, ES-021C
ES 022		ES-022
ES 024ABC	ES-024A, ES-024B, ES-024C	ES-024A, ES-024B, ES-024C

### Mind/Body and Flexibility Fitness

Course	Cuyamaca College	Grossmont College
ES 013	ES-013	
ES 026		ES-026
ES 027		ES-027A, ES-027B, ES-027C
ES 028ABC	ES-028A, ES-028B, ES-028C	ES-028A, ES-028B, ES-028C

### Muscle Development

Course	Cuyamaca College	Grossmont College
ES 014ABC	ES-014A, ES-014B, ES-014C	
ES 005ABC		ES-005A, ES-005B, ES-005C
ES 023ABC		ES-023A, ES-023B, ES-023C

### Cardiovascular Fitness

Course	Cuyamaca College	Grossmont College
ES 007ABC		ES-007A, ES-007B, ES-007C
ES 008ABC	ES-008A, ES-008B, ES-008C	ES-008A, ES-008B, ES-008C
ES 009ABC	ES-009A, ES-009B, ES-009C	ES-009A, ES-009B, ES-009C
ES 010	ES-010	
ES 016ABC		ES-016A, ES-016B, ES-016C
ES 017ABC		ES-017A, ES-017B, ES-017C

### Combative Sports

Course	Cuyamaca College	Grossmont College
ES 180	ES-180	ES-180
ES 185ABC		ES-185A, ES-185B, ES-185C

### Racquet Sports

Course	Cuyamaca College	Grossmont College
ES 060ABC	ES-060A, ES-060B, ES-060C	ES-060A, ES-060B, ES-060C
ES 061ABC		ES-061A, ES-061B, ES-061C
ES 076ABC	ES-076A, ES-076B, ES-076C	ES-076A, ES-076B, ES-076C

### Individual Sports

Course	Cuyamaca College	Grossmont College
ES 012	ES-012	
ES 037		ES-037A, ES-037B, ES-037C
ES 125ABC	ES-125A, ES-125B, ES-125C	ES-125A, ES-125B, ES-125C
ES 130ABC		ES-130A, ES-130B, ES-130C

### Team Sports/Gym

Course	Cuyamaca College	Grossmont College
ES 155ABC	ES-155A, ES-155B, ES-155C	ES-155A, ES-155B, ES-155C
ES 175ABC	ES-175A, ES-175B, ES-175C	ES-175A, ES-175B, ES-175C

### Team Sports/Field

Course	Cuyamaca College	Grossmont College
ES 170ABC	ES-170A, ES-170B, ES-170C	ES-170A, ES-170B, ES-170C
ES 171ABC	ES-171A, ES-171B, ES-171C	ES-171A, ES-171B, ES-171C
ES 172ABC		ES-172A, ES-172B, ES-172C
ES 176ABC		ES-176A, ES-176B, ES-176C

### Vocal Ensembles

Course	Cuyamaca College	Grossmont College
MUS 136	MUS-136	
MUS 137	MUS-137	
MUS 236	MUS-236	
MUS 237	MUS-237	
MUS 138		MUS-138
MUS 139		MUS-139
MUS 238		MUS-238
MUS 239		MUS-239
MUS 158	MUS-158	
MUS 159	MUS-159	
MUS 258	MUS-258	
MUS 259	MUS-259	

### Jazz/Popular Ensembles

Course	Cuyamaca College	Grossmont College
MUS 108	MUS-108	
MUS 109	MUS-109	
MUS 208	MUS-208	
MUS 209	MUS-209	
MUS 156	MUS-156	MUS-156
MUS 157	MUS-157	MUS-157
MUS 256	MUS-256	MUS-256
MUS 257	MUS-257	MUS-257
MUS 166		MUS-166

MUS 167	MUS-167
MUS 266	MUS-266
MUS 267	MUS-267

## Non-Western Ensembles

Course	Cuyamaca College	Grossmont College
MUS 154		MUS-154
MUS 155		MUS-155
MUS 254		MUS-254
MUS 255		MUS-255

## Large Instrumental Ensembles

Course	Cuyamaca College	Grossmont College
MUS 148		MUS-148
MUS 149		MUS-149
MUS 248		MUS-248
MUS 249		MUS-249
MUS 150		MUS-150
MUS 151		MUS-151
MUS 250		MUS-250
MUS 251		MUS-251
MUS 152	MUS-152	MUS-152
MUS 153	MUS-153	MUS-153
MUS 252	MUS-252	MUS-252
MUS 253	MUS-253	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

### Diversity, Equal Opportunity and Title IX Officer

District Office  
Grossmont-Cuyamaca Community College District  
8800 Grossmont College Drive  
El Cajon, CA 92020  
(619) 644-7039

### Cuyamaca College

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

### Grossmont College

Dean, Student Affairs  
8800 Grossmont College Drive  
El Cajon, CA 92020

(619) 644-7600

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 submitted 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 decide 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 (<http://www.cccco.edu/Complaint-Process-Notice> (<http://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](http://www.cccco.edu/Complaint-Process-Notice)

(<http://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, Aimee.Gallagher@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](http://www.cccco.edu/About-Us/Chancellors-Office/Divisions/General-Counsel/Programs/College-District-Discrimination-Appeals) (<http://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/](http://accjc.org/complaint-process/) (<http://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 college 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 services are 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 online, email, and

in-person formats through various campus locations as well as through the Cuyamaca Virtual Tutoring Center. For more information and/or to request an appointment, please click on the blue "Tutoring" link in your course Canvas container, email [cuyamaca.tutoring@gcccd.edu](mailto:cuyamaca.tutoring@gcccd.edu), visit the Tutoring website at [www.cuyamaca.edu/tutoring](http://www.cuyamaca.edu/tutoring) (<http://www.cuyamaca.edu/tutoring/>), or leave a voicemail at (619) 660-4525.

## 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 entire semester
Spring Semester	18 units total for entire semester
Summer Semester	8 units total for 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



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

California Community Colleges offer Associate Degrees for Transfer (ADT) for students interested in transferring 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](http://www2.calstate.edu/apply/transfer/Pages/associate-degree-for-transfer-major-and-campus-search.aspx) (<http://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

Code	Title	Units
(Minimum of 6 semester units)		
Select one course from each area:		
1. Written Communication		3
ENGL-120	College Composition and Reading	
ENGL-124	Advanced Composition: Critical Reasoning and Writing	
ESL-122	College Rhetoric	
2. Oral Communication and Analytical Thinking		3
COMM-120	Interpersonal Communication	
COMM-122	Public Speaking	
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
ENGR-100	Introduction to Engineering and Design	
MATH-110	Intermediate Algebra for Business, Math, Science and Engineering Majors	
MATH-120	Quantitative Reasoning	
MATH-121	Quantitative Reasoning for Career Education	

MATH-125	Structure and Concepts of Elementary Mathematics I
MATH-160	Elementary Statistics
MATH-170	Analytic Trigonometry
MATH-175	College Algebra
MATH-176	PreCalculus: Functions and Graphs
MATH-178	Calculus for Business, Social and Behavioral Sciences
MATH-180	Analytic Geometry and Calculus I
MATH-245	Discrete Mathematics
MATH-280	Analytic Geometry and Calculus II
MATH-281	Multivariable Calculus
MATH-284	Linear Algebra
PHIL-125	Critical Thinking
PHIL-130	Logic
PSY-215	Statistics for the Behavioral Sciences

KUMEY-133	Ethnoecology
KUMEY-134	Ethnobotany
KUMEY-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>
OCEA-112	Introduction to Oceanography
OCEA-113	Oceanography Laboratory <sup>1</sup>
PHYC-110	Introductory Physics <sup>1</sup>
PHYC-130	Fundamentals of Physics <sup>1</sup>
PHYC-131	Fundamentals of Physics <sup>1</sup>
PHYC-201	Mechanics and Waves <sup>1</sup>
PHYC-202	Electricity, Magnetism, and Heat <sup>1</sup>
PHYC-203	Light, Optics, and Modern Physics <sup>1</sup>

<sup>1</sup> Laboratory course.

<sup>2</sup> Students will not receive credit for more than one of the following courses: CHEM-115 Fundamentals of Chemistry, CHEM-120 Preparation for General Chemistry.

## Area B – Natural Sciences

Code	Title	Units
(Minimum of 4 semester units)		
Select one of the following courses that includes a laboratory:		4-5
ANTH-130	Introduction to Biological Anthropology	
ASTR-110	Descriptive Astronomy	
ASTR-112	General Astronomy Laboratory <sup>1</sup>	
BIO-112	Contemporary Issues in Environmental Resources	
BIO-115	Biology of Alcohol and Other Drugs	
BIO-122	The Secret Life of Plants <sup>1</sup>	
BIO-130	General Biology I	
BIO-131	General Biology I Laboratory <sup>1</sup>	
BIO-133	Ethnoecology	
BIO-134	Ethnobotany	
BIO-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	
BIO-140	Human Anatomy <sup>1</sup>	
BIO-152	Paramedical Microbiology <sup>1</sup>	
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology <sup>1</sup>	
BIO-240	Principles of Ecology, Evolution and Organismal Biology <sup>1</sup>	
CHEM-102	Introduction to General, Organic and Biological Chemistry <sup>1</sup>	
CHEM-115	Fundamentals of Chemistry <sup>1,2</sup>	
CHEM-120	Preparation for General Chemistry <sup>1,2</sup>	
CHEM-141	General Chemistry I <sup>1</sup>	
CHEM-232	Organic Chemistry II <sup>1</sup>	
ET-110	Introduction to Electricity and Electronics <sup>1</sup>	
GEOG-120	Physical Geography: Earth Systems	
GEOG-121	Physical Geography: Earth Systems Laboratory <sup>1</sup>	
GEOL-104	Earth Science	
GEOL-105	Physical Geology: Earth Systems Laboratory <sup>1</sup>	
GEOL-110	Planet Earth	
GEOL-111	Planet Earth Laboratory <sup>1</sup>	

## Area C - Humanities

Code	Title	Units
(Minimum of 3 semester units)		
Select one of the following:		3
ARAM-120	Aramaic I	
ARAM-121	Aramaic II	
ARAM-220	Aramaic III	
ARBC-120	Arabic I	
ARBC-121	Arabic II	
ARBC-122	Arabic for the Arabic Speaker I	
ARBC-123	Arabic for the Arabic Speaker II	
ARBC-130	Arabic Literature and Culture	
ARBC-145	Arabic Civilizations	
ARBC-220	Arabic III	
ARBC-221	Arabic IV	
ARBC-250	Conversational Arabic I	
ARBC-251	Conversational Arabic II	
ARBC-254	Conversational Iraqi Dialect	
ARBC-256	Conversational Levantine Dialect	
ART-100	Art Appreciation	
ART-120	Two-Dimensional Design	
ART-124	Drawing I	
ART-129	Three-Dimensional Design	
ART-140	Survey of Western Art I: Prehistory through Middle Ages	
ART-141	Survey of Western ART II: Renaissance through Modern	
ART-142	Art of Africa, Oceania and the Americas	
ART-143	Modern Art	
ART-144	Architecture of the 20th and 21st Centuries	
ART-145	Contemporary Art	
ART-146	Asian Art	
ART-148	Applied Design and Crafts	
ART-151	Chicanx Art <sup>1</sup>	
ASL-120	American Sign Language I	
ASL-121	American Sign Language II	

ASL-140	Inside Deaf Culture
ASL-220	American Sign Language III
ASL-221	American Sign Language IV
ENGL-122	Introduction to Literature
ENGL-126	Creative Writing
ENGL-201	Women, Gender, and Sexuality in Literature
ENGL-202	Introduction to Film as Literature
ENGL-214	Masterpieces of Drama
ENGL-217	Fantasy and Science Fiction
ENGL-221	British Literature I
ENGL-222	British Literature II
ENGL-231	American Literature I
ENGL-232	American Literature II
ENGL-236	Chicana/o Literature <sup>1</sup>
ENGL-238	Black Literature <sup>1</sup>
ENGL-270	World Literature I
ENGL-271	World Literature II
ETHN-111	Culture, Art & Ideas of the United States <sup>1</sup>
ETHN-151	Chicanx Art <sup>1</sup>
ETHN-236	Chicana/o Literature <sup>1</sup>
ETHN-238	Black Literature <sup>1</sup>
HIST-100	Early World History
HIST-101	Modern World History
HIST-105	Early Western Civilization
HIST-106	Modern Western Civilization
HIST-114	Comparative History of the Early Americas <sup>1</sup>
HIST-115	Comparative History of the Modern Americas <sup>1</sup>
HIST-148	The Modern Middle East <sup>1</sup>
HUM-110	Principles of the Humanities
HUM-111	Culture, Art & Ideas of the United States <sup>1</sup>
HUM-115	Arts and Culture in Local Context - San Diego
HUM-116	Kumeyaay Arts and Culture I
HUM-117	Kumeyaay Arts and Culture II
HUM-118	Introduction to Kumeyaay Basketry & Pottery
HUM-120	European Humanities
HUM-140	Humanities of the Americas
HUM-155	World Mythology through the Humanities
KUMEY-116	Kumeyaay Arts and Culture I
KUMEY-117	Kumeyaay Arts and Culture II
KUMEY-118	Introduction to Kumeyaay Basketry & Pottery
KUMEY-120	Kumeyaay Language I
KUMEY-121	Kumeyaay Language II
KUMEY-220	Kumeyaay Language III
MUS-110	Great Music Listening
MUS-111	History of Jazz
MUS-115	History of Rock Music
MUS-116	Introduction to World Music

MUS-117	Introduction to Music History and Literature
MUS-123	History of Hip-Hop Culture
PHIL-110	A General Introduction to Philosophy
PHIL-115	History of Philosophy I: Ancient
PHIL-117	History of Philosophy II: Modern and Contemporary
PHIL-140	Problems in Ethics
PHIL-141	Bioethics
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction
RELG-120	World Religions
RELG-130	Scriptures of World Religions
RELG-160	Introduction to the Hebrew Bible: The First Testament
RELG-170	Introduction to Christianity
SPAN-120	Spanish I
SPAN-121	Spanish II
SPAN-141	Spanish and Latin American Cultures
SPAN-145	Hispanic Civilizations
SPAN-220	Spanish III
SPAN-221	Spanish IV
SPAN-250	Conversational Spanish I
SPAN-251	Conversational Spanish II
THTR-110	Introduction to the Theatre

<sup>1</sup> Course meets the Cultural Diversity Graduation Requirement.

## Area D - Social and Behavioral Sciences

Code	Title	Units
(Minimum of 3 semester units)		
Select one of the following:		3
ANTH-120	Cultural Anthropology	
ANTH-140	Introduction to Archaeology	
ANTH-150	Introduction to Cultural Resource Management	
CD-115	Changing American Family	
CD-125	Child Growth and Development	
CD-131	Child, Family and Community	
CD-145	Child Abuse and Family Violence in Our Society	
COMM-110	Introduction to Mass Communication	
COMM-124	Intercultural Communication <sup>1</sup>	
COUN-140	Self Awareness and Interpersonal Relationships	
ECON-110	Economic Issues and Policies	
ECON-120	Principles of Macroeconomics	
ECON-121	Principles of Microeconomics	
ETHN-107	History of Race & Ethnicity in the United States <sup>1</sup>	
ETHN-114	Introduction to Race & Ethnicity <sup>1</sup>	
ETHN-118	U.S. History: Chicano/Chicana Perspectives <sup>1</sup>	

ETHN-119	U.S. History: Chicano/Chicana Perspectives II <sup>1</sup>	POSC-121	Introduction to U.S. Government and Politics
ETHN-130	U.S. History and Cultures: Native American Perspectives I <sup>1</sup>	POSC-124	Introduction to Comparative Government and Politics
ETHN-131	U.S. History and Cultures: Native American Perspectives II <sup>1</sup>	POSC-130	Introduction to International Relations
ETHN-132	Kumeyaay History I: Precontact - 1845 <sup>1</sup>	POSC-140	Introduction to California Governments and Politics
ETHN-133	Kumeyaay History II: 1846 - Present <sup>1</sup>	POSC-145	Introduction to Latin American Government and Politics
ETHN-150	Latinx Sociology <sup>1</sup>	POSC-147	Introduction to Middle East Government and Politics
ETHN-165	Introduction to the Politics of Race and Gender <sup>1</sup>	POSC-148	American Foreign Policy
ETHN-180	U.S. History: Black Perspectives I <sup>1</sup>	POSC-150	Introduction to Political Theory
ETHN-181	U.S. History: Black Perspectives II <sup>1</sup>	POSC-165	Introduction to the Politics of Race and Gender <sup>1</sup>
GEOG-106	World Regional Geography	POSC-166	Introduction to Native American Politics and Policy <sup>1</sup>
GEOG-130	Human Geography: the Cultural Landscape	POSC-170	Introduction to Political Science Research Methods
HED-120	Personal Health and Lifestyles	POSC-180	Introduction to Public Policy
HED-201	Introduction to Public Health	PSY-120	Introductory Psychology
HED-203	Substance Abuse and Public Health	PSY-125	Cross-Cultural Psychology <sup>1</sup>
HED-204	Health and Social Justice	PSY-132	Psychology of Health <sup>1</sup>
HED-251	Healthy Lifestyles: Theory and Application	PSY-134	Human Sexuality
HIST-107	History of Race & Ethnicity in the United States <sup>1</sup>	PSY-138	Social Psychology
HIST-108	Early American History	PSY-140	Physiological Psychology
HIST-109	Modern American History	PSY-150	Developmental Psychology
HIST-114	Comparative History of the Early Americas <sup>1</sup>	PSY-170	Abnormal Psychology
HIST-115	Comparative History of the Modern Americas <sup>1</sup>	PSY-211	Cognitive Psychology
HIST-118	U.S. History: Chicano/Chicana Perspectives I <sup>1</sup>	PSY-220	Learning
HIST-119	U.S. History: Chicano/Chicana Perspectives II <sup>1</sup>	SOC-114	Introduction to Race & Ethnicity <sup>1</sup>
HIST-122	Women in Early American History	SOC-120	Introductory Sociology <sup>1</sup>
HIST-123	Women in Modern American History	SOC-125	Marriage, Family and Alternative Lifestyles <sup>1</sup>
HIST-124	History of California <sup>1</sup>	SOC-130	Contemporary Social Problems
HIST-128	Kumeyaay History I: Precontact - 1845 <sup>1</sup>	SOC-138	Social Psychology
HIST-129	Kumeyaay History II: 1846 - Present <sup>1</sup>	SOC-140	Sex and Gender Across Cultures
HIST-130	U.S. History and Cultures: Native American Perspectives I <sup>1</sup>	SOC-150	Latinx Sociology <sup>1</sup>
HIST-131	U.S. History and Cultures: Native American Perspectives II <sup>1</sup>	SW-170	Kumeyaay Conflict Resolution
HIST-180	U.S. History: Black Perspectives I <sup>1</sup>		
HIST-181	U.S. History: Black Perspectives II <sup>1</sup>		
KUMEY-128	Kumeyaay History I: Precontact - 1845 <sup>1</sup>		
KUMEY-129	Kumeyaay Hist II: 1846 - Present <sup>1</sup>		
KUMEY-150	Introduction to Cultural Resource Management		
KUMEY-166	Introduction to Native American Politics and Policy <sup>1</sup>		
KUMEY-170	Kumeyaay Conflict Resolution		
NUTR-155	Introduction to Nutrition		
NUTR-158	Nutrition for Fitness and Sports		
POSC-120	Introduction to Politics and Political Analysis		

<sup>1</sup> Course meets the Cultural Diversity Graduation Requirement.

### Additional Requirements

Code	Title	Units
(Minimum 6 semester units)		
Select two additional courses from two different areas:		6
Area B - Natural Sciences		
Area C - Humanities		
Area D - Social and Behavioral Sciences		

### 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 College Composition and Reading with a grade of "C" or better, or a grade of "P"<sup>1</sup>.
  - b. Completion of MATH-120 Quantitative Reasoning or a higher numbered math course with a grade of "C" or higher or a grade of "P"; or a statistics course from another discipline with a grade of "C" or higher or a grade of "P"; or placing into a math course numbered MATH-170 Analytic Trigonometry 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 or a "P" in all courses counted towards a major requirement.
7. A maximum of 12 "P"<sup>1</sup> semester units taken in regular course work at this institution may be counted toward the 60 semester units required for graduation.
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, with the exception of an Associate Degree for Transfer (ADT).
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).

<sup>1</sup> 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.

Code	Title	Units
<b>Approved Cultural Diversity Courses</b>		
ART-151	Chicanx Art	3
COMM-124	Intercultural Communication	3
ENGL-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-111	Culture, Art & Ideas of the United States	3
ETHN-114	Introduction to Race & Ethnicity	3

ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-132	Kumeyaay History I: Precontact - 1845	3
ETHN-133	Kumeyaay History II: 1846 - Present	3
ETHN-150	Latinx Sociology	3
ETHN-151	Chicanx Art	3
ETHN-165	Introduction to the Politics of Race and Gender	3
ETHN-180	U.S. History: Black Perspectives I	3
ETHN-181	U.S. History: Black Perspectives II	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	3
HIST-107	History of Race & Ethnicity in the United States	3
HIST-114	Comparative History of the Early Americas	3
HIST-115	Comparative History of the Modern Americas	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-128	Kumeyaay History I: Precontact - 1845	3
HIST-129	Kumeyaay History II: 1846 - Present	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-148	The Modern Middle East	3
HIST-180	U.S. History: Black Perspectives I	3
HIST-181	U.S. History: Black Perspectives II	3
HUM-111	Culture, Art & Ideas of the United States	3
KUMEY-128	Kumeyaay History I: Precontact - 1845	3
KUMEY-129	Kumeyaay Hist II: 1846 - Present	3
KUMEY-166	Introduction to Native American Politics and Policy	3
POSC-165	Introduction to the Politics of Race and Gender	3
POSC-166	Introduction to Native American Politics and Policy	3
PSY-125	Cross-Cultural Psychology	3
PSY-132	Psychology of Health	3
SOC-114	Introduction to Race & Ethnicity	3
SOC-120	Introductory Sociology	3
SOC-125	Marriage, Family and Alternative Lifestyles	3
SOC-150	Latinx Sociology	3

## 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 or a "P" in all courses which are to be applied toward the certificate.
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 or a "P" in all courses which are to be applied toward the certificate.
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](http://www.assist.org) (<http://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](http://www.cuyamaca.edu/student-support/transfer-center/index.php) (<http://www.cuyamaca.edu/student-support/transfer-center/>) or G-200 in the Student Services building.

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) 2023-2024

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](http://www.gcccd.edu) (<http://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 Communication, 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

Code	Title	Units
<b>A. English Composition</b>		
ENGL-120	College Composition and Reading	3
ESL-122	College Rhetoric	6
<b>B. Critical Thinking</b>		
ENGL-124	Advanced Composition: Critical Reasoning and Writing	3
<b>C. Oral Communication</b>		
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3

## Area 2 – Mathematical Concepts and Quantitative Reasoning

(1 course, 3 semester units)

Code	Title	Units
BIO-215	Statistics for Life Sciences <sup>1</sup>	3
CS-240	Discrete Structures	3
MATH-120	Quantitative Reasoning <sup>1</sup>	3
MATH-125	Structure and Concepts of Elementary Mathematics I <sup>1</sup>	3
MATH-126	Structure and Concepts of Elementary Mathematics II <sup>1</sup>	3
MATH-160	Elementary Statistics <sup>1</sup>	4
MATH-175	College Algebra <sup>1</sup>	4
MATH-176	PreCalculus: Functions and Graphs <sup>1</sup>	6
MATH-178	Calculus for Business, Social and Behavioral Sciences <sup>1</sup>	4
MATH-180	Analytic Geometry and Calculus I <sup>1</sup>	5
MATH-245	Discrete Mathematics	3
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
MATH-284	Linear Algebra	3
MATH-285	Differential Equations	3
PSY-215	Statistics for the Behavioral Sciences <sup>1</sup>	4

<sup>1</sup> 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.

Code	Title	Units
<b>A. Fine Arts</b>		
ART-100	Art Appreciation	3
ART-120	Two-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-143	Modern Art	3
ART-144	Architecture of the 20th and 21st Centuries	3
ART-145	Contemporary Art	3

ART-146	Asian Art	3
ART-151	Chicanx Art	3
ETHN-151	Chicanx Art	3
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-117	Introduction to Music History and Literature	3
MUS-123	History of Hip-Hop Culture	3
THTR-110	Introduction to the Theatre	3

### B. Humanities

ARAM-121	Aramaic II	5
ARAM-220	Aramaic III	5
ARBC-121	Arabic II	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-130	Arabic Literature and Culture	3
ARBC-145	Arabic Civilizations	3
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ASL-121	American Sign Language II	4
ASL-140	Inside Deaf Culture	3
ASL-220	American Sign Language III	4
ASL-221	American Sign Language IV	4
ENGL-122	Introduction to Literature	3
ENGL-201	Women, Gender, and Sexuality 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-221	British Literature I	3
ENGL-222	British Literature II	3
ENGL-231	American Literature I	3
ENGL-232	American Literature II	3
ENGL-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-111	Culture, Art & Ideas of the United States	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	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-110	Principles of the Humanities	3
HUM-111	Culture, Art & Ideas of the United States	3
HUM-115	Arts and Culture in Local Context - San Diego	3
HUM-116	Kumeyaay Arts and Culture I	3
HUM-120	European Humanities	3
HUM-140	Humanities of the Americas	3
HUM-155	World Mythology through the Humanities	3



KUMEY-121	Kumeyaay Language II	4	GEOG-106	World Regional Geography	3
KUMEY-220	Kumeyaay Language III	4	GEOG-130	Human Geography: the Cultural Landscape	3
PHIL-110	A General Introduction to Philosophy	3	HED-204	Health and Social Justice	3
PHIL-115	History of Philosophy I: Ancient	3	HIST-100	Early World History	3
PHIL-117	History of Philosophy II: Modern and Contemporary	3	HIST-101	Modern World History	3
PHIL-140	Problems in Ethics	3	HIST-105	Early Western Civilization	3
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction	3	HIST-106	Modern Western Civilization	3
RELG-120	World Religions	3	HIST-107	History of Race & Ethnicity in the United States	3
RELG-130	Scriptures of World Religions	3	HIST-108	Early American History	3
RELG-160	Introduction to the Hebrew Bible: The First Testament	3	HIST-109	Modern American History	3
RELG-170	Introduction to Christianity	3	HIST-114	Comparative History of the Early Americas	3
SPAN-121	Spanish II	5	HIST-115	Comparative History of the Modern Americas	3
SPAN-141	Spanish and Latin American Cultures	3	HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
SPAN-145	Hispanic Civilizations	3	HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
SPAN-220	Spanish III	5	HIST-122	Women in Early American History	3
SPAN-221	Spanish IV	5	HIST-123	Women in Modern American History	3

## Area 4 – Social and Behavioral Sciences

(At least 2 courses, 6 semester units)

Courses must be taken from at least 2 disciplinary perspectives.

Code	Title	Units			
ANTH-120	Cultural Anthropology	3	HIST-124	History of California	3
ANTH-140	Introduction to Archaeology	3	HIST-128	Kumeyaay History I: Precontact - 1845	3
ANTH-160	Introduction to Archaeological Field Work	4	HIST-129	Kumeyaay History II: 1846 - Present	3
CD-115	Changing American Family	3	HIST-130	U.S. History and Cultures: Native American Perspectives I	3
CD-125	Child Growth and Development	3	HIST-131	U.S. History and Cultures: Native American Perspectives II	3
CD-131	Child, Family and Community	3	HIST-148	The Modern Middle East	3
COMM-110	Introduction to Mass Communication	3	HIST-180	U.S. History: Black Perspectives I	3
COMM-124	Intercultural Communication	3	HIST-181	U.S. History: Black Perspectives II	3
ECON-110	Economic Issues and Policies <sup>1</sup>	3	HIST-275	Historical Period	3
ECON-120	Principles of Macroeconomics	3	HIST-276	Geographical Area	3
ECON-121	Principles of Microeconomics	3	HIST-277	Historical Theme	3
ETHN-107	History of Race & Ethnicity in the United States	3	KUMEY-128	Kumeyaay History I: Precontact - 1845	3
ETHN-114	Introduction to Race & Ethnicity	3	KUMEY-129	Kumeyaay Hist II: 1846 - Present	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3	KUMEY-166	Introduction to Native American Politics and Policy	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3	POSC-120	Introduction to Politics and Political Analysis	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3	POSC-121	Introduction to U.S. Government and Politics	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3	POSC-124	Introduction to Comparative Government and Politics	3
ETHN-132	Kumeyaay History I: Precontact - 1845	3	POSC-130	Introduction to International Relations	3
ETHN-133	Kumeyaay History II: 1846 - Present	3	POSC-140	Introduction to California Governments and Politics	3
ETHN-150	Latinx Sociology	3	POSC-165	Introduction to the Politics of Race and Gender	3
ETHN-165	Introduction to the Politics of Race and Gender	3	POSC-166	Introduction to Native American Politics and Policy	3
ETHN-180	U.S. History: Black Perspectives I	3	POSC-170	Introduction to Political Science Research Methods	3
ETHN-181	U.S. History: Black Perspectives II	3	POSC-180	Introduction to Public Policy	3
			PSY-120	Introductory Psychology	3

PSY-125	Cross-Cultural Psychology	3
PSY-134	Human Sexuality	3
PSY-138	Social Psychology	3
PSY-140	Physiological Psychology	3
PSY-150	Developmental Psychology	3
PSY-170	Abnormal Psychology	3
PSY-211	Cognitive Psychology	3
PSY-220	Learning	3
SOC-114	Introduction to Race & Ethnicity	3
SOC-120	Introductory Sociology	3
SOC-125	Marriage, Family and Alternative Lifestyles	3
SOC-130	Contemporary Social Problems	3
SOC-138	Social Psychology	3
SOC-140	Sex and Gender Across Cultures	3
SOC-150	Latinx Sociology	3

<sup>1</sup> 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 must correspond to related lecture courses.

Code	Title	Units
<b>A. Physical Sciences</b>		
ASTR-110	Descriptive Astronomy	3
ASTR-112	General Astronomy Laboratory <sup>1</sup>	1
CHEM-102	Introduction to General, Organic and Biological Chemistry <sup>1,2</sup>	5
CHEM-115	Fundamentals of Chemistry <sup>1,2</sup>	4
CHEM-120	Preparation for General Chemistry <sup>1,2</sup>	4
CHEM-141	General Chemistry I <sup>1</sup>	5
CHEM-142	General Chemistry II <sup>1</sup>	5
CHEM-231	Organic Chemistry I <sup>1</sup>	5
CHEM-232	Organic Chemistry II <sup>1</sup>	5
GEOG-120	Physical Geography: Earth Systems <sup>3</sup>	3
GEOG-121	Physical Geography: Earth Systems Laboratory <sup>1,3</sup>	1
GEOL-104	Earth Science <sup>3</sup>	3
GEOL-105	Physical Geology: Earth Systems Laboratory <sup>1</sup>	1
GEOL-110	Planet Earth	3
GEOL-111	Planet Earth Laboratory <sup>1</sup>	1
OCEA-112	Introduction to Oceanography	3
OCEA-113	Oceanography Laboratory <sup>1</sup>	1
PHYC-110	Introductory Physics <sup>1,2</sup>	4
PHYC-130	Fundamentals of Physics <sup>1,2</sup>	4
PHYC-131	Fundamentals of Physics <sup>1,2</sup>	4
PHYC-201	Mechanics and Waves <sup>1,2</sup>	5
PHYC-202	Electricity, Magnetism, and Heat <sup>1,2</sup>	5
PHYC-203	Light, Optics, and Modern Physics <sup>1,2</sup>	5

## B. Biological Sciences

ANTH-130	Introduction to Biological Anthropology	3
BIO-112	Contemporary Issues in Environmental Resources	3
BIO-122	The Secret Life of Plants <sup>1</sup>	4
BIO-130	General Biology I <sup>2</sup>	3
BIO-131	General Biology I Laboratory <sup>1,2</sup>	1
BIO-133	Ethnoecology	3
BIO-134	Ethnobotany	3
BIO-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	1
BIO-140	Human Anatomy <sup>1</sup>	5
BIO-141	Human Physiology	3
BIO-141L	Laboratory in Human Physiology <sup>1</sup>	1
BIO-152	Paramedical Microbiology <sup>1</sup>	5
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology <sup>1</sup>	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology <sup>1</sup>	5
KUMEY-133	Ethnoecology	3
KUMEY-134	Ethnobotany	3
KUMEY-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	1

## C. Laboratory

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

<sup>1</sup> Laboratory course.

<sup>2</sup> Transfer credit may be limited by UC or CSU or both. Please consult with a counselor.

<sup>3</sup> GEOG-121 Physical Geography: Earth Systems Laboratory corresponds to either GEOG-120 Physical Geography: Earth Systems or GEOL-104 Earth Science.

## 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.

Code	Title	Units
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-250	Conversational Arabic I	3
ARBC-251	Conversational Arabic II	3
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
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-220	Kumeyaay Language III	4
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

## Area 7 – Ethnic Studies (effective Fall 2023)

(1 course, 3 semester units)

Courses must be completed Fall 2023 or later to be certified in Area 7.

Code	Title	Units
ENGL-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-114	Introduction to Race & Ethnicity	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	3
HIST-107	History of Race & Ethnicity in the United States	3
SOC-114	Introduction to Race & Ethnicity	3

## U.S. History, Constitution, and American Ideals Requirement

The California State University 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-Breadth Area D.

Students are required to select Option I or Option II and complete two courses.

Option I - Choose one course from List A and one course from List B.

Code	Title	Units
List A (Approved for US-1 & US-2)		
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3

ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-180	U.S. History: Black Perspectives I	3
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-114	Comparative History of the Early Americas	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-122	Women in Early American History	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-180	U.S. History: Black Perspectives I	3

List B (Approved for US-3)

ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-181	U.S. History: Black Perspectives II	3
HIST-109	Modern American History	3
HIST-115	Comparative History of the Modern Americas	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-123	Women in Modern American History	3
HIST-124	History of California	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-181	U.S. History: Black Perspectives II	3
POSC-140	Introduction to California Governments and Politics	3

Option II - Choose one course from List A and one course from List B.

Code	Title	Units
List A (Approved for US-2 & US-3)		
POSC-121	Introduction to U.S. Government and Politics	3
List B (Approved for US-1)		
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-180	U.S. History: Black Perspectives I	3
ETHN-181	U.S. History: Black Perspectives II	3
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-109	Modern American History	3
HIST-114	Comparative History of the Early Americas	3

HIST-115	Comparative History of the Modern Americas	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-122	Women in Early American History	3
HIST-123	Women in Modern American History	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-180	U.S. History: Black Perspectives I	3
HIST-181	U.S. History: Black Perspectives II	3

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

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 should discuss with a Counselor to verify this graduation requirement is complete.

### IGETC for STEM

Students majoring in the Associate Degree for Transfer in Biology, and/or the Associate Degree for Transfer in Environmental Science 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  
 Davis  
 Irvine  
 Los Angeles  
 Merced  
 Riverside  
 San Diego  
 San Francisco (Medical Center)  
 Santa Barbara  
 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](http://www.cuyamaca.edu/student-support/transfer-center/uc-tag.php) (<http://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 months of October and November. Visit [www.universityofcalifornia.edu/admissions](http://www.universityofcalifornia.edu/admissions) (<http://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](http://www.assist.org) (<http://www.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, Veterans and former foster youth attending one of the University Link local partner community colleges.

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.

Subject	Credit Limitation
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, CHEM-115 or CHEM-120 if taken after CHEM-141. No credit for CHEM-102 if taken after CHEM-115.
Counseling	COUN-120 and COUN-150 combined: maximum credit, 1 course.
Economics	No credit for ECON-110 if taken after ECON-120 or ECON-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 (ESL-103-CC, ESL-106-CC, ESL-119-CC, ESL-120-CC): maximum credit, eight units.
Exercise Science	Maximum of four units of credit for Physical Activity courses.
History	HIST-118, HIST-130 and HIST-180 combined: maximum credit, one course. HIST-119, HIST-131 and HIST-181 combined: maximum credit, one course.
Math	Credit only for MATH-120 (3 units) or MATH-125 and MATH-126 combined (6 units). MATH-160, BIO-215 and PSY-215 combined: maximum credit, one course. MATH-175 and MATH-176 combined: maximum credit, 5 semester/7.5 quarter units. MATH-178 and MATH-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.
Physics	No credit for PHYC-110 if taken after PHYC-130 or PHYC-201.. PHYC-130 and PHYC-131 combined with PHYC-201, PHYC-202, PHYC-203: 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  
Channel Islands  
Chico  
Dominguez Hills  
East Bay  
Fresno  
Fullerton  
Humboldt  
Long Beach  
Los Angeles  
Maritime  
Monterey Bay  
Northridge  
Pomona  
Sacramento  
San Bernardino  
San Diego  
San Francisco  
San Jose  
San Luis Obispo  
San Marcos  
Sonoma  
Stanislaus

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](http://www2.calstate.edu/apply) (<http://www2.calstate.edu/apply/>)

## SDSU Upper Division Transfer Admission Guarantee (TAG)

Please refer to <https://admissions.sdsu.edu/transfers/transfer-pathways> (<https://admissions.sdsu.edu/transfers/transfer-pathways/>) for more information on the SDSU TAG.

## Plan C: California State University (CSU) General Education Breadth 2023-2024

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](http://www.gcccd.edu) (<http://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 nine (9) 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.
6. A minimum of three (3) semester units designed to help students comprehend the diversity and social justice history of the United States and of the society in which they live.

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 F 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.

Code	Title	Units
<b>1. Oral Communication</b>		
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3
<b>2. Written Communication</b>		
ENGL-120	College Composition and Reading	3
ESL-122	College Rhetoric	6
<b>3. Critical Thinking</b>		
COMM-137	Critical Thinking in Group Communication	3
COMM-145	Argumentation	3
ENGL-122	Introduction to Literature	3
ENGL-124	Advanced Composition: Critical Reasoning and Writing	3
PHIL-125	Critical Thinking	3
PHIL-130	Logic	3

### 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. Lab must correspond to its related lecture course.

Code	Title	Units
<b>1. Physical Sciences</b>		
ASTR-110	Descriptive Astronomy	3
ASTR-112	General Astronomy Laboratory <sup>1</sup>	1
CHEM-102	Introduction to General, Organic and Biological Chemistry <sup>1</sup>	5
CHEM-115	Fundamentals of Chemistry <sup>1</sup>	4
CHEM-120	Preparation for General Chemistry <sup>1</sup>	4
CHEM-141	General Chemistry I <sup>1</sup>	5
CHEM-142	General Chemistry II <sup>1</sup>	5
CHEM-231	Organic Chemistry I <sup>1</sup>	5
CHEM-232	Organic Chemistry II <sup>1</sup>	5
ET-110	Introduction to Electricity and Electronics <sup>1</sup>	4
GEOG-120	Physical Geography: Earth Systems <sup>2</sup>	3
GEOG-121	Physical Geography: Earth Systems Laboratory <sup>1,2</sup>	1
GEOL-104	Earth Science <sup>2</sup>	3
GEOL-105	Physical Geology: Earth Systems Laboratory <sup>1</sup>	1
GEOL-110	Planet Earth	3
GEOL-111	Planet Earth Laboratory <sup>1</sup>	1
OCEA-112	Introduction to Oceanography	3
OCEA-113	Oceanography Laboratory <sup>1</sup>	1

PHYC-110	Introductory Physics <sup>1</sup>	4
PHYC-130	Fundamentals of Physics <sup>1</sup>	4
PHYC-131	Fundamentals of Physics <sup>1</sup>	4
PHYC-201	Mechanics and Waves <sup>1</sup>	5
PHYC-202	Electricity, Magnetism, and Heat <sup>1</sup>	5
PHYC-203	Light, Optics, and Modern Physics <sup>1</sup>	5
<b>2. Life Sciences</b>		
ANTH-130	Introduction to Biological Anthropology	3
BIO-112	Contemporary Issues in Environmental Resources	3
BIO-122	The Secret Life of Plants <sup>1</sup>	4
BIO-130	General Biology I	3
BIO-131	General Biology I Laboratory <sup>1</sup>	1
BIO-133	Ethnoecology	3
BIO-134	Ethnobotany	3
BIO-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	1
BIO-140	Human Anatomy <sup>1</sup>	5
BIO-141	Human Physiology	3
BIO-141L	Laboratory in Human Physiology <sup>1</sup>	1
BIO-152	Paramedical Microbiology <sup>1</sup>	5
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology <sup>1</sup>	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology <sup>1</sup>	5
KUMEY-133	Ethnoecology	3
KUMEY-134	Ethnobotany	3
KUMEY-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	1
OCEA-112	Introduction to Oceanography	3
OCEA-113	Oceanography Laboratory <sup>1</sup>	1
<b>3. Laboratory Activity</b>		
This requirement is met by completing a lab course in B1 or B2. Lab must correspond to its related lecture course.		
<b>4. Mathematics/Quantitative Reasoning</b>		
BIO-215	Statistics for Life Sciences	3
CS-240	Discrete Structures	3
MATH-120	Quantitative Reasoning	3
MATH-125	Structure and Concepts of Elementary Mathematics I	3
MATH-126	Structure and Concepts of Elementary Mathematics II	3
MATH-160	Elementary Statistics	4
MATH-170	Analytic Trigonometry	3
MATH-175	College Algebra	4
MATH-176	PreCalculus: Functions and Graphs	6
MATH-178	Calculus for Business, Social and Behavioral Sciences	4
MATH-180	Analytic Geometry and Calculus I	5
MATH-245	Discrete Mathematics	3
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
MATH-284	Linear Algebra	3
MATH-285	Differential Equations	3
PSY-215	Statistics for the Behavioral Sciences	4

<sup>1</sup> Laboratory Course.

<sup>2</sup> GEOG-121 Physical Geography: Earth Systems Laboratory corresponds to either GEOG-120 Physical Geography: Earth Systems or GEOL-104 Earth Science.

## Area C – Arts and Humanities

(Minimum of 9 semester units)

At least 1 course in each category.

Code	Title	Units
<b>1. Arts</b>		
ART-100	Art Appreciation	3
ART-120	Two-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-143	Modern Art	3
ART-144	Architecture of the 20th and 21st Centuries	3
ART-145	Contemporary Art	3
ART-146	Asian Art	3
ART-148	Applied Design and Crafts	3
ART-151	Chicanx Art	3
ETHN-151	Chicanx Art	3
HUM-110	Principles of the Humanities	3
HUM-120	European Humanities	3
HUM-140	Humanities of the Americas	3
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-117	Introduction to Music History and Literature	3
MUS-123	History of Hip-Hop Culture	3
THTR-110	Introduction to the Theatre	3
<b>2. Humanities</b>		
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-130	Arabic Literature and Culture	3
ARBC-145	Arabic Civilizations	3
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-250	Conversational Arabic I	3
ARBC-251	Conversational Arabic II	3
ARBC-254	Conversational Iraqi Dialect	3
ASL-120	American Sign Language I	4
ASL-121	American Sign Language II	4

ASL-140	Inside Deaf Culture	3
ASL-220	American Sign Language III	4
ASL-221	American Sign Language IV	4
ENGL-122	Introduction to Literature	3
ENGL-201	Women, Gender, and Sexuality 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-221	British Literature I	3
ENGL-222	British Literature II	3
ENGL-231	American Literature I	3
ENGL-232	American Literature II	3
ENGL-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-111	Culture, Art & Ideas of the United States	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	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
HIST-114	Comparative History of the Early Americas	3
HIST-115	Comparative History of the Modern Americas	3
HIST-148	The Modern Middle East	3
HUM-110	Principles of the Humanities	3
HUM-111	Culture, Art & Ideas of the United States	3
HUM-115	Arts and Culture in Local Context - San Diego	3
HUM-116	Kumeyaay Arts and Culture I	3
HUM-120	European Humanities	3
HUM-140	Humanities of the Americas	3
HUM-155	World Mythology through the Humanities	3
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-220	Kumeyaay Language III	4
PHIL-110	A General Introduction to Philosophy	3
PHIL-115	History of Philosophy I: Ancient	3
PHIL-117	History of Philosophy II: Modern and Contemporary	3
PHIL-140	Problems in Ethics	3
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction	3
RELG-120	World Religions	3
RELG-130	Scriptures of World Religions	3
RELG-160	Introduction to the Hebrew Bible: The First Testament	3
RELG-170	Introduction to Christianity	3
SPAN-120	Spanish I	5
SPAN-121	Spanish II	5
SPAN-141	Spanish and Latin American Cultures	3

SPAN-145	Hispanic Civilizations	3
SPAN-220	Spanish III	5
SPAN-221	Spanish IV	5
SPAN-250	Conversational Spanish I	3
SPAN-251	Conversational Spanish II	3

## Area D – Social Sciences

(Minimum of 6 semester units)

Courses may be taken in the same discipline

Code	Title	Units
ANTH-120	Cultural Anthropology	3
ANTH-140	Introduction to Archaeology	3
ANTH-150	Introduction to Cultural Resource Management	3
ANTH-160	Introduction to Archaeological Field Work	4
CD-115	Changing American Family	3
CD-125	Child Growth and Development	3
CD-131	Child, Family and Community	3
CD-145	Child Abuse and Family Violence in Our Society	3
COMM-110	Introduction to Mass Communication	3
COMM-124	Intercultural Communication	3
ECON-110	Economic Issues and Policies	3
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3
ETHN-107	History of Race & Ethnicity in the United States <sup>1</sup>	3
ETHN-114	Introduction to Race & Ethnicity	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I <sup>1</sup>	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II <sup>1</sup>	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I <sup>1</sup>	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II <sup>1</sup>	3
ETHN-132	Kumeyaay History I: Precontact - 1845	3
ETHN-133	Kumeyaay History II: 1846 - Present	3
ETHN-150	Latinx Sociology	3
ETHN-165	Introduction to the Politics of Race and Gender	3
ETHN-180	U.S. History: Black Perspectives I <sup>1</sup>	3
ETHN-181	U.S. History: Black Perspectives II <sup>1</sup>	3
GEOG-106	World Regional Geography	3
GEOG-130	Human Geography: the Cultural Landscape	3
HED-203	Substance Abuse and Public Health	3
HED-204	Health and Social Justice	3
HED-251	Healthy Lifestyles: Theory and Application	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



HIST-107	History of Race & Ethnicity in the United States <sup>1</sup>	3
HIST-108	Early American History <sup>1</sup>	3
HIST-109	Modern American History <sup>1</sup>	3
HIST-114	Comparative History of the Early Americas <sup>1</sup>	3
HIST-115	Comparative History of the Modern Americas <sup>1</sup>	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I <sup>1</sup>	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II <sup>1</sup>	3
HIST-122	Women in Early American History <sup>1</sup>	3
HIST-123	Women in Modern American History <sup>1</sup>	3
HIST-124	History of California <sup>1</sup>	3
HIST-128	Kumeyaay History I: Precontact - 1845	3
HIST-129	Kumeyaay History II: 1846 - Present	3
HIST-130	U.S. History and Cultures: Native American Perspectives I <sup>1</sup>	3
HIST-131	U.S. History and Cultures: Native American Perspectives II <sup>1</sup>	3
HIST-180	U.S. History: Black Perspectives I <sup>1</sup>	3
HIST-181	U.S. History: Black Perspectives II <sup>1</sup>	3
HIST-275	Historical Period	3
HIST-276	Geographical Area	3
HIST-277	Historical Theme	3
KUMEY-128	Kumeyaay History I: Precontact - 1845	3
KUMEY-129	Kumeyaay Hist II: 1846 - Present	3
KUMEY-150	Introduction to Cultural Resource Management	3
KUMEY-166	Introduction to Native American Politics and Policy	3
POSC-120	Introduction to Politics and Political Analysis	3
POSC-121	Introduction to U.S. Government and Politics <sup>1</sup>	3
POSC-124	Introduction to Comparative Government and Politics	3
POSC-130	Introduction to International Relations	3
POSC-140	Introduction to California Governments and Politics <sup>1</sup>	3
POSC-165	Introduction to the Politics of Race and Gender	3
POSC-166	Introduction to Native American Politics and Policy	3
POSC-170	Introduction to Political Science Research Methods	3
POSC-180	Introduction to Public Policy	3
PSY-120	Introductory Psychology	3
PSY-125	Cross-Cultural Psychology	3
PSY-132	Psychology of Health	3
PSY-134	Human Sexuality	3
PSY-138	Social Psychology	3
PSY-140	Physiological Psychology	3
PSY-150	Developmental Psychology	3

PSY-170	Abnormal Psychology	3
PSY-211	Cognitive Psychology	3
PSY-220	Learning	3
SOC-114	Introduction to Race & Ethnicity	3
SOC-120	Introductory Sociology	3
SOC-125	Marriage, Family and Alternative Lifestyles	3
SOC-130	Contemporary Social Problems	3
SOC-138	Social Psychology	3
SOC-140	Sex and Gender Across Cultures	3
SOC-150	Latinx Sociology	3
SPAN-145	Hispanic Civilizations	3

<sup>1</sup> Course meets CSU American Institutions requirement.

## Area E – Lifelong Learning and Self-Development

Three semester units, not all from physical activity, from:

Code	Title	Units
BIO-115	Biology of Alcohol and Other Drugs	
CD-125	Child Growth and Development	
CD-145	Child Abuse and Family Violence in Our Society	
CIS-110	Principles of Information Systems	
COUN-120	College and Career Success	
COUN-140	Self Awareness and Interpersonal Relationships	
ES-019A	Beginning Physical Fitness	
ES-019B	Intermediate Physical Fitness	
ES-019C	Advanced Physical Fitness	
HED-120	Personal Health and Lifestyles	
HED-201	Introduction to Public Health	
HED-203	Substance Abuse and Public Health	
HED-251	Healthy Lifestyles: Theory and Application	
NUTR-155	Introduction to Nutrition	
NUTR-158	Nutrition for Fitness and Sports	
NUTR-255	Science of Nutrition	
PSY-132	Psychology of Health	
PSY-134	Human Sexuality	
PSY-140	Physiological Psychology	
PSY-150	Developmental Psychology	
PSY-220	Learning	
SCI-100	Success in Science, Technology, Engineering and Mathematics (STEM)	
SOC-125	Marriage, Family and Alternative Lifestyles	

Or DD 214 and/or military transcripts.

## Area F – Ethnic Studies

One course (Minimum of 3 semester units) is required.

Code	Title	Units
ENGL-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ETHN-107	History of Race & Ethnicity in the United States	3

ETHN-114	Introduction to Race & Ethnicity	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	3
HIST-107	History of Race & Ethnicity in the United States	3
SOC-114	Introduction to Race & Ethnicity	3

### U.S. History, Constitution, and American Ideals Requirement

The California State University 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-Breadth Area D.

Students are required to select Option I or Option II and complete two courses.

Option I - Choose one course from List A and one course from List B.

Code	Title	Units
List A (Approved for US-1 & US-2)		
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-180	U.S. History: Black Perspectives I	3
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-114	Comparative History of the Early Americas	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-122	Women in Early American History	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-180	U.S. History: Black Perspectives I	3
List B (Approved for US-3)		
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-181	U.S. History: Black Perspectives II	3
HIST-109	Modern American History	3
HIST-115	Comparative History of the Modern Americas	3

HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-123	Women in Modern American History	3
HIST-124	History of California	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-181	U.S. History: Black Perspectives II	3
POSC-140	Introduction to California Governments and Politics	3

Option II - Choose one course from List A and one course from List B.

Code	Title	Units
List A (Approved for US-2 & US-3)		
POSC-121	Introduction to U.S. Government and Politics	3
List B (Approved for US-1)		
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-180	U.S. History: Black Perspectives I	3
ETHN-181	U.S. History: Black Perspectives II	3
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-109	Modern American History	3
HIST-114	Comparative History of the Early Americas	3
HIST-115	Comparative History of the Modern Americas	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-122	Women in Early American History	3
HIST-123	Women in Modern American History	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-180	U.S. History: Black Perspectives I	3
HIST-181	U.S. History: Black Perspectives II	3

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

**Courses with a <sup>1</sup> meet CSU American Institutions requirement.**

The CSU GE Certificate of Achievement is uniquely designed to be flexible while simultaneously allowing students to meet lower division transfer

requirements. Students earning the certificate in CSU General Education Breadth, which is required as preparation for successful transfer.

## 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](http://www.collegeboard.org) (<http://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](http://www.collegeboard.org) (<http://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](http://www.ibo.org) (<http://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)

## Advanced Placement (AP)

AP Exam	Total Units Awarded	General Education	GCCCD Major Courses Fulfilled
<b>Art History</b>	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
<b>Biology</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 4	CC: 4, Area B - w/ lab CSU GE: 4, Area B2, B3 IGETC: 4, Area 5B, 5C CCC: 4, Natural Sciences	CC: BIO 130, 131 GC: BIO 120
<b>Calculus AB</b>	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A2 CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 180 (Score of 3)
<b>Calculus BC</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area A2 CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 180 (Score of 3) MATH 180 and 280 (Score of 4 or 5)
<b>Calculus BC/AB Subscore</b>	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A2 CSU GE: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 180
<b>Chemistry</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 4	CC: 4, Area B - w/ lab OSU 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)
<b>Chinese Language &amp; Culture</b>	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
<b>Comparative Government &amp; Politics</b>	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
<b>Computer Science A</b>	GCCCD: 3 CSU: 3 UC: 1.3 CCC: 0	N/A	CC: CS 182 GC: CSIS 293
<b>Computer Science AB</b>	GCCCD: 6 CSU: 6 UC: 2.6 CCC: 3	N/A	N/A
<b>Computer Science Principles</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area A2 CSU: 3, Area B4 IGETC: N/A CCC: Language and Rationality	N/A
<b>English Language &amp; Composition</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area A1 CSU GE: 3, Area A2 IGETC: 3, Area 1A CCC: 3, Language and Rationality	ENGL 120
<b>English Literature &amp; Composition</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 6, Area A1, C CSU GE: 6, Area A2, C2 IGETC: 3, Area 1A or 3B CCC: 3, Language and Rationality or Humanities	ENGL 120, 122
<b>Environmental Science</b>	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B - w/ lab CSU GE: 4, Area B1, B3 IGETC: 3, Area 5A, 5C CCC: 4, Natural Sciences	N/A
<b>European History</b>	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



<b>French Language &amp; Culture</b>	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	<b>Physics 1: Algebra-Based</b>	GCCCD: 4 CSU: 4 UC: 5.3 CCC: 4	CC: 4, Area B - w/ lab CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	PHYC 110
<b>German Language and Culture</b>	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	<b>Physics 2: Algebra-Based</b>	GCCCD: 4 CSU: 4 UC: 5.3 CCC: 4	CC: 4, Area B - w/ lab CSU GE: 4, Area B1, B3 IGETC: 4, Area 5A, 5C CCC: 4, Natural Sciences	PHYC 110
<b>Human Geography</b>	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	<b>Physics C: Electricity &amp; Magnetism</b>	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B - w/lab CSU GE: 4, Area B1, B3 IGETC: 3, Area 5A, 5C CCC: 4, Natural Sciences	CC: Area B - w/ lab GC: PHYC 202 or PHYC 240
<b>Italian Language &amp; Culture</b>	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	<b>Physics C: Mechanics</b>	GCCCD: 4 CSU: 4 UC: 2.6 CCC: 4	CC: 4, Area B - w/lab CSU GE: 4, Area B1, B3 IGETC: 3, Area 5A, 5C CCC: 4, Natural Sciences	CC: Area B - w/ lab GC: PHYC 201 or PHYC 140
<b>Japanese Language &amp; Culture</b>	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	<b>PreCalculus</b>	GCCCD: 3 CSU: 3 UC: 0 CCC: 3	CC: 3, Area A2 CSU GE: 3, B4 IGETC: N/A CCC: 3, Language and Rationality	MATH 170, 175 OR MATH 176
<b>Latin</b>	GCCCD: 6 CSU: 6 UC: 5.3 CCC: 3	CC: 3, Area C CSU: 3, Area C2 IGETC: 3, Area 3B, 6A CCC: 3, Humanities	N/A	<b>Psychology</b>	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
<b>Macroeconomics</b>	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	<b>Seminar</b>	GCCCD: 3 CSU: 3 UC: 1.3 CCC: 0	N/A	N/A
<b>Microeconomics</b>	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	<b>Spanish Language &amp; Culture</b>	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
<b>Music Theory</b>	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				

<b>Spanish Literature &amp; Culture</b>	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
<b>Statistics</b>	GCCCD: 3 CSU: 3 UC: 2.6 CCC: 3	CC: 3, Area A CSU GD: 3, Area B4 IGETC: 3, Area 2A CCC: 3, Language and Rationality	MATH 160
<b>Studio Art - 2D Design</b>	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 0	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 120
<b>Studio Art - 3D Design</b>	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 0	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 129
<b>Studio Art - Drawing</b>	GCCCD: 3 CSU: 3 UC: 5.3 CCC: 0	CC: 3, Area C CSU GE: N/A IGETC: N/A CCC: N/A	ART 124
<b>US Government &amp; Politics</b>	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
<b>US History</b>	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
<b>World History Modern</b>	GCCCD: 3 CSU: 3 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 or 101

- 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.
- 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).

References: CSU Chancellor's Office Memo Code: ASA-2019-03; Systemwide Credit for External Examinations, January 28, 2019; Memorandum ESS 22-200-003, March 21st, 2022.

## College Level Examination Program (CLEP)

(Note: CLEP is currently not accepted for IGETC or by the UC System)

CLEP Examination	Approved Score	Total Units Awarded	General Education
<b>American Government</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3, Area D CSU GE: 3, Area D IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>American Literature</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>Analyzing and Interpreting Literature</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>Biology</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3, Area B - no lab CSU GE: 3, Area B2 - no lab IGETC: N/A CCC: 3, Natural Sciences
<b>Calculus</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3, Area A2 CSU GE: 3, Area B4 IGETC: N/A CCC: 3, Language and Rationality

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.

<b>Chemistry</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	CC: 3 units, Area B - no lab CSU GE: 3 units, Area B1 - no lab IGETC: N/A CCC: 3, Natural Sciences	<b>Freshman College Composition</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A
<b>College Algebra</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A CCC: 3, Language and Rationality	<b>German Level I</b>	50	GCCCD: 6 CSU: 6 UC: N/A CCC: 3	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A
<b>College Algebra-Trigonometry</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3 units, Area A2 CSU GE: 3 units, Area B4 IGETC: N/A CCC: 3, Language and Rationality	<b>German Level II</b>	60	GCCCD: 9 CSU: 9 UC: N/A CCC: 3	GC: 5, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>College Composition</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>History: US I</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D, US-1 IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>College Composition - Modular</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>History: US II</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D, US-1 IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>College Mathematics</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>Human Growth and Development</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area E IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>English Composition (without essay)</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>Humanities</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>English Composition (with essay)</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>Information Systems and Computer Applications</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>Financial Accounting</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 0 CSU GE: N/A IGETC: N/A CCC: N/A	<b>Introduction to Educational Psychology</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>French Level I</b>	50	GCCCD: 6 CSU: 6 UC: N/A CCC: 6	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A	<b>Introductory Business Law</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>French Level II</b>	50	GCCCD: 9 CSU: 9 UC: N/A CCC: 3	GC: 5, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities				

<b>Introductory Psychology</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>Introductory Sociology</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>Natural Sciences</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area B - no lab CSU GE: 3, Area B1 or B2 - no lab IGETC: N/A CCC: 3, Natural Sciences
<b>Precalculus</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area A2 CSU GE: 3, Area B4 IGETC: N/A CCC: 3, Language and Rationality
<b>Principles of Accounting</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>Principles of Macroeconomics</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D IGETC: N/A CCC: 3, Social/Behavioral Sciences
<b>Principles of Management</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>Principles of Marketing</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 0	GC: 3, Elective Credit CSU GE: N/A IGETC: N/A CCC: N/A
<b>Principles of Microeconomics</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area D CSU GE: 3, Area D IGETC: N/A CCC: Social/Behavioral Sciences

<b>Social Sciences and History</b>	50	GCCCD: 0 CSU: 0 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A
<b>Spanish Level I</b>	50	GCCCD: 6 CSU: 6 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A
<b>Spanish Level II</b>	63	GCCCD: 9 CSU: 9 UC: N/A CCC: 3	GC: 5, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>Spanish with Writing I</b>	50	GCCCD: 6 CSU: 6 UC: N/A CCC: 0	GC: N/A CSU GE: N/A IGETC: N/A CCC: N/A
<b>Spanish with Writing II</b>	50	GCCCD: 9 CSU: 9 UC: N/A CCC: 0	GC: 3, Area C CSU GE: 3, Area C2 IGETC: N/A CCC: 3, Humanities
<b>Western Civilization I</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area C or D CSU GE: 3, Area C2 or D IGETC: N/A CCC: 3, Humanities or Social/Behavioral Sciences
<b>Western Civilization II</b>	50	GCCCD: 3 CSU: 3 UC: N/A CCC: 3	GC: 3, Area C or D CSU GE: 3, Area D IGETC: N/A CCC: 3, Social/Behavioral Sciences

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.

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.

References: CSU Chancellor's Office Memo Code: ASA-2019-03; Systemwide Credit for External Examinations, January 28, 2019; Memorandum ESS 22-200-003, March 21st, 2022.



## International Baccalaureate (IB)

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 HL (any region)	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
Language A Literature HL <sup>1</sup> (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 <sup>2</sup>
Language A Language and Literature HL <sup>1</sup> (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 <sup>2</sup>
Language A1 Literature HL (any language)	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 A2 Language and Literature (any language)	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 B HL (any language)	GCCCD: 4 CSU: 4 UC: 5	GCCCD: 6 CSU: 6 UC: 5.3	CC: N/A CSU GE: N/A IGETC: 3, Area 6A
IB Mathematics HL: Analysis and Approaches	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

IB Mathematics HL: Applications and Interpretation	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 - no lab CSU GE: 3, 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

<sup>1</sup> 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.

<sup>2</sup> Score must be 5. All Languages including English receive IGETC 3B credit. All languages except English receive IGETC 6A credit.

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.

References: CSU Chancellor's Office Memo Code: ASA-2019-03; Systemwide Credit for External Examinations, January 28, 2019; Memorandum ESS 22-200-003, March 21st, 2022.

## 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](http://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-142	ARTH 140
ART-143	ARTH 150
ART-146	ARTH 130
ART-148	ARTS 280
ART-230	ARTS 200
BIO-140	BIOL 110B
BIO-141, BIO-141L	BIOL 120B
BIO-230	BIOL 190
BIO-230, BIO-240	BIOL 135S
BIO-240	BIOL 140
BUS-110	BUS 110
BUS-120	ACCT 110
BUS-121	ACCT 120
BUS-125	BUS 120, BUS 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, CHEM-142	CHEM 120S
CHEM-231	CHEM 150
CHEM-231, CHEM-232	CHEM 160S
CIS-110	BUS 140, ITIS 120
CIS-125	ITIS 150
CIS-202	ITIS 151
CIS-263	ITIS 160
COMM-110	JOUR 100
COMM-120	COMM 130
COMM-122	COMM 110
COMM-124	COMM 150
COMM-137	COMM 140
COMM-145	COMM 120
CS-119, CS-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
ESL-122	ENGL 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	PHYC-130, PHYC-131	PHYS 100S
HED-203	PHS 103	PHYC-131	PHYS 110
HIST-100	HIST 150	PHYC-201	PHYS 205
HIST-101	HIST 160	PHYC-201, PHYC-202, PHYC-203	PHYS 200S
HIST-105	HIST 170	PHYC-202	PHYS 210
HIST-106	HIST 180	PHYC-203	PHYS 215
HIST-108	HIST 130	POSC-120	POLS 150
HIST-109	HIST 140	POSC-121	POLS 110
MATH-125	MATH 120	POSC-124	POLS 130
MATH-160	MATH 110	POSC-130	POLS 140
MATH-175	MATH 151	POSC-150	POLS 120
MATH-178	MATH 140	POSC-165	POLS-170
MATH-180	MATH 210	POSC-170	POLS 160
MATH-180, MATH-280	MATH 900S	PSY-120	PSY 110
MATH-245	MATH 160	PSY-134	PSY 130
MATH-280	MATH 220	PSY-138	PSY 170
MATH-281	MATH 230	PSY-140	PSY 150
MATH-285	MATH 240	PSY-150	PSY 180
MATH-284	MATH 250	PSY-170	PSY 120
MATH-284, MATH-285	MATH 910S	PSY-205	PSY 200
MUS-001	MUS 110	PSY-215	SOCI 125
MUS-105	MUS 120	SOC-114	SOCI 150
MUS-105	MUS 125	SOC-120	SOCI 110
MUS-106	MUS 130	SOC-125	SOCI 130
MUS-106	MUS 135	SOC-130	SOCI 115
MUS-110	MUS 100	SOC-138	PSY 170
MUS-152	MUS 180	SOC-140	SOCI 140
MUS-153	MUS 180	SPAN-120	SPAN 100
MUS-156	MUS 180	SPAN-121	SPAN 110
MUS-157	MUS 180	SPAN-220	SPAN 200
MUS-158	MUS 180	SPAN-221	SPAN 210
MUS-159	MUS 180	THTR-110	THTR 111
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		

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- Civil Engineering Associate in Science (p. 187)
- Communication Associate in Arts (p. 177)
- Communication Studies 2.0 for Transfer (AA-T) (p. 176)
- Communication Studies for Transfer (AA-T) (p. 175)
- Computer Programming Certificate of Specialization (p. 154)
- Computer Science for Transfer (AS-T) (p. 155)
- Computer Support Technician Certificate of Specialization (p. 154)
- Craft Industries Entrepreneurship Certificate of Specialization (p. 105)
- Cyber Security Specialist Certificate of Specialization (p. 154)

### D

- Digital Photography Certificate of Specialization (p. 200)

### E

- Early Childhood Education for Transfer (AS-T) (p. 86)
- Early Childhood Intervention Certificate of Specialization (p. 90)
- Economics for Transfer (AA-T) (p. 111)
- Electrical and Computer Engineering Associate in Science (p. 187)
- Elementary Education Associate in Arts (p. 91)
- Elementary Teacher Education for Transfer (AA-T) (p. 90)

- English Associate in Arts and Certificate of Achievement (p. 178)
- English for Transfer (AA-T) (p. 177)
- Entrepreneurship-Small Business Management Associate in Science and Certificate of Achievement (p. 104)
- Environmental Health and Safety Management (p. 156)
- Environmental Management Associate in Science (p. 157)
- Environmental Science for Transfer (AS-T) (p. 189)
- Environmental Technician Certificate of Achievement (p. 158)
- Ethnic Studies Associate in Arts (p. 93)
- Ethnic Studies Associate in Arts (p. 120)
- Executive Assistant Associate in Science and Certificate of Achievement (p. 107)
- Exercise Science Associate in Science (p. 170)

## F

- Floral Design Associate in Science and Certificate of Achievement (p. 161)
- Front Office Receptionist Certificate of Specialization (p. 108)

## G

- General Studies: Business and Technology (p. 111)
- General Studies: Communication and Language Arts (p. 179)
- General Studies: Humanities and Fine Arts (p. 120)
- General Studies: Lifelong Health, Well-Being and Self-Development (p. 168)
- General Studies: Science and Mathematics (p. 190)
- General Studies: Social and Behavioral Sciences (p. 94)
- Golf Course and Sports Turf Management Associate in Science and Certificate of Achievement (p. 162)
- Graphic Design Associate in Arts and Certificate of Achievement (p. 199)

## H

- History Associate in Arts (p. 123)
- History for Transfer (AA-T) (p. 122)

## I

- Infants and Toddlers Associate in Science and Certificate of Achievement (p. 87)
- Intersegmental General Education Transfer Curriculum (CSU or UC) (p. 204)
- Irrigation Technology Associate in Science and Certificate of Achievement (p. 162)

## K

- Kinesiology for Transfer (AA-T) (p. 169)
- Kumeyaay Studies Associate in Arts (p. 124)
- Kumeyaay Studies Certificate of Achievement (p. 125)

## L

- Laboratory Occupational Safety and Health Technician Certificate of Achievement (p. 158)
- Landscape Architecture Associate in Science and Certificate of Achievement (p. 163)

- Landscape Technology Associate in Science and Certificate of Achievement (p. 164)

## M

- Management Associate in Science and Certificate of Achievement (p. 113)
- Marine Biology Associate in Science (p. 185)
- Mathematics Associate in Science and Certificate of Achievement (p. 192)
- Mathematics for Transfer (AS-T) (p. 191)
- Mechanical and Aerospace Engineering Associate in Science (p. 188)
- Mechatronics Certificate of Achievement (p. 156)
- Music Education Associate in Arts (p. 201)
- Music for Transfer (AA-T) (p. 201)
- Music Industry Studies Associate in Arts (p. 202)

## N

- Networking, Security and System Administration - Enterprise Networking Associate in Science and Certificate of Achievement (p. 149)
- Networking, Security and System Administration - Enterprise System Administration Associate in Science and Certificate of Achievement (p. 151)
- Nursery Technology Associate in Science and Certificate of Achievement (p. 165)

## O

- Occupational Safety and Health (OSH) Management Associate in Science (p. 159)
- Occupational Safety and Health (OSH) Technician Certificate of Achievement (p. 159)
- Office Assistant Level I Certificate of Specialization (p. 109)
- Office Assistant Level II Certificate of Specialization (p. 109)
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## P

- Paralegal Studies Associate in Science (p. 113)
- Philosophy for Transfer (AA-T) (p. 125)
- Physics Associate in Science (p. 193)
- Physics for Transfer (AS-T) (p. 193)
- Political Science for Transfer (AA-T) (p. 95)
- Preschool Children Associate in Science and Certificate of Achievement (p. 88)
- Psychology for Transfer (AA-T) (p. 96)
- Public Health Science for Transfer (AS-T) (p. 172)

## R

- Real Estate Associate in Science and Certificate of Achievement (p. 117)



- Recreational Leadership–School-Based Programs Certificate of Specialization (p. 171)

## S

- Social Work Associate in Arts (p. 97)
- Sociology for Transfer (AA-T) (p. 98)
- Spanish Associate in Arts and Certificate of Achievement (p. 181)
- Spanish for Transfer (AA-T) (p. 180)
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## U

- University Studies: Business and Economics (p. 118)
- University Studies: Communication and Language Arts (p. 181)
- University Studies: Humanities and Fine Arts (p. 126)
- University Studies: Science and Mathematics (p. 194)
- University Studies: Social and Behavioral Sciences (p. 98)

## W

- Wastewater Collection Systems Associate in Science and Certificate of Achievement (p. 142)
- Wastewater Collection Systems, Stackable Certificates of Specialization (p. 146)
- Wastewater Treatment Operations Associate in Science and Certificate of Achievement (p. 142)
- Wastewater Treatment Operations, Stackable Certificates of Specialization (p. 147)
- Water Distribution Operations Associate in Science and Certificate of Achievement (p. 143)
- Water Distribution Operations, Stackable Certificates of Specialization (p. 148)
- Water Resources Management Associate in Science and Certificate of Achievement (p. 144)
- Water Treatment Plant Operations Associate in Science and Certificate of Achievement (p. 145)
- Water Treatment Plant Operations, Stackable Certificates of Specialization (p. 148)
- Web Design Certificate of Specialization (p. 155)
- Web Development Associate in Science and Certificate of Achievement (p. 152)
- Web Graphics Certificate of Specialization (p. 200)
- Web Programming Certificate of Specialization (p. 155)

## Behavioral & Social Sciences



- Anthropology for Transfer (AA-T) (p. 85)
- Child Development (p. 85)
- Elementary Education (p. 90)
- Ethnic Studies Associate in Arts (p. 93)
- General Studies: Social and Behavioral Sciences (p. 94)
- Political Science for Transfer (AA-T) (p. 95)
- Psychology (p. 96)
- Social Work Associate in Arts (p. 97)
- Sociology for Transfer (AA-T) (p. 98)
- University Studies: Social and Behavioral Sciences (p. 98)



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

## 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. Completion of 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. A grade of "C" or higher or "Pass" 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

Code	Title	Units
<b>Required Core</b>		
ANTH-120	Cultural Anthropology	3
ANTH-130	Introduction to Biological Anthropology	3
ANTH-140	Introduction to Archaeology	3
<b>List A</b>		
Select one of the following:		4
MATH-160	Elementary Statistics	
PSY-215	Statistics for the Behavioral Sciences	
<b>List B</b>		
Select one or two of the following:		4
BIO-140	Human Anatomy	
PSY-205	Research Methods in Psychology	
GEOL-110 & GEOL-111	Planet Earth and Planet Earth Laboratory <sup>1</sup>	
GEOL-104 & GEOG-121	Earth Science and Physical Geography: Earth Systems Laboratory <sup>2</sup>	
<b>List C</b>		
Select one of the following:		
MUS-116 or RELG-120	Introduction to World Music World Religions	3
<b>Units in the Major</b>		<b>20</b>
Double-Counted Units		19
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Electives		20/22
<b>Total Units</b>		<b>60</b>

<sup>1</sup> Must be taken if GEOL-110 Planet Earth is selected.

<sup>2</sup> Must be taken if GEOL-104 Earth Science is selected.

## Child Development



- Child and Adolescent Development for Transfer (AA-T) (p. 86)
- Early Childhood Education for Transfer (AS-T) (p. 86)
- Infants and Toddlers Associate in Science and Certificate of Achievement (p. 87)
- Preschool Children Associate in Science and Certificate of Achievement (p. 88)
- Administration Certificate of Specialization (p. 89)
- Early Childhood Intervention Certificate of Specialization (p. 90)



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

### 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.

1. 60 semester or 90 quarter CSU-transferable units
2. The California State University-General Education-Breadth pattern (CSU GE-Breadth); **or** the Intersegmental General Education Transfer Curriculum (IGETC) pattern.
3. A minimum of 18 semester or 27 quarter units in the major or area of emphasis as determined by the community college district
4. A minimum grade point average (GPA) of 2.0.
5. A grade of "C" or higher or "Pass" 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:

- 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

Code	Title	Units
<b>Required Core</b>		
CD-125	Child Growth and Development	3
PSY-120	Introductory Psychology	3
MATH-160	Elementary Statistics	4
<b>List A</b>		
Select nine units from the following:		9
CD-131	Child, Family and Community	
BIO-130	General Biology I	
CD-130	Curriculum: Design and Implementation	
CD-213	Observation and Assessment	

<b>Units in the Major</b>	<b>19</b>
Double-Counted Units	12-18
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)	39/37
Electives	14-20
<b>Total Units</b>	<b>60</b>



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

### 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 higher or "Pass" 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

Code	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
<b>Units in the Major</b>		<b>24</b>
Double-Counted Units		6
Plus General Education Requirements (CSU GE or IGETC-CSU (p. 55))		37-39
Total Transferable Elective Units		3-5
<b>Total Units</b>		<b>60</b>

## Infants and Toddlers Associate in Science and Certificate of Achievement



### 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 Child Growth and Development, CD-131 Child, Family and Community, one curriculum class (CD-123 Principles and Practices of Programs and Curriculum for Young Children, CD-126 Art for Child Development, CD-127 Science and Mathematics for Child Development CD-128 Music and Movement for Child Development, CD-129 Language and Literature for Child

Development or CD-130 Curriculum: Design and Implementation), 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 Child Growth and Development, CD-131 Child, Family and Community, one curriculum class (CD-123 Principles and Practices of Programs and Curriculum for Young Children, CD-126 Art for Child Development, CD-127 Science and Mathematics for Child Development, CD-128 Music and Movement for Child Development, CD-129 Language and Literature for Child Development or CD-130 Curriculum: Design and Implementation), 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 Principles and Practices of Programs and Curriculum for Young Children, CD-125 Child Growth and Development, CD-130 Curriculum: Design and Implementation, CD-131 Child, Family and Community, CD-134 Health, Safety and Nutrition of Young Children, CD-153 Teaching in a Diverse Society, CD-212 Practicum in Early Childhood Education and CD-213 Observation and Assessment, 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<sup>1</sup>
- Camping Guide
- Child Care Specialist
- Child Psychologist<sup>1</sup>
- Curriculum Development
- Development Specialist (Child, Adolescent and Family)<sup>1</sup>
- Early Intervention Aide<sup>1</sup>
- Educational Consultant<sup>1</sup>
- Infant/Toddler Teacher

Outdoor Education Specialist  
 Preschool Director  
 Preschool Teacher  
 Recreation Leader  
 Recreation Specialist<sup>1</sup>  
 School Age Child Care Teacher  
 Social Service Specialist<sup>1</sup>  
 Special Education Assistant – Children with Special Needs

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
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 or CD-210	Working with Children with Special Needs Working with Young Children with Challenging Behaviors	3
CD-153	Teaching in a Diverse Society	3
<b>Total Units</b>		<b>31</b>

## Area of Emphasis: Infants and Toddlers

Code	Title	Units
<b>Core Curriculum</b>		
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
<b>Total Units</b>		<b>42</b>

Plus General Education Requirements (p. 55)

## 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.

# Preschool Children Associate in Science and Certificate of Achievement



## 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 Child Growth and Development, CD-131 Child, Family and Community, one curriculum class (CD-123 Principles and Practices of Programs and Curriculum for Young Children, CD-126 Art for Child Development, CD-127 Science and Mathematics for Child Development CD-128 Music and Movement for Child Development, CD-129 Language and Literature for Child Development or CD-130 Curriculum: Design and Implementation), 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 Child Growth and Development, CD-131 Child, Family and Community, one curriculum class (CD-123 Principles and Practices of Programs and Curriculum for Young Children, CD-126 Art for Child Development, CD-127 Science and Mathematics for Child Development, CD-128 Music and Movement for Child Development, CD-129 Language and Literature for Child Development or CD-130 Curriculum: Design and Implementation), 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 Principles and Practices of Programs and Curriculum for Young Children, CD-125 Child Growth and Development, CD-130 Curriculum: Design and Implementation, CD-131 Child, Family and Community, CD-134 Health, Safety and Nutrition of Young Children, CD-153 Teaching in a Diverse Society, CD-212 Practicum in Early Childhood Education and CD-213 Observation and Assessment, 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<sup>1</sup>  
 Camping Guide  
 Child Care Specialist  
 Child Psychologist<sup>1</sup>  
 Curriculum Development  
 Development Specialist (Child, Adolescent and Family)<sup>1</sup>  
 Early Intervention Aide<sup>1</sup>  
 Educational Consultant<sup>1</sup>  
 Infant/Toddler Teacher  
 Outdoor Education Specialist  
 Preschool Director  
 Preschool Teacher  
 Recreation Leader  
 Recreation Specialist<sup>1</sup>  
 School Age Child Care Teacher  
 Social Service Specialist<sup>1</sup>  
 Special Education Assistant – Children with Special Needs

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
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 or CD-210	Working with Children with Special Needs Working with Young Children with Challenging Behaviors	3
CD-153	Teaching in a Diverse Society	3
<b>Total Units</b>		<b>31</b>

## Area of Emphasis: Preschool Children

Code	Title	Units
Core Curriculum		31
CD-130	Curriculum: Design and Implementation	3
CD-132	Observation and Assessment: Field Experience Seminar	3
CD-133	Practicum-Field Experience: Student Teaching	2
<b>Total Units</b>		<b>39</b>

Plus General Education Requirements (p. 55)

## 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.

## Administration Certificate of Specialization



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 Infant and Toddler Development or CD-143 Responsive Planning for Infant/Toddler Care).

### Certificate Requirements

Code	Title	Units
CD-125	Child Growth and Development	3
CD-131	Child, Family and Community	3
Select one of the following:		3
CD-126	Art for Child Development	
CD-127	Science and Mathematics for Child Development	
CD-128	Music and Movement for Child Development	
CD-129	Language and Literature for Child Development	
Select one of the following:		3
CD-124	Infant and Toddler Development	
CD-136	Adult Supervision	
CD-143	Responsive Planning for Infant/Toddler Care	
Select one of the following:		3
CD-137	Administration of Child Development Programs I	
CD-138	Administration of Child Development Programs II	
<b>Total Units</b>		<b>15</b>

## Early Childhood Intervention Certificate of Specialization



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

Code	Title	Units
CD-125	Child Growth and Development <sup>1</sup>	3
CD-134	Health, Safety and Nutrition of Young Children	3
CD-141	Working with Children with Special Needs	3
Select two of the following:		6
CD-126	Art for Child Development <sup>1</sup>	
CD-127	Science and Mathematics for Child Development <sup>1</sup>	
CD-128	Music and Movement for Child Development <sup>1</sup>	
CD-129	Language and Literature for Child Development <sup>1</sup>	
CD-131	Child, Family and Community <sup>1</sup>	
CD-145	Child Abuse and Family Violence in Our Society	
CD-210	Working with Young Children with Challenging Behaviors	
<b>Total Units</b>		<b>15</b>

<sup>1</sup> 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



- Elementary Teacher Education for Transfer (AA-T) (p. 90)
- Elementary Education Associate in Arts (p. 91)



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

## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
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

### List A

ENGL-124	Advanced Composition: Critical Reasoning and Writing	3
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### List B

Select one of the following: 3

ART-100	Art Appreciation	
MUS-110	Great Music Listening	
THTR-110	Introduction to the Theatre	

### List C

Select eight units from the following: 8

Any course in List B not selected		
ARBC-121	Arabic II	
ART-140	Survey of Western Art I: Prehistory through Middle Ages	
ART-141	Survey of Western ART II: Renaissance through Modern	
ASL-121	American Sign Language II	
COMM-120	Interpersonal Communication	
ES-253	Physical Education in Elementary Schools	
HED-105	Health Education for Teachers	
MATH-126	Structure and Concepts of Elementary Mathematics II	
MUS-118	Introduction to Music	
PHIL-125	Critical Thinking	
PHIL-130	Logic	
PHIL-140	Problems in Ethics	
RELG-120	World Religions	
RELG-130	Scriptures of World Religions	
SPAN-121	Spanish II	

**Units in the Major 60**

Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55) <sup>1</sup> 37-39

Total Transferable Elective Units 0

**Total Units 60**

<sup>1</sup> General education requirements all met in the major.

Please note: SDSU accepts this degree for students transferring into Liberal Studies Generalist Education.

## Elementary Education Associate in Arts



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<sup>1</sup>
- Audiovisual Specialist
- School Clerical Worker
- Counselor<sup>1</sup>
- Educational Consultant<sup>1</sup>
- Educational Psychologist<sup>1</sup>
- Educational Therapist<sup>1</sup>
- Educational Writer<sup>1</sup>
- Food Service
- Guidance Worker<sup>1</sup>
- Librarian<sup>1</sup>
- Library Technician
- Social Psychologist<sup>1</sup>
- Speech Pathologist/Audiologist<sup>1</sup>
- Teacher<sup>1</sup>
- Teacher's Aide
- Tutor

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	Title	Units
<b>Composition, Oral Communication, and Literature</b>		
1. Composition (minimum six units):		
ENGL-120	College Composition and Reading	3
Select one of the following: 3		
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
ENGL-124	Advanced Composition: Critical Reasoning and Writing (Preferred)	
PHIL-125	Critical Thinking	
PHIL-130	Logic	
2. Communication (minimum three units):		

Select one of the following: 3

COMM-120	Interpersonal Communication	
COMM-122	Public Speaking	

3. Literature (minimum three units):

Select one of the following: 3

ENGL-122	Introduction to Literature	
ENGL-270	World Literature I	
ENGL-271	World Literature II	

### Mathematics and Sciences

4. Mathematics:

MATH-125	Structure and Concepts of Elementary Mathematics I	3
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MATH-126	Structure and Concepts of Elementary Mathematics II	3
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5. Biological Sciences:

BIO-130	General Biology I	3
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BIO-131	General Biology I Laboratory	1
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6. Physical Sciences:

GEOL-104	Earth Science	3
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GEOG-121	Physical Geography: Earth Systems Laboratory	1
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or GEOL-105	Physical Geology: Earth Systems Laboratory	
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### Social Science and History

7. Global Perspective:

GEOG-106	World Regional Geography	3
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8. American Institutions (minimum three units, choose one course from each category):

Category A. Select one of the following: 3

HIST-108	Early American History	
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HIST-118	U.S. History: Chicano/Chicana Perspectives I	
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HIST-130	U.S. History and Cultures: Native American Perspectives I	
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HIST-180	U.S. History: Black Perspectives I	
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Category B. Select one of the following: 3

HIST-109	Modern American History	
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HIST-119	U.S. History: Chicano/Chicana Perspectives II	
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HIST-131	U.S. History and Cultures: Native American Perspectives II	
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HIST-181	U.S. History: Black Perspectives II	
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POSC-121	Introduction to U.S. Government and Politics	
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9. Civilizations:

HIST-100	Early World History	3
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### Visual and Performing Arts/Humanities

10. Music:

MUS-118	Introduction to Music	4
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11. Art/Humanities:

ART-100	Art Appreciation	3
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12. Human Growth and Development:

Select one option: 3-6

Option I:

CD-125	Child Growth and Development	
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## Option II:

PSY-120 & PSY-150	Introductory Psychology and Developmental Psychology
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## 13. General Education/Humanities:

Select one option: 3-5

## Option I:

## Select one of the following:

ARBC-121	Arabic II
ASL-121	American Sign Language II
SPAN-121	Spanish II

## Option II:

Select one of the following: (Choose this option only if 3 years of foreign language have been taken in high school)

PHIL-140	Problems in Ethics
RELG-120	World Religions
RELG-130	Scriptures of World Religions

## Option III:

Select one of the following: (Choose this option only if 3 years of foreign language have been taken in high school)

ARBC-220	Arabic III
ASL-220	American Sign Language III
SPAN-220	Spanish III

## 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 Units 60-66****Recommended Elective**

Code	Title	Units
PSC-100	Physical Science for Elementary Education (Offered at Grossmont College; required for major at SDSU)	3

**Ethnic Studies Associate in Arts**

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**

Code	Title	Units
<b>Core Curriculum</b>		
ETHN-107/HIST-107	History of Race & Ethnicity in the United States	3
ETHN-111/HUM-111	Culture, Art & Ideas of the United States	3
ETHN-114/SOC-114	Introduction to Race & Ethnicity	3
<b>List A</b>		
Select two of the following:		6
ETHN-118/ HIST-118	U.S. History: Chicano/Chicana Perspectives I	
ETHN-119/ HIST-119	U.S. History: Chicano/Chicana Perspectives II	
ETHN-130/ HIST-130	U.S. History and Cultures: Native American Perspectives I	
ETHN-131/ HIST-131	U.S. History and Cultures: Native American Perspectives II	
ETHN-180/ HIST-180	U.S. History: Black Perspectives I	
ETHN-181/ HIST-181	U.S. History: Black Perspectives II	
KUMEY-128/ HIST-128	Kumeyaay History I: Precontact - 1845	
KUMEY-129/ HIST-129	Kumeyaay Hist II: 1846 - Present	
<b>List B</b>		
Select two of the following:		6
ETHN-151/ ART-151	Chicanx Art	
ETHN-236/ ENGL-236	Chicana/o Literature	
ETHN-238/ ENGL-238	Black Literature	
ETHN-165/ POSC-165	Introduction to the Politics of Race and Gender	
ETHN-150/ SOC-150	Latinx Sociology	
KUMEY-116/ HUM-116	Kumeyaay Arts and Culture I	



KUMEY-166/ Introduction to Native American Politics  
POSC-166 and Policy

**Total Units** 21

Plus General Education Requirements (p. 55)

## 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**  
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.

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.

### 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.
- Analyze the role 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

Code	Title	Units
ANTH-120	Cultural Anthropology	3
ANTH-140	Introduction to Archaeology	3
ANTH-150	Introduction to Cultural Resource Management	3
ARBC-145	Arabic Civilizations	3
BIO-134	Ethnobotany	3
CD-145	Child Abuse and Family Violence in Our Society	3
COUN-120	College and Career Success	3
COUN-140	Self Awareness and Interpersonal Relationships	3
ECON-110	Economic Issues and Policies	3
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-114	Introduction to Race & Ethnicity	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-150	Latinx Sociology	3
ETHN-165	Introduction to the Politics of Race and Gender	3
ETHN-180	U.S. History: Black Perspectives I	3
ETHN-181	U.S. History: Black Perspectives II	3
GEOG-106	World Regional Geography	3
GEOG-122	Regional Field Studies in Physical Geography and Geology of Desert Environments	1
GEOG-130	Human Geography: the Cultural Landscape	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
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-109	Modern American History	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-122	Women in Early American History	3
HIST-123	Women in Modern American History	3
HIST-124	History of California	3
HIST-128	Kumeyaay History I: Precontact - 1845	3
HIST-129	Kumeyaay History II: 1846 - Present	3

HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-148	The Modern Middle East	3
HIST-180	U.S. History: Black Perspectives I	3
HIST-181	U.S. History: Black Perspectives II	3
HIST-275	Historical Period	3
HIST-276	Geographical Area	3
HIST-277	Historical Theme	3
KUMEY-128	Kumeyaay History I: Precontact - 1845	3
KUMEY-129	Kumeyaay Hist II: 1846 - Present	3
KUMEY-150	Introduction to Cultural Resource Management	3
KUMEY-166	Introduction to Native American Politics and Policy	3
KUMEY-170	Kumeyaay Conflict Resolution	3
POSC-120	Introduction to Politics and Political Analysis	3
POSC-121	Introduction to U.S. Government and Politics	3
POSC-124	Introduction to Comparative Government and Politics	3
POSC-130	Introduction to International Relations	3
POSC-140	Introduction to California Governments and Politics	3
POSC-145	Introduction to Latin American Government and Politics	3
POSC-147	Introduction to Middle East Government and Politics	3
POSC-148	American Foreign Policy	3
POSC-150	Introduction to Political Theory	3
POSC-165	Introduction to the Politics of Race and Gender	3
POSC-166	Introduction to Native American Politics and Policy	3
POSC-170	Introduction to Political Science Research Methods	3
SOC-114	Introduction to Race & Ethnicity	3
SOC-120	Introductory Sociology	3
SOC-125	Marriage, Family and Alternative Lifestyles	3
SOC-130	Contemporary Social Problems	3
SOC-138	Social Psychology	3
SOC-140	Sex and Gender Across Cultures	3
SOC-150	Latinx Sociology	3
SPAN-145	Hispanic Civilizations	3
SW-170	Kumeyaay Conflict Resolution	3

## Behavioral Science

Code	Title	Units
CD-115	Changing American Family	3
CD-125	Child Growth and Development	3
CD-131	Child, Family and Community	3
COMM-110	Introduction to Mass Communication	3

COMM-124	Intercultural Communication	3
HED-120	Personal Health and Lifestyles	3
HED-201	Introduction to Public Health	3
HED-203	Substance Abuse and Public Health	3
HED-204	Health and Social Justice	3
HED-251	Healthy Lifestyles: Theory and Application	3
NUTR-158	Nutrition for Fitness and Sports	3
PSY-120	Introductory Psychology	3
PSY-125	Cross-Cultural Psychology	3
PSY-132	Psychology of Health	3
PSY-134	Human Sexuality	3
PSY-138	Social Psychology	3
PSY-140	Physiological Psychology	3
PSY-150	Developmental Psychology	3
PSY-170	Abnormal Psychology	3
PSY-201	Academic and Career Opportunities in Psychology	1
PSY-211	Cognitive Psychology	3
PSY-220	Learning	3



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

## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
POSC-121	Introduction to U.S. Government and Politics	3
<b>List A</b>		
Select three of the following:		9
POSC-120	Introduction to Politics and Political Analysis	
POSC-124	Introduction to Comparative Government and Politics	
POSC-130	Introduction to International Relations	
POSC-170	Introduction to Political Science Research Methods	
<b>List B</b>		
Select two of the following:		6-7
POSC-140	Introduction to California Governments and Politics	
MATH-160	Elementary Statistics	
or PSY-215	Statistics for the Behavioral Sciences	
Any course from List A not selected above		

<b>Units for the Major</b>	<b>18-19</b>
9 units may be double-counted with GE	
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)	39/37
Total Transferable Elective Units	11-12/13-14
<b>Total Units</b>	<b>60</b>

## Psychology



- Psychology for Transfer (AA-T) (p. 96)
- Behavioral Training Certificate of Achievement (p. 97)



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

### 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
PSY-120	Introductory Psychology	3
PSY-205	Research Methods in Psychology	4
PSY-215	Statistics for the Behavioral Sciences	4
or MATH-160	Elementary Statistics	

### List A

Select one of the following:		3
BIO-130	General Biology I	
PSY-140	Physiological Psychology	

### List B

Select one of the following:		3
PSY-138	Social Psychology	
PSY-150	Developmental Psychology	
PSY-211	Cognitive Psychology	
Any course not selected above		

### List C

Select one of the following:		3
PSY-125	Cross-Cultural Psychology	
PSY-134	Human Sexuality	
PSY-220	Learning	
Any course not selected above		

<b>Units in the Major</b>		<b>20</b>
12 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)	39/37	
Total Transferable Elective Units	13/15	
<b>Total Units</b>		<b>60</b>

## Behavioral Training Certificate of Achievement



Students who complete the required courses qualify for a Certificate in Behavioral Training. The objectives of the program are for students to be able to: apply the basic elements of behavioral psychology to modify existing behaviors; keep accurate records and input data to track behavioral changes; and explore jobs and careers using behavioral psychology and experience real life situations applying the coursework. 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:

- Demonstrate familiarity with the major concepts, theoretical perspectives, empirical findings, and historical trends in behavioral psychology.
- Understand and apply basic research methods in behavioral psychology, including data entry, behavioral assessment, behavior modification plan, data analysis, and future modification plans.
- Respect and use critical and creative thinking applied to the application of behavioral paradigms in multiple situations.

## Certificate Requirements

Code	Title	Units
PSY-120	Introductory Psychology	3
PSY-220	Learning	3
PSY-215	Statistics for the Behavioral Sciences	4
or MATH-160	Elementary Statistics	

## Certificate of Achievement

Students who complete the requirements above qualify for a Certificate in Behavioral Training. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

## Social Work Associate in Arts



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<sup>1</sup>
- Child Welfare<sup>1</sup>
- Clinical:
  - Counseling, Therapy<sup>1</sup>
- Community Organizations:
  - Advocacy, Politics, Education<sup>1</sup>
- Criminal Justice/Corrections<sup>1</sup>
- Developmental Disabilities<sup>1</sup>
- Gerontology<sup>1</sup>
- Health Care<sup>1</sup>
- Occupational:

- Counseling<sup>1</sup>
- Organizational Development<sup>1</sup>
- Teaching<sup>1</sup>
- Wellness Promotion<sup>1</sup>
- Human Resources<sup>1</sup>
- Public Welfare:
  - Social Work<sup>1</sup>
- Research<sup>1</sup>

<sup>1</sup> Bachelor degree or higher recommended.

## Associate in Arts Degree Requirements

Code	Title	Units
BIO-130	General Biology I	3
ECON-120	Principles of Macroeconomics	3
or ECON-121	Principles of Microeconomics	
HED-201	Introduction to Public Health	3
Select one of the following:		3-4
MATH-160	Elementary Statistics	
PSY-215	Statistics for the Behavioral Sciences	
BIO-215	Statistics for Life Sciences	
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
<b>Total Units</b>		<b>24-25</b>

Plus General Education Requirements (p. 55)



## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
MATH-160	Elementary Statistics	4
or PSY-215	Statistics for the Behavioral Sciences	
SOC-120	Introductory Sociology	3
SOC-130	Contemporary Social Problems	3
<b>List A</b>		
Select two of the following:		6
SOC-114	Introduction to Race & Ethnicity	
SOC-125	Marriage, Family and Alternative Lifestyles	
PSY-138/SOC-138	Social Psychology	
SOC-140	Sex and Gender Across Cultures	
<b>List B</b>		
Select one of the following:		3
ANTH-120	Cultural Anthropology	
PSY-120	Introductory Psychology	
Any course not already used in List A		
<b>Units in the Major</b>		<b>19</b>
12 units may be double counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		14/16
<b>Total Units</b>		<b>60</b>

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

Choose a minimum of 18 units. 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.

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.

## 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.
- Analyze the role 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

Code	Title	Units
ANTH-120	Cultural Anthropology	3
ANTH-140	Introduction to Archaeology	3
ANTH-150	Introduction to Cultural Resource Management	3
BIO-134	Ethnobotany	3
COUN-120	College and Career Success	3
COUN-140	Self Awareness and Interpersonal Relationships	3
ECON-110	Economic Issues and Policies	3
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3
ETHN-107	History of Race & Ethnicity in the United States	3
ETHN-114	Introduction to Race & Ethnicity	3
ETHN-118	U.S. History: Chicano/Chicana Perspectives I	3
ETHN-119	U.S. History: Chicano/Chicana Perspectives II	3
ETHN-130	U.S. History and Cultures: Native American Perspectives I	3
ETHN-131	U.S. History and Cultures: Native American Perspectives II	3
ETHN-150	Latinx Sociology	3
ETHN-165	Introduction to the Politics of Race and Gender	3

ETHN-180	U.S. History: Black Perspectives I	3
ETHN-181	U.S. History: Black Perspectives II	3
GEOG-106	World Regional Geography	3
GEOG-130	Human Geography: the Cultural Landscape	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
HIST-107	History of Race & Ethnicity in the United States	3
HIST-108	Early American History	3
HIST-109	Modern American History	3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	3
HIST-119	U.S. History: Chicano/Chicana Perspectives II	3
HIST-122	Women in Early American History	3
HIST-123	Women in Modern American History	3
HIST-124	History of California	3
HIST-128	Kumeyaay History I: Precontact - 1845	3
HIST-129	Kumeyaay History II: 1846 - Present	3
HIST-130	U.S. History and Cultures: Native American Perspectives I	3
HIST-131	U.S. History and Cultures: Native American Perspectives II	3
HIST-148	The Modern Middle East	3
HIST-180	U.S. History: Black Perspectives I	3
HIST-181	U.S. History: Black Perspectives II	3
HIST-275	Historical Period	3
HIST-276	Geographical Area	3
HIST-277	Historical Theme	3
KUMEY-128	Kumeyaay History I: Precontact - 1845	3
KUMEY-129	Kumeyaay Hist II: 1846 - Present	3
KUMEY-150	Introduction to Cultural Resource Management	3
KUMEY-166	Introduction to Native American Politics and Policy	3
KUMEY-170	Kumeyaay Conflict Resolution <sup>1</sup>	3
POSC-120	Introduction to Politics and Political Analysis	3
POSC-121	Introduction to U.S. Government and Politics	3
POSC-124	Introduction to Comparative Government and Politics	3
POSC-130	Introduction to International Relations	3
POSC-140	Introduction to California Governments and Politics	3
POSC-145	Introduction to Latin American Government and Politics <sup>1</sup>	3
POSC-147	Introduction to Middle East Government and Politics <sup>1</sup>	3
POSC-148	American Foreign Policy <sup>1</sup>	3
POSC-150	Introduction to Political Theory <sup>1</sup>	3

POSC-165	Introduction to the Politics of Race and Gender	3
POSC-166	Introduction to Native American Politics and Policy	3
POSC-170	Introduction to Political Science Research Methods	3
SOC-114	Introduction to Race & Ethnicity	3
SOC-120	Introductory Sociology	3
SOC-125	Marriage, Family and Alternative Lifestyles	3
SOC-130	Contemporary Social Problems	3
SOC-138	Social Psychology	3
SOC-150	Latinx Sociology	3
SOC-140	Sex and Gender Across Cultures	3
SPAN-145	Hispanic Civilizations	3
SW-170	Kumeyaay Conflict Resolution <sup>1</sup>	3

<sup>1</sup> Course not UC-transferable.

## Behavioral Science

Code	Title	Units
CD-115	Changing American Family	3
CD-125	Child Growth and Development	3
CD-131	Child, Family and Community	3
CD-145	Child Abuse and Family Violence in Our Society	3
COMM-110	Introduction to Mass Communication	3
COMM-124	Intercultural Communication	3
HED-120	Personal Health and Lifestyles	3
HED-201	Introduction to Public Health	3
HED-203	Substance Abuse and Public Health	3
HED-204	Health and Social Justice	3
HED-251	Healthy Lifestyles: Theory and Application <sup>1</sup>	3
PSY-120	Introductory Psychology	3
PSY-125	Cross-Cultural Psychology	3
PSY-132	Psychology of Health	3
PSY-134	Human Sexuality	3
PSY-138	Social Psychology	3
PSY-140	Physiological Psychology	3
PSY-150	Developmental Psychology	3
PSY-170	Abnormal Psychology	3
PSY-201	Academic and Career Opportunities in Psychology <sup>1</sup>	1
PSY-211	Cognitive Psychology	3
PSY-220	Learning	3

<sup>1</sup> Course not UC-transferable.

## Business and Professional Studies



- Accounting (p. 101)
- Business (p. 102)
- Business Office Technology (p. 105)
- Economics for Transfer (AA-T) (p. 111)
- General Studies: Business and Technology (p. 111)
- Management Associate in Science and Certificate of Achievement (p. 113)
- Paralegal Studies Associate in Science (p. 113)
- Real Estate (p. 117)
- University Studies: Business and Economics (p. 118)

## Accounting



- Accounting Associate in Science and Certificate of Achievement (p. 101)
- Bookkeeping Certificate of Achievement (p. 101)

## Accounting Associate in Science and Certificate of Achievement



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<sup>1</sup>
- Budgeter<sup>1</sup>

- Bank Examiner<sup>1</sup>
- Bookkeeper
- Cost Accountant<sup>1</sup>
- Certified Accountant<sup>1</sup>
- Controller<sup>1</sup>
- Credit Card Clerk
- Securities Clerk
- Systems Analyst<sup>1</sup>
- Tax Specialist/Accountant<sup>1</sup>
- Treasurer<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Accounting Associate in Science Degree Requirements

Code	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
<b>Total Units</b>		<b>33</b>

Plus General Education Requirements (p. 55)

## 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 of Achievement



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

Code	Title	Units
BOT-123	Comprehensive Excel, Level I	1
BOT-124	Comprehensive Excel, Level II	1
BOT-125	Comprehensive Excel, Level III	1
BOT-174	Computer Concepts and Applications	3
BUS-109	Elementary Accounting	3-4
or BUS-120	Financial Accounting	
BUS-128	Business Communication	3
or BUS-125	Business Law: Legal Environment of Business	
BUS-129	Payroll Accounting and Business Taxes	2
BUS-176	Computerized Accounting Applications	2
<b>Total Units</b>		<b>16-17</b>

Note: BUS-109 Elementary Accounting may be taken instead of BUS-120 Financial Accounting 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



- Business Administration 2.0 for Transfer (AS-T) (p. 102)
- Business Administration Associate in Science and Certificate of Achievement (p. 103)
- Business-General Associate in Science and Certificate of Achievement (p. 103)
- Entrepreneurship-Small Business Management Associate in Science and Certificate of Achievement (p. 104)
- Craft Industries Entrepreneurship Certificate of Specialization (p. 105)



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

### Business Administration 2.0 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 CSU-transferable semester 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 higher or "Pass" 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 Outcomes

Upon completion of this program, students will be able to:

- Recognize essential functions and concerns specific to human resources, management, and general business operations.
- Identify and analyze business problems or entrepreneurial opportunities and effectively communicate recommendations for courses of actions.

## Associate in Science Degree Requirements

Code	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
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3
MATH-160	Elementary Statistics	4

or PSY-215	Statistics for the Behavioral Sciences	
MATH-178	Calculus for Business, Social and Behavioral Sciences	4-5
or MATH-180	Analytic Geometry and Calculus I	
<b>Units for the Major</b>		<b>28-29</b>
9 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU (p. 55))		39/37
Total Transferable Elective Units		1-4
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into Business Administration (Financial Services) or Business Administration (General) majors.

## Business Administration Associate in Science and Certificate of Achievement



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<sup>1</sup>  
 Agricultural Marketing Specialist<sup>1</sup>  
 Banker<sup>1</sup>  
 Broker<sup>1</sup>  
 Consultant  
 Computer Operations Specialist<sup>1</sup>  
 Credit Investigator  
 Economic Forecaster<sup>1</sup>  
 Financial Analyst<sup>1</sup>  
 Hospital Administrator<sup>1</sup>  
 Import/Export Agent  
 Market Research Analyst<sup>1</sup>  
 Personnel Manager<sup>1</sup>  
 Real Estate Broker/Agent

Retail Manager  
 Securities Analyst/Trader<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	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
<b>Total Units</b>		<b>32</b>

Plus General Education Requirements (p. 55)

**Recommended Elective:** BUS-156 Principles of Management

### 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.

## Business-General Associate in Science and Certificate of Achievement



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<sup>1</sup>  
 Buyer  
 Conciliator  
 Credit Analyst<sup>1</sup>  
 Employment Interviewer  
 Hospital Administrator<sup>1</sup>  
 Sales Agent  
 Trust Officer<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	Title	Units
BUS-109 or BUS-120	Elementary Accounting Financial Accounting	3-4
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 or CIS-110	Computer Concepts and Applications Principles of Information Systems	3-4
ECON-110 or ECON-120	Economic Issues and Policies Principles of Macroeconomics	3
<b>Total Units</b>		<b>25-29</b>

Plus General Education Requirements (p. 55)

## 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.

## Entrepreneurship-Small Business Management Associate in Science and Certificate of Achievement



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  
 Intrapreneur (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

Code	Title	Units
BUS-109 or BUS-120	Elementary Accounting Financial Accounting	3-4
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
Select two of the following:		4-6
BUS-112	Craft Entrepreneur	
BUS-115	Human Relations in Business	
BUS-156	Principles of Management	
BUS-176	Computerized Accounting Applications	
Select at least three units from the following:		3
BOT-114	Essential Word	
BOT-115	Essential Excel	
BOT-116	Essential Access	
BOT-117	Essential Powerpoint	
BOT-132	Google Applications for Business	
BOT-174	Computer Concepts and Applications	
<b>Total Units</b>		<b>22-25</b>

Plus General Education Requirements (p. 55)

## 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.

## 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

Code	Title	Units
<b>Core Curriculum</b>		
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
Select at least four units from the following:		
BOT-107	Office Systems and Procedures	4

BOT-114	Essential Word
BOT-115	Essential Excel
BOT-117	Essential Powerpoint
BOT-132	Google Applications for Business
BOT-151	Using Microsoft Outlook
<b>Total Units</b>	<b>15</b>

## Business Office Technology



- Administrative Assistant Associate in Science and Certificate of Achievement (p. 105)
- Business Office Technology Associate in Science and Certificate of Achievement (p. 106)
- Executive Assistant Associate in Science and Certificate of Achievement (p. 107)
- Account Clerk Certificate of Specialization (p. 108)
- Business Information Worker Certificate of Achievement (p. 108)
- Front Office Receptionist Certificate of Specialization (p. 108)
- Office Assistant Level I Certificate of Specialization (p. 109)
- Office Assistant Level II Certificate of Specialization (p. 109)
- Office Professional Certificate of Specialization (p. 110)
- Office Software Specialist Level I Certificate of Specialization (p. 110)
- Office Software Specialist Level II Certificate of Specialization (p. 110)

## Administrative Assistant Associate in Science and Certificate of Achievement



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	3
BOT-104	Filing and Records Management	1
BOT-106	Effective Job Search	1
BOT-107	Office Systems and Procedures	2
BOT-118	Integrated Office Projects	1
BUS-128	Business Communication	3
Select one of the following options:		1-3
Option A:		
BOT-114	Essential Word	
Option B:		
BOT-120	Comprehensive Word, Level I	
BOT-121	Comprehensive Word, Level II	
BOT-122	Comprehensive Word, Level III	
Select one of the following options:		1-3
Option A:		
BOT-115	Essential Excel	
Option B:		
BOT-123	Comprehensive Excel, Level I	
BOT-124	Comprehensive Excel, Level II	
BOT-125	Comprehensive Excel, Level III	
Select one of the following options:		1-3
Option A:		
BOT-116	Essential Access	
Option B:		
BOT-126	Comprehensive Access, Level I	
BOT-127	Comprehensive Access, Level II	
BOT-128	Comprehensive Access, Level III	
Select one of the following options:		1-2
Option A:		
BOT-117	Essential Powerpoint	
Option B:		
BOT-129	Comprehensive PowerPoint, Level I	
BOT-130	Comprehensive PowerPoint, Level II	
Select one to three units of the following:		1-3
BOT-223	Office Work Experience	
BOT-224	Office Work Experience	
BOT-225	Office Work Experience	
Select at least five units from the following:		5-5.5
BOT-103A	Building Keyboarding Skill I	
BOT-103B	Building Keyboarding Skill II	
BOT-103C	Building Keyboarding Skill III	
BOT-132	Google Applications for Business	
BOT-133	Adobe Acrobat for the Workplace	
BOT-150	Using Microsoft Publisher	
BOT-151	Using Microsoft Outlook	
BUS-109	Elementary Accounting	

BUS-120 Financial Accounting

Total Units

22-31.5

Plus General Education Requirements (p. 55)

## 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.

## Business Office Technology Associate in Science and Certificate of Achievement



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	3
BOT-102A & BOT-102B	Intermediate Keyboarding/Document Processing I and Intermediate Keyboarding/Document Processing II	3
BOT-107	Office Systems and Procedures	2
BOT-120	Comprehensive Word, Level I	1
BOT-121	Comprehensive Word, Level II	1
BOT-122	Comprehensive Word, Level III	1
BOT-174	Computer Concepts and Applications	3
BUS-128	Business Communication	3
Select at least six units from the following		6
BOT-119	Windows for the Information Worker	
BOT-123	Comprehensive Excel, Level I	
BOT-124	Comprehensive Excel, Level II	
BOT-125	Comprehensive Excel, Level III	
BOT-223	Office Work Experience	
BOT-224	Office Work Experience	
BOT-225	Office Work Experience	
BUS-109 or BUS-120	Elementary Accounting Financial Accounting	
BUS-156	Principles of Management	
BUS-176	Computerized Accounting Applications	
<b>Total Units</b>		<b>24</b>

Plus General Education Requirements (p. 55)

## 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.

## Executive Assistant Associate in Science and Certificate of Achievement



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	3
BOT-102A & BOT-102B	Intermediate Keyboarding/Document Processing I and Intermediate Keyboarding/Document Processing II	3
BOT-120	Comprehensive Word, Level I	1
BOT-121	Comprehensive Word, Level II	1
BOT-122	Comprehensive Word, Level III	1
BOT-123	Comprehensive Excel, Level I	1
BOT-124	Comprehensive Excel, Level II	1
BOT-125	Comprehensive Excel, Level III	1
BOT-126	Comprehensive Access, Level I	1
BOT-127	Comprehensive Access, Level II	1
BOT-128	Comprehensive Access, Level III	1
BOT-129	Comprehensive PowerPoint, Level I	1
BOT-130	Comprehensive PowerPoint, Level II	1
BOT-151	Using Microsoft Outlook	1
BUS-128	Business Communication	3
Select at least three units from the following:		3-4
BOT-132	Google Applications for Business	
BUS-109	Elementary Accounting	
BUS-110	Introduction to Business	
BUS-115	Human Relations in Business	
BUS-120	Financial Accounting	
BUS-125	Business Law: Legal Environment of Business	
Select at least three units from the following:		3-3.5
BOT-103A	Building Keyboarding Skill I	
BOT-103B	Building Keyboarding Skill II	
BOT-103C	Building Keyboarding Skill III	
BOT-119	Windows for the Information Worker	
BOT-133	Adobe Acrobat for the Workplace	
BOT-150	Using Microsoft Publisher	
<b>Total Units</b>		<b>28-29.5</b>

Plus General Education Requirements (p. 55)

## 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.

## Account Clerk Certificate of Specialization



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

Code	Title	Units
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	3
BUS-109 or BUS-120	Elementary Accounting Financial Accounting	3-4
BUS-176	Computerized Accounting Applications	2
<b>Total Units</b>		<b>8-9</b>

### Certificate of Specialization

Students who complete the requirements above 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.

## Business Information Worker Certificate of Achievement



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

Code	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
<b>Total Units</b>		<b>16</b>

### 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.

## Front Office Receptionist Certificate of Specialization



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

Code	Title	Units
Select one of the following:		
BOT-100	Basic Keyboarding	1
BOT-103A & BOT-103B	Building Keyboarding Skill I and Building Keyboarding Skill II	
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
<b>Total Units</b>		<b>8</b>

## Certificate of Specialization

Students who complete the requirements above 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.

## Office Assistant Level I Certificate of Specialization



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	3
BOT-104	Filing and Records Management	1
BOT-119	Windows for the Information Worker	2

BOT-132	Google Applications for Business	3
<b>Total Units</b>		<b>10</b>

## Certificate of Specialization

Students who complete the requirements above 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.

## Office Assistant Level II Certificate of Specialization



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

Code	Title	Units
BOT-102A & BOT-102B	Intermediate Keyboarding/Document Processing I and Intermediate Keyboarding/Document Processing 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
<b>Total Units</b>		<b>9</b>

## Certificate of Specialization

Students who complete the requirements above 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.

# Office Professional Certificate of Specialization



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

Code	Title	Units
Select one of the following:		1-3
BOT-100	Basic Keyboarding	
BOT-101A & BOT-101B	Keyboarding/Document Processing I and Keyboarding/Document Processing II	
BOT-102A & BOT-102B	Intermediate Keyboarding/Document Processing I and Intermediate Keyboarding/Document Processing II	
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
<b>Total Units</b>		<b>9-11</b>

## Certificate of Specialization

Students who complete the requirements above 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.

## Office Software Specialist Level I Certificate of Specialization



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
Select one of the following:		1-2
BOT-114	Essential Word	
BOT-120 & BOT-121	Comprehensive Word, Level I and Comprehensive Word, Level II	
Select one of the following:		1-2
BOT-115	Essential Excel	
BOT-123 & BOT-124	Comprehensive Excel, Level I and Comprehensive Excel, Level II	
Select one of the following:		1-2
BOT-116	Essential Access	
BOT-126 & BOT-127	Comprehensive Access, Level I and Comprehensive Access, Level II	
Select one of the following:		1-2
BOT-117	Essential Powerpoint	
BOT-129 & BOT-130	Comprehensive PowerPoint, Level I and Comprehensive PowerPoint, Level II	
<b>Total Units</b>		<b>5-9</b>

## Certificate of Specialization

Students who complete the requirements above 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.

## Office Software Specialist Level II Certificate of Specialization



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

Code	Title	Units
BOT-100	Basic Keyboarding	1
BOT-118	Integrated Office Projects	1
BOT-120 or BOT-114	Comprehensive Word, Level I Essential Word	1
BOT-121	Comprehensive Word, Level II	1
BOT-122	Comprehensive Word, Level III	1
BOT-123 or BOT-115	Comprehensive Excel, Level I Essential Excel	1
BOT-124	Comprehensive Excel, Level II	1
BOT-125	Comprehensive Excel, Level III	1
BOT-126 or BOT-116	Comprehensive Access, Level I Essential Access	1
BOT-127	Comprehensive Access, Level II	1
BOT-129 or BOT-117	Comprehensive PowerPoint, Level I Essential PowerPoint	1
BOT-130	Comprehensive PowerPoint, Level II	1
<b>Total Units</b>		<b>12</b>

## Certificate of Specialization

Students who complete the requirements above 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.



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

## 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. A grade of "C" or higher or "Pass" 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

Code	Title	Units
<b>Required Core</b>		
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	4-5
or MATH-180	Analytic Geometry and Calculus I	
<b>List A</b>		
Select one of the following:		3-4
BUS-120	Financial Accounting	
BUS-121	Managerial Accounting	
BUS-128	Business Communication	
CIS-110	Principles of Information Systems	
<b>List B</b>		
Select 1-2 of the following:		3-4
Any List A course not used		
<b>Units in the Major</b>		<b>21-23</b>
9-12/9 Double-Counted Units		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Electives		7-12/9-11
<b>Total Units</b>		<b>60</b>

## 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**

Students must take a minimum of three units from each area. The remaining units may be taken from any area.

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.

## 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.

Code	Title	Units
<b>Business</b>		
BUS-109	Elementary Accounting	3
BUS-110	Introduction to Business	3
BUS-111	Entrepreneurship: Starting and Developing a Business	3
BUS-115	Human Relations in Business	3
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-129	Payroll Accounting and Business Taxes	2
BUS-150	Individual Income Tax Accounting	3
BUS-155	Human Resources Management	3

BUS-156	Principles of Management	3
BUS-161	Business Internship	1-3
BUS-162	Analysis of Financial Statements	3
BUS-176	Computerized Accounting Applications	2
BUS-195	Principles of Money Management for Success	3

### Computer and Information Science

CIS-110	Principles of Information Systems	4
CIS-120	Computer Maintenance and A+ Certification	3
CIS-121	Network Cabling Systems	3
CIS-125	Network+ Certification	3
CIS-140	Databases	3
CIS-162	Technical Diagramming Using Microsoft Visio	2
CIS-190	Windows Operating System	3
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-205	Implementing Cisco IP Routing (Route)	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
CIS-220	E-Commerce and Web Presence	3
CIS-225	Web Development Capstone	3
CIS-261	NSSA Degree Capstone	2
CIS-263	Fundamentals of Network Security	3
CIS-290	Windows Server-Installing and Configuring	2
CIS-291	Linux System Administration	3

### Economics

ECON-110	Economic Issues and Policies	3
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3

### Mathematics

MATH-121	Quantitative Reasoning for Career Education	3
MATH-160	Elementary Statistics	4
MATH-178	Calculus for Business, Social and Behavioral Sciences	4
MATH-180	Analytic Geometry and Calculus I	5

## Management Associate in Science and Certificate of Achievement



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<sup>1</sup>
- Claim Adjuster
- Computer Operations Supervisor<sup>2</sup>
- Director, Research and Development<sup>1</sup>
- Employment Interviewer
- Financial Planner
- Hospital Administrator<sup>1</sup>
- Import-Export Agent
- Management Trainee
- Management Consultant<sup>2</sup>
- Office Manager
- Stock Broker
- Teacher, College<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

<sup>2</sup> Bachelor Degree normally recommended.

### Associate in Science Degree Requirements

Code	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	
Select two of the following:		5-7
BOT-123	Comprehensive Excel, Level I	
BOT-124	Comprehensive Excel, Level II	
BOT-125	Comprehensive Excel, Level III	
BOT-174	Computer Concepts and Applications	
BUS-176	Computerized Accounting Applications	
CIS-110	Principles of Information Systems	
Select a minimum of three units of the following:		3-4
BUS-110	Introduction to Business	
BUS-121	Managerial Accounting	
BUS-161	Business Internship	
BUS-195	Principles of Money Management for Success	
COMM-122	Public Speaking	

**Total Units** **30-33**

Plus General Education Requirements (p. 55)

### 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 Associate in Science



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<sup>1</sup>  
 Forms and Procedures Specialist  
 Freelance Paralegal  
 Labor Relations Specialist<sup>2</sup>  
 Law Clerk  
 Legal Aide  
 Legal Assistant  
 Legal Research Assistant  
 Legal Technician  
 Occupational Safety and Health Worker  
 Paralegal<sup>1</sup>  
 Patent Agent  
 Title Examiner

<sup>1</sup> Bachelor Degree normally recommended.

<sup>2</sup> Bachelor Degree or higher required.

It is recommended that incoming students complete C grade or higher in ESL-2B Advanced Accelerated Composition for English as a Second Language or placement into ENGL-120 College Composition and Reading or equivalent prior to taking any Paralegal Studies classes.

## Associate in Science Degree Requirements

Code	Title	Units
BOT-120	Comprehensive Word, Level I	1
BOT-121	Comprehensive Word, Level II	1
Select one of the following:		1
BOT-122	Comprehensive Word, Level III	
BOT-151	Using Microsoft Outlook	
BOT-115	Essential Excel	
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
Select at least six units from the following:		6
PARA-120	Introduction to Administrative Law	
PARA-121	Social Security Disability Law	
PARA-125	Business Organizations	
PARA-140	Introduction to Criminal Law and Procedures	

PARA-145	Estate Planning
PARA-146	Probate and Administration of Estates
PARA-150	Family Law (Divorce, Separation, Nullity, and Paternity)
PARA-151	Family Law (Custody, Visitation, Support)
PARA-160	Personal Injury
PARA-170	Workers' Compensation
PARA-175	Electronic Discovery: Fundamentals and Procedure
PARA-176	Electronic Discovery: Advanced Practice
PARA-250	Internship <sup>1</sup>

**Total Units** **27**

Plus General Education Requirements as shown below

<sup>1</sup> Student must complete 18 units within the major to be eligible for this course.

**Recommended Elective:** BUS-128 Business Communication

## General Education Requirements for the Paralegal Studies Degree

Code	Title	Units
<b>Area A - Language and Rationality</b>		
Select a minimum of 6 semester units. One course from each category:		6
<b>1. Written Communication</b>		
ENGL-120	College Composition and Reading	
<b>2. Oral Communication and Analytical Thinking</b>		
COMM-120	Interpersonal Communication	
COMM-122	Public Speaking	
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
ENGR-100	Introduction to Engineering and Design	
MATH-110	Intermediate Algebra for Business, Math, Science and Engineering Majors	
MATH-120	Quantitative Reasoning	
MATH-125	Structure and Concepts of Elementary Mathematics I	
MATH-160	Elementary Statistics	
MATH-170	Analytic Trigonometry	
MATH-175	College Algebra	
MATH-176	PreCalculus: Functions and Graphs	
MATH-178	Calculus for Business, Social and Behavioral Sciences	
MATH-180	Analytic Geometry and Calculus I	
MATH-245	Discrete Mathematics	
MATH-280	Analytic Geometry and Calculus II	
MATH-281	Multivariable Calculus	
MATH-284	Linear Algebra	
PHIL-125	Critical Thinking	
PHIL-130	Logic	
PSY-215	Statistics for the Behavioral Sciences	

**Area B-Natural Sciences**

Select a minimum of 4 semester units, including one course that includes a laboratory. 4

ANTH-130	Introduction to Biological Anthropology
ASTR-110	Descriptive Astronomy
ASTR-112	General Astronomy Laboratory <sup>1</sup>
BIO-112	Contemporary Issues in Environmental Resources
BIO-115	Biology of Alcohol and Other Drugs
BIO-122	The Secret Life of Plants <sup>1</sup>
BIO-130	General Biology I
BIO-131	General Biology I Laboratory <sup>1</sup>
BIO-140	Human Anatomy <sup>1</sup>
BIO-152	Paramedical Microbiology <sup>1</sup>
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology <sup>1</sup>
BIO-240	Principles of Ecology, Evolution and Organismal Biology <sup>1</sup>
CHEM-102	Introduction to General, Organic and Biological Chemistry <sup>1</sup>
CHEM-115	Fundamentals of Chemistry <sup>1,2</sup>
CHEM-120	Preparation for General Chemistry <sup>1,2</sup>
CHEM-141	General Chemistry I <sup>1</sup>
GEOG-120	Physical Geography: Earth Systems
GEOG-121	Physical Geography: Earth Systems Laboratory <sup>1</sup>
GEOL-104	Earth Science
GEOL-110	Planet Earth
GEOL-111	Planet Earth Laboratory <sup>1</sup>
OCEA-112	Introduction to Oceanography
OCEA-113	Oceanography Laboratory <sup>1</sup>
PHYC-110	Introductory Physics <sup>1</sup>
PHYC-130	Fundamentals of Physics <sup>1</sup>
PHYC-131	Fundamentals of Physics <sup>1</sup>
PHYC-201	Mechanics and Waves <sup>1</sup>
PHYC-202	Electricity, Magnetism, and Heat <sup>1</sup>
PHYC-203	Light, Optics, and Modern Physics <sup>1</sup>

### Area C - Humanities

Minimum of 3 semester units.

Select one of the following: 3

ARAM-120	Aramaic I
ARAM-121	Aramaic II
ARAM-220	Aramaic III
ARBC-120	Arabic I
ARBC-121	Arabic II
ARBC-145	Arabic Civilizations
ARBC-220	Arabic III
ARBC-221	Arabic IV
ARBC-250	Conversational Arabic I
ARBC-251	Conversational Arabic II
ART-100	Art Appreciation
ART-120	Two-Dimensional Design
ART-124	Drawing I
ART-129	Three-Dimensional Design

ART-140	Survey of Western Art I: Prehistory through Middle Ages
ART-141	Survey of Western ART II: Renaissance through Modern
ART-143	Modern Art
ART-144	Architecture of the 20th and 21st Centuries
ART-145	Contemporary Art
ART-146	Asian Art
ART-148	Applied Design and Crafts
ASL-120	American Sign Language I
ASL-121	American Sign Language II
ASL-140	Inside Deaf Culture
ASL-220	American Sign Language III
ASL-221	American Sign Language IV
ENGL-122	Introduction to Literature
ENGL-201	Women, Gender, and Sexuality in Literature
ENGL-202	Introduction to Film as Literature
ENGL-214	Masterpieces of Drama
ENGL-217	Fantasy and Science Fiction
ENGL-221	British Literature I
ENGL-222	British Literature II
ENGL-231	American Literature I
ENGL-232	American Literature II
ENGL-270	World Literature I
ENGL-271	World Literature II
HIST-100	Early World History
HIST-101	Modern World History
HIST-105	Early Western Civilization
HIST-106	Modern Western Civilization
HUM-110	Principles of the Humanities
HUM-115	Arts and Culture in Local Context - San Diego
HUM-116	Kumeyaay Arts and Culture I
HUM-120	European Humanities
HUM-140	Humanities of the Americas
HUM-155	World Mythology through the Humanities
KUMEY-120	Kumeyaay Language I
KUMEY-121	Kumeyaay Language II
KUMEY-220	Kumeyaay Language III
MUS-110	Great Music Listening
MUS-111	History of Jazz
MUS-115	History of Rock Music
MUS-116	Introduction to World Music
MUS-117	Introduction to Music History and Literature
PHIL-110	A General Introduction to Philosophy
PHIL-115	History of Philosophy I: Ancient
PHIL-117	History of Philosophy II: Modern and Contemporary
PHIL-140	Problems in Ethics
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction
RELG-120	World Religions

RELG-130	Scriptures of World Religions
RELG-160	Introduction to the Hebrew Bible: The First Testament
RELG-170	Introduction to Christianity
SPAN-120	Spanish I
SPAN-121	Spanish II
SPAN-141	Spanish and Latin American Cultures
SPAN-145	Hispanic Civilizations
SPAN-220	Spanish III
SPAN-221	Spanish IV
SPAN-250	Conversational Spanish I
SPAN-251	Conversational Spanish II
THTR-110	Introduction to the Theatre

**Area D - Social and Behavioral Sciences**

Minimum of 3 semester units.

Select one of the following: 3

ANTH-120	Cultural Anthropology
CD-115	Changing American Family
CD-125	Child Growth and Development
CD-131	Child, Family and Community
CD-145	Child Abuse and Family Violence in Our Society
COMM-110	Introduction to Mass Communication
COMM-124	Intercultural Communication
ECON-110	Economic Issues and Policies
ECON-120	Principles of Macroeconomics
ECON-121	Principles of Microeconomics
GEOG-106	World Regional Geography
GEOG-130	Human Geography: the Cultural Landscape
HED-120	Personal Health and Lifestyles
HED-201	Introduction to Public Health
HIST-108	Early American History
HIST-109	Modern American History
HIST-118	U.S. History: Chicano/Chicana Perspectives I
HIST-119	U.S. History: Chicano/Chicana Perspectives II
HIST-122	Women in Early American History
HIST-123	Women in Modern American History
HIST-124	History of California
HIST-128	Kumeyaay History I: Precontact - 1845
HIST-129	Kumeyaay History II: 1846 - Present
HIST-130	U.S. History and Cultures: Native American Perspectives I
HIST-131	U.S. History and Cultures: Native American Perspectives II
HIST-180	U.S. History: Black Perspectives I
HIST-181	U.S. History: Black Perspectives II
POSC-120	Introduction to Politics and Political Analysis
POSC-121	Introduction to U.S. Government and Politics
POSC-124	Introduction to Comparative Government and Politics

POSC-130	Introduction to International Relations
POSC-140	Introduction to California Governments and Politics
PSY-120	Introductory Psychology
PSY-125	Cross-Cultural Psychology
PSY-134	Human Sexuality
PSY-138	Social Psychology
PSY-140	Physiological Psychology
PSY-150	Developmental Psychology
PSY-170	Abnormal Psychology
PSY-220	Learning
SOC-120	Introductory Sociology
SOC-125	Marriage, Family and Alternative Lifestyles
SOC-130	Contemporary Social Problems

**Area E - Cultural Diversity Graduation Requirement**

Minimum of 3 semester units.

Select one of the following: 3

ART-151	Chicanx Art
COMM-124	Intercultural Communication
ENGL-236	Chicana/o Literature
ENGL-238	Black Literature
ETHN-107	History of Race & Ethnicity in the United States
ETHN-111	Culture, Art & Ideas of the United States
ETHN-114	Introduction to Race & Ethnicity
ETHN-118	U.S. History: Chicano/Chicana Perspectives I
ETHN-119	U.S. History: Chicano/Chicana Perspectives II
ETHN-130	U.S. History and Cultures: Native American Perspectives I
ETHN-131	U.S. History and Cultures: Native American Perspectives II
ETHN-150	Latinx Sociology
ETHN-180	U.S. History: Black Perspectives I
ETHN-236	Chicana/o Literature
ETHN-238	Black Literature
HIST-107	History of Race & Ethnicity in the United States
HIST-114	Comparative History of the Early Americas
HIST-115	Comparative History of the Modern Americas
HIST-118	U.S. History: Chicano/Chicana Perspectives I
HIST-119	U.S. History: Chicano/Chicana Perspectives II
HIST-128	Kumeyaay History I: Precontact - 1845
HIST-129	Kumeyaay History II: 1846 - Present
HIST-130	U.S. History and Cultures: Native American Perspectives I
HIST-131	U.S. History and Cultures: Native American Perspectives II
HIST-148	The Modern Middle East
HIST-180	U.S. History: Black Perspectives I

HIST-181	U.S. History: Black Perspectives II
HUM-111	Culture, Art & Ideas of the United States
KUMEY-166	Introduction to Native American Politics and Policy
POSC-165	Introduction to the Politics of Race and Gender
POSC-166	Introduction to Native American Politics and Policy
PSY-125	Cross-Cultural Psychology
PSY-132	Psychology of Health
SOC-114	Introduction to Race & Ethnicity
SOC-120	Introductory Sociology
SOC-125	Marriage, Family and Alternative Lifestyles
SOC-150	Latinx Sociology

#### Additional Requirements

Select two additional courses from two different areas, minimum 6 semester units:

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

<sup>1</sup> This course includes a laboratory.

<sup>2</sup> Students will not receive credit for more than one of the following courses: CHEM-115 Fundamentals of Chemistry, CHEM-120 Preparation for General Chemistry.

## Degree Requirements

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

- A minimum of 60 semester units of college work.
- Competency Requirements
  - Completion of ENGL-120 College Composition and Reading with a grade of "C" or better or "P"<sup>1</sup>.
  - Completion of MATH-110 Intermediate Algebra for Business, Math, Science and Engineering Majors 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"<sup>1</sup> or completion of assessment placing into a class higher than MATH-110 Intermediate Algebra for Business, Math, Science and Engineering Majors.
- 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.

  - 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.
  - 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.
- Achievement of a "C" average (2.0 GPA) in all college work counted toward general education requirements.

- Achievement of a "C" grade or higher or "Pass" in all courses counted toward the major.
- A maximum of 12 "P"<sup>1</sup> semester units taken in regular course work at this institution may be counted toward the 60 semester units required for graduation.
- A minimum of 12 semester units of Legal Specialty courses must be completed at Cuyamaca College.

<sup>1</sup> 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



- Real Estate Associate in Science and Certificate of Achievement (p. 117)
- Broker's License Certificate of Achievement (p. 118)

## Real Estate Associate in Science and Certificate of Achievement



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<sup>1</sup>  
 Broker  
 Builder/Developer  
 Economist<sup>2</sup>  
 Escrow Officer/Trust Manager  
 Investor  
 Lender/Financial Institution  
 Property Manager

Salesperson  
Title Officer

<sup>1</sup> California Bureau of Real Estate Appraisers License required.

<sup>2</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	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
Select three of the following including one Accounting course:		7 - 11
BUS-110	Introduction to Business <sup>1</sup>	
BUS-120 or BUS-109	Financial Accounting Elementary Accounting	
RE-197	Real Estate Economics	
RE-201	Real Estate Property Management	
RE-250	Real Estate Internship <sup>1</sup>	
Electives:		
BUS-125	Business Law: Legal Environment of Business	
RE-204	Real Estate Office Administration	
<b>Total Units</b>		<b>22-26</b>

<sup>1</sup> Non Department of Real Estate Licensing course.

Plus General Education Requirements (p. 55)

## 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.

## Broker's License Certificate of Achievement



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.

Code	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 or BUS-120	Elementary Accounting Financial Accounting	3-4
BUS-125	Business Law: Legal Environment of Business	3
<b>Total Units</b>		<b>24-25</b>

## 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

1. **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

Choose a minimum of 18 units. Students must complete a minimum of three units in Business, three units in Economics, and three units from the elective category. The remaining nine units may be taken from any of the three categories.

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.

## 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.

Code	Title	Units
<b>Business</b>		
BUS-110	Introduction to Business	3
BUS-120	Financial Accounting	4
BUS-121	Managerial Accounting	4
BUS-125	Business Law: Legal Environment of Business	3
BUS-128	Business Communication <sup>1</sup>	3
<b>Economics</b>		
ECON-110	Economic Issues and Policies	3
ECON-120	Principles of Macroeconomics	3
ECON-121	Principles of Microeconomics	3
<b>Electives</b>		
CIS-110	Principles of Information Systems	4
MATH-160	Elementary Statistics	4
MATH-178	Calculus for Business, Social and Behavioral Sciences	4
MATH-180	Analytic Geometry and Calculus I	5

<sup>1</sup> Course not UC transferable.

## Culture, People & Ideas



- Ethnic Studies Associate in Arts (p. 120)
- General Studies: Humanities and Fine Arts (p. 120)
- History (p. 122)
- Kumeyaay Studies (p. 124)
- Philosophy for Transfer (AA-T) (p. 125)
- University Studies: Humanities and Fine Arts (p. 126)

## Ethnic Studies Associate in Arts



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

Code	Title	Units
<b>Core Curriculum</b>		
ETHN-107/HIST-107	History of Race & Ethnicity in the United States	3
ETHN-111/HUM-111	Culture, Art & Ideas of the United States	3
ETHN-114/SOC-114	Introduction to Race & Ethnicity	3

#### List A

Select two of the following: 6

ETHN-118/ HIST-118	U.S. History: Chicano/Chicana Perspectives I
ETHN-119/ HIST-119	U.S. History: Chicano/Chicana Perspectives II
ETHN-130/ HIST-130	U.S. History and Cultures: Native American Perspectives I
ETHN-131/ HIST-131	U.S. History and Cultures: Native American Perspectives II
ETHN-180/ HIST-180	U.S. History: Black Perspectives I
ETHN-181/ HIST-181	U.S. History: Black Perspectives II
KUMEY-128/ HIST-128	Kumeyaay History I: Precontact - 1845
KUMEY-129/ HIST-129	Kumeyaay Hist II: 1846 - Present

#### List B

Select two of the following: 6

ETHN-151/ ART-151	Chicanx Art
ETHN-236/ ENGL-236	Chicana/o Literature
ETHN-238/ ENGL-238	Black Literature
ETHN-165/ POSC-165	Introduction to the Politics of Race and Gender
ETHN-150/ SOC-150	Latinx Sociology
KUMEY-116/ HUM-116	Kumeyaay Arts and Culture I
KUMEY-166/ POSC-166	Introduction to Native American Politics and Policy

**Total Units** 21

Plus General Education Requirements (p. 55)

## 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

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.

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. .

## 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.

Code	Title	Units
<b>Humanities</b>		
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-130	Arabic Literature and Culture	3
ARBC-145	Arabic Civilizations	3
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-250	Conversational Arabic I	3
ARBC-251	Conversational Arabic II	3
ARBC-254	Conversational Iraqi Dialect	3
ARBC-256	Conversational Levantine Dialect	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-142	Art of Africa, Oceania and the Americas	3
ART-143	Modern Art	3
ART-145	Contemporary Art	3
ART-146	Asian Art	3

ART-151	Chicanx Art	3
ASL-120	American Sign Language I	4
ASL-121	American Sign Language II	4
ASL-140	Inside Deaf Culture	3
ASL-220	American Sign Language III	4
ASL-221	American Sign Language IV	4
ENGL-122	Introduction to Literature	3
ENGL-201	Women, Gender, and Sexuality in Literature	3
ENGL-202	Introduction to Film as Literature	3
ENGL-217	Fantasy and Science Fiction	3
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-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-111	Culture, Art & Ideas of the United States	3
ETHN-151	Chicanx Art	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	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
HIST-114	Comparative History of the Early Americas	3
HIST-115	Comparative History of the Modern Americas	3
HUM-110	Principles of the Humanities	3
HUM-111	Culture, Art & Ideas of the United States	3
HUM-115	Arts and Culture in Local Context - San Diego	3
HUM-116	Kumeyaay Arts and Culture I	3
HUM-117	Kumeyaay Arts and Culture II	3
HUM-120	European Humanities	3
HUM-140	Humanities of the Americas	3
HUM-155	World Mythology through the Humanities	3
KUMEY-116	Kumeyaay Arts and Culture I	3
KUMEY-117	Kumeyaay Arts and Culture II	3
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-220	Kumeyaay Language III	4
PHIL-110	A General Introduction to Philosophy	3
PHIL-115	History of Philosophy I: Ancient	3
PHIL-117	History of Philosophy II: Modern and Contemporary	3
PHIL-140	Problems in Ethics	3
PHIL-141	Bioethics	3
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction	3
RELG-120	World Religions	3
RELG-130	Scriptures of World Religions	3

RELG-160	Introduction to the Hebrew Bible: The First Testament	3
RELG-170	Introduction to Christianity	3
SPAN-120	Spanish I	5
SPAN-121	Spanish II	5
SPAN-141	Spanish and Latin American Cultures	3
SPAN-145	Hispanic Civilizations	3
SPAN-220	Spanish III	5
SPAN-221	Spanish IV	5
SPAN-250	Conversational Spanish I	3
SPAN-251	Conversational Spanish II	3
<b>Fine Arts</b>		
ART-100	Art Appreciation	3
ART-104	Artists and Designers Today	3
ART-119	Color Theory	3
ART-120	Two-Dimensional Design	3
ART-121	Painting I	3
ART-124	Drawing I	3
ART-125	Drawing II	3
ART-129	Three-Dimensional Design	3
ART-135	Watercolor I	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-142	Art of Africa, Oceania and the Americas	3
ART-143	Modern Art	3
ART-144	Architecture of the 20th and 21st Centuries	3
ART-145	Contemporary Art	3
ART-146	Asian Art	3
ART-148	Applied Design and Crafts	3
ART-151	Chicanx Art	3
ART-210	Introduction to Printmaking	3
ART-211	Intermediate Printmaking	3
ART-220	Painting II	3
ART-221	Painting III	3
ART-222	Painting IV	3
ART-224	Drawing III	3
ART-225	Drawing IV	3
ART-230	Figure Drawing I	3
ART-231	Figure Drawing II	3
ART-232	Figure Drawing III	3
ART-233	Figure Drawing IV	3
ART-235	Watercolor II	3
ART-236	Watercolor III	3
ART-240	Portraiture and Character Design	3
ART-241	Illustration I	3
ART-242	Illustration II	3
ETHN-151	Chicanx Art	3
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-117	Introduction to Music History and Literature	3
MUS-123	History of Hip-Hop Culture	3
THTR-110	Introduction to the Theatre	3

## History



- History for Transfer (AA-T) (p. 122)
- History Associate in Arts (p. 123)



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

### 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 higher or "Pass" 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:

- 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

Code	Title	Units
<b>Core Curriculum</b>		
HIST-108	Early American History	3
HIST-109	Modern American History	3
<b>List A</b>		
Select six units from the following:		6
HIST-100	Early World History	
or HIST-105	Early Western Civilization	
HIST-101	Modern World History	
or HIST-106	Modern Western Civilization	
<b>List B</b>		
Select one course from each group:		
Group 1: Select one of the follow courses:		3
HIST-107/ ETHN-107	History of Race & Ethnicity in the United States	
HIST-118/ ETHN-118	U.S. History: Chicano/Chicana Perspectives I	
HIST-119/ ETHN-119	U.S. History: Chicano/Chicana Perspectives II	
HIST-128/ KUMEY-128	Kumeyaay History I: Precontact - 1845	
HIST-129/ KUMEY-129	Kumeyaay History II: 1846 - Present	
HIST-130/ ETHN-130	U.S. History and Cultures: Native American Perspectives I	
HIST-131/ ETHN-131	U.S. History and Cultures: Native American Perspectives II	
HIST-180/ ETHN-180	U.S. History: Black Perspectives I	
HIST-181/ ETHN-181	U.S. History: Black Perspectives II	
or if not selected above:		
HIST-100	Early World History (if not selected above)	
or HIST-101	Modern World History	
Group 2: Select one of the following courses:		3
HIST-114	Comparative History of the Early Americas	
HIST-115	Comparative History of the Modern Americas	
HIST-122	Women in Early American History	
HIST-123	Women in Modern American History	
HIST-124	History of California	
HIST-148	The Modern Middle East	
HUM-111/ ETHN-111	Culture, Art & Ideas of the United States	
HUM-115	Arts and Culture in Local Context - San Diego	
HUM-116	Kumeyaay Arts and Culture I	

KUMEY-166/ POSC-166	Introduction to Native American Politics and Policy	
POSC-140	Introduction to California Governments and Politics	
Any course from Group 1 not selected		
<b>Units in the Major</b>		<b>18</b>
12 Units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		15/17
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into History B.A.



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

### History Associate in Arts



This degree program is useful for students preparing for careers in education and teaching, the law and legal field, journalism, government service, political science, museums and archives, consulting, 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 help students develop and refine research, writing, and interpretive skills that are essential in navigating both society and their careers. 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<sup>1</sup>  
Archaeologist<sup>1</sup>  
Archivist<sup>1</sup>  
Attorney



- Editor<sup>1</sup>
- Education Administrator<sup>1</sup>
- History Professor/Historian<sup>1</sup>
- Judicial Law Clerk<sup>1</sup>
- Law Professor<sup>1</sup>
- Legislative Assistant<sup>1</sup>
- Legal Arbitrator, Mediator, and Conciliator<sup>1</sup>
- Museum Curator<sup>1</sup>
- Political Science Professor<sup>1</sup>
- Politician
- Research Historian<sup>1</sup>
- Reporter, Correspondent<sup>1</sup>
- Secondary School (K-12) Teacher<sup>1</sup>
- Social Worker<sup>1</sup>
- Writer, Author, Editor<sup>1</sup>

<sup>1</sup> Bachelor Degree (B.A.) or higher required.

### Associate in Arts Degree Requirements

Code	Title	Units
Select twelve units from any two of the following sequences:		12
HIST-100 & HIST-101	Early World History and Modern World History	
HIST-105 & HIST-106	Early Western Civilization and Modern Western Civilization	
HIST-108 & HIST-109	Early American History and Modern American History	
List A. Select one of the following:		3
HIST-107/ETHN-107	History of Race & Ethnicity in the United States	
HIST-118/ETHN-118	U.S. History: Chicano/Chicana Perspectives I	
HIST-119/ETHN-119	U.S. History: Chicano/Chicana Perspectives II	
HIST-128/KUMEY-128	Kumeyaay History I: Precontact - 1845	
HIST-129/ETHN-129	Kumeyaay History II: 1846 - Present	
HIST-130/ETHN-130	U.S. History and Cultures: Native American Perspectives I	
HIST-131/ETHN-131	U.S. History and Cultures: Native American Perspectives II	
HIST-180/ETHN-180	U.S. History: Black Perspectives I	
HIST-181/ETHN-181	U.S. History: Black Perspectives II	
List B. Select one of the following:		3
HIST-114	Comparative History of the Early Americas	
HIST-115	Comparative History of the Modern Americas	
HIST-122	Women in Early American History	
HIST-123	Women in Modern American History	
HIST-124	History of California	
HIST-148	The Modern Middle East	
ETHN-111/HUM-111	Culture, Art & Ideas of the United States	

HUM-115	Arts and Culture in Local Context - San Diego
KUMEY-116/HUM-116	Kumeyaay Arts and Culture I
KUMEY-166/POSC-166	Introduction to Native American Politics and Policy
POSC-140	Introduction to California Governments and Politics
Any course from List A not selected	

**Total Units** **18**

Plus General Education Requirements (p. 55)

## Kumeyaay Studies



- Kumeyaay Studies Associate in Arts (p. 124)
- Kumeyaay Studies Certificate of Achievement (p. 125)

## Kumeyaay Studies Associate in Arts



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

Code	Title	Units
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-128/HIST-128	Kumeyaay History I: Precontact - 1845	3

KUMEY-129/ HIST-129	Kumeyaay Hist II: 1846 - Present	3
List A. Select Four (4) Units:		4
KUMEY-133/ BIO-133	Ethnoecology	
KUMEY-134/ BIO-134	Ethnobotany	
KUMEY-135/ BIO-135	Ethnobotany/Ethnoecology Lab	
List B. Select two of the following:		6
KUMEY-116/ HUM-116	Kumeyaay Arts and Culture I	
KUMEY-117/ HUM-117	Kumeyaay Arts and Culture II	
KUMEY-118/ HUM-118	Introduction to Kumeyaay Basketry & Pottery	
List C. Select one of the following:		3-4
KUMEY-150/ ANTH-150	Introduction to Cultural Resource Management	
KUMEY-166/ POSC-166	Introduction to Native American Politics and Policy	
KUMEY-170/ SW-170	Kumeyaay Conflict Resolution	
KUMEY-220	Kumeyaay Language III	
One any course from List A or B not selected		
<b>Total Units</b>		<b>27-28</b>

Plus General Education Requirements (p. 55)

## Kumeyaay Studies Certificate of Achievement



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

Code	Title	Units
KUMEY-120	Kumeyaay Language I	4
KUMEY-128/ HIST-128	Kumeyaay History I: Precontact - 1845	3
Select one of the following:		3
KUMEY-116/ HUM-116	Kumeyaay Arts and Culture I	
KUMEY-117/ HUM-117	Kumeyaay Arts and Culture II	
Select one of the following:		3
KUMEY-133/ BIO-133	Ethnoecology	
KUMEY-134/ BIO-134	Ethnobotany	
Select one of the following:		3-4
KUMEY-121	Kumeyaay Language II	
KUMEY-129/ HIST-129	Kumeyaay Hist II: 1846 - Present	
KUMEY-150/ ANTH-150	Introduction to Cultural Resource Management	
KUMEY-166/ POSC-166	Introduction to Native American Politics and Policy	
KUMEY-220	Kumeyaay Language III	
or any course not taken above		
<b>Total Units</b>		<b>16-17</b>

## Certificate of Achievement

Students who complete the requirements above 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.



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

## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
Select two of the following:		6
PHIL-110	A General Introduction to Philosophy	
PHIL-130	Logic	
PHIL-140	Problems in Ethics	
<b>List A</b>		
Select one of the following:		3
Any course from Core not used		3
PHIL-115	History of Philosophy I: Ancient	
PHIL-117	History of Philosophy II: Modern and Contemporary	
<b>List B</b>		
Select two of the following:		6
Any course from List A not used		
HIST-105	Early Western Civilization	
HIST-106	Modern Western Civilization	
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction	
RELG-120	World Religions	
<b>List C</b>		
Select one of the following:		3
Any course from List A or B not used		
PHIL-125	Critical Thinking	
<b>Units in the Major</b>		<b>21</b>
6-15 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37

Total Transferable Elective Units	11-18
<b>Total Units</b>	<b>60</b>

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**

Choose a minimum of 18 units. 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.

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.

## 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.

Code	Title	Units
<b>Humanities</b>		
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-130	Arabic Literature and Culture	3
ARBC-145	Arabic Civilizations	3

ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-254	Conversational Iraqi Dialect	3
ARBC-256	Conversational Levantine Dialect <sup>1</sup>	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-142	Art of Africa, Oceania and the Americas <sup>1</sup>	3
ART-143	Modern Art	3
ART-145	Contemporary Art	3
ART-146	Asian Art	3
ART-151	Chicanx Art	3
ASL-120	American Sign Language I	4
ASL-121	American Sign Language II	4
ASL-140	Inside Deaf Culture	3
ASL-220	American Sign Language III	4
ASL-221	American Sign Language IV	4
ENGL-122	Introduction to Literature	3
ENGL-201	Women, Gender, and Sexuality in Literature	3
ENGL-202	Introduction to Film as Literature	3
ENGL-217	Fantasy and Science Fiction	3
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-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-111	Culture, Art & Ideas of the United States	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	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
HIST-114	Comparative History of the Early Americas	3
HIST-115	Comparative History of the Modern Americas	3
HUM-110	Principles of the Humanities	3
HUM-111	Culture, Art & Ideas of the United States	3
HUM-115	Arts and Culture in Local Context - San Diego	3
HUM-116	Kumeyaay Arts and Culture I	3
HUM-117	Kumeyaay Arts and Culture II	3
HUM-120	European Humanities	3
HUM-140	Humanities of the Americas	3
HUM-155	World Mythology through the Humanities	3
KUMEY-116	Kumeyaay Arts and Culture I	3
KUMEY-117	Kumeyaay Arts and Culture II	3
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4

KUMEY-220	Kumeyaay Language III	4	MUS-123	History of Hip-Hop Culture	3
PHIL-110	A General Introduction to Philosophy	3	THTR-110	Introduction to the Theatre	3
PHIL-115	History of Philosophy I: Ancient	3			
PHIL-117	History of Philosophy II: Modern and Contemporary	3			
PHIL-140	Problems in Ethics	3			
PHIL-141	Bioethics	3			
PHIL-170	Philosophy of Religion: A Cross-Cultural Introduction	3			
RELG-120	World Religions	3			
RELG-130	Scriptures of World Religions	3			
RELG-160	Introduction to the Hebrew Bible: The First Testament	3			
RELG-170	Introduction to Christianity	3			
SPAN-120	Spanish I	5			
SPAN-121	Spanish II	5			
SPAN-141	Spanish and Latin American Cultures	3			
SPAN-145	Hispanic Civilizations	3			
SPAN-220	Spanish III	5			
SPAN-221	Spanish IV	5			
SPAN-250	Conversational Spanish I	3			
SPAN-251	Conversational Spanish II	3			
<b>Fine Arts</b>					
ART-100	Art Appreciation	3			
ART-104	Artists and Designers Today <sup>1</sup>	3			
ART-119	Color Theory <sup>1</sup>	3			
ART-120	Two-Dimensional Design	3			
ART-124	Drawing I	3			
ART-125	Drawing II	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-142	Art of Africa, Oceania and the Americas <sup>1</sup>	3			
ART-143	Modern Art	3			
ART-144	Architecture of the 20th and 21st Centuries	3			
ART-145	Contemporary Art	3			
ART-146	Asian Art	3			
ART-148	Applied Design and Crafts <sup>1</sup>	3			
ART-151	Chicanx Art	3			
ART-210	Introduction to Printmaking <sup>1</sup>	3			
ART-211	Intermediate Printmaking <sup>1</sup>	3			
ART-241	Illustration I	3			
ART-242	Illustration II	3			
ETHN-151	Chicanx Art	3			
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-117	Introduction to Music History and Literature	3			

<sup>1</sup> Course not UC transferable.



## Environmental & Applied Technology



- Automotive Technology (p. 129)
- CADD Technology (p. 138)
- Center for Water Studies (p. 140)
- Computer and Information Science (p. 149)
- Computer Science (p. 155)
- Environmental Health and Safety Management (p. 156)
- Ornamental Horticulture (p. 160)
- Surveying Associate in Science and Certificate of Achievement (p. 167)

## Automotive Technology



- Automotive Technology Associate in Science and Certificate of Achievement (p. 129)
- Automotive Technology Chassis Specialist Associate in Science and Certificate of Achievement (p. 130)
- Automotive Technology Drivetrain Specialist Associate in Science and Certificate of Achievement (p. 131)
- Automotive Technology Electronics and Electric Vehicle Specialist Associate in Science and Certificate of Achievement (p. 132)
- Automotive Technology Engine Performance Specialist Associate in Science and Certificate of Achievement (p. 133)
- Automotive Technology Engine Repair Specialist Associate in Science and Certificate of Achievement (p. 134)
- Automotive Technology Service Management Associate in Science and Certificate of Achievement (p. 134)
- Automotive Technology – Automotive Service Councils of California ASCCA Associate in Science and Certificate of Achievement (p. 135)
- Automotive Technology – Ford ASSET Associate in Science (p. 136)
- Automotive Technology – General Motors ASEP Associate in Science and Certificate of Achievement (p. 137)

## Automotive Technology Associate in Science and Certificate of Achievement



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

Code	Title	Units
AUTO-099	Introduction to Automotive Technology	3
AUTO-100L	Introduction to Automotive Technology Laboratory	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 Repair Assessment Test Out	0.5
AUTO-132	Differential and 4WD Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1
AUTO-132T	Differential and 4WD Systems 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	0.5
AUTO-144L	Noise, Vibration, and Harshness Laboratory	1
AUTO-144T	Noise, Vibration, and Harshness 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-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 System Diagnosis and Repair	1
AUTO-171L	Climate Control System Diagnosis and Repair Laboratory	1
AUTO-171T	Climate Control System 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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust 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
<b>Total Units</b>		<b>44</b>

Plus General Education Requirements (p. 55)

## 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.

## Automotive Technology Chassis Specialist Associate in Science and Certificate of Achievement



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 an Associate in 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.

## Associate in Science Degree Requirements

Code	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 Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1
AUTO-132T	Differential and 4WD Systems 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	0.5
AUTO-144L	Noise, Vibration, and Harshness Laboratory	1
AUTO-144T	Noise, Vibration, and Harshness 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 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 Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>35.5</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology Drivetrain Specialist Associate in Science and Certificate of Achievement



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 courses and general education courses will receive an Associate in 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 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.

## Associate in Science Degree Requirements

Code	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 Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1
AUTO-132T	Differential and 4WD Systems 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 Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>36</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology Electronics and Electric Vehicle Specialist Associate in Science and Certificate of Achievement



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 degree 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 courses and general education courses will receive an Associate in 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 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.

## Associate in Science Degree Requirements

Code	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 Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1

AUTO-132T	Differential and 4WD Systems 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 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 System Diagnosis and Repair	1
AUTO-171L	Climate Control System Diagnosis and Repair Laboratory	1
AUTO-171T	Climate Control System 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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust 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 Work Experience <sup>1</sup>	12

ET-110	Introduction to Electricity and Electronics	4
<b>Total Units</b>		<b>52</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology Engine Performance Specialist Associate in Science and Certificate of Achievement



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

Code	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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust 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 Inspector Training Emission Control License	2
AUTO-284L	Level I Inspector Training Emission Control License Laboratory	1
AUTO-284T	Level I Inspector Training Emission Control License Assessment Test Out	0.5
AUTO-285	Level II Inspector Training Emission Control License	1
AUTO-285L	Level II Inspector Training Emission Control License Laboratory	1
AUTO-285T	Level II Inspector Training Emission Control License 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 Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>46.5</b>

Plus General Education Requirements (p. 55)



<sup>1</sup> 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.

## Automotive Technology Engine Repair Specialist Associate in Science and Certificate of Achievement



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 an 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

Code	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	0.5
AUTO-144L	Noise, Vibration, and Harshness Laboratory	1

AUTO-144T	Noise, Vibration, and Harshness 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 System Diagnosis and Repair	1
AUTO-171L	Climate Control System Diagnosis and Repair Laboratory	1
AUTO-171T	Climate Control System 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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust 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 Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>37.5</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology Service Management Associate in Science and Certificate of Achievement



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 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 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

Code	Title	Units
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	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 System 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	Service Management	3
AUTO-211	Automotive Customer Service	2
AUTO-212	Automotive Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>35.5</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology – Automotive Service Councils of California ASCCA Associate in Science and Certificate of Achievement



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

Code	Title	Units
<b>Required Core</b>		
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 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-183	Engine Performance II Intake Exhaust and Emission Systems	2
AUTO-183L	Engine Performance II Intake Exhaust Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust Emission Systems Assessment Test Out	0.5
AUTO-284	Level I Inspector Training Emission Control License	2
AUTO-284L	Level I Inspector Training Emission Control License Laboratory	1
AUTO-284T	Level I Inspector Training Emission Control License Assessment Test Out	0.5
AUTO-285	Level II Inspector Training Emission Control License	1
AUTO-285L	Level II Inspector Training Emission Control License Laboratory	1
AUTO-285T	Level II Inspector Training Emission Control License 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 <sup>1</sup>	12
<b>Total Units</b>		<b>41</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Automotive Technology – Ford ASSET Associate in Science



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

Code	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 Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1
AUTO-132T	Differential and 4WD Systems 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	0.5
AUTO-144L	Noise, Vibration, and Harshness Laboratory	1
AUTO-144T	Noise, Vibration, and Harshness 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 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 System Diagnosis and Repair	1
AUTO-171L	Climate Control System Diagnosis and Repair Laboratory	1
AUTO-171T	Climate Control System 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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust Emission Systems Assessment Test Out	0.5
AUTO-215	Ford ASSET-Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>53</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> Must be taken for a total of 12 units.

## Automotive Technology – General Motors ASEP Associate in Science and Certificate of Achievement



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

Code	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 Systems Diagnosis and Service	1
AUTO-132L	Differential and 4WD Systems Laboratory	1
AUTO-132T	Differential and 4WD Systems 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	0.5
AUTO-144L	Noise, Vibration, and Harshness Laboratory	1
AUTO-144T	Noise, Vibration, and Harshness 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 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 System Diagnosis and Repair	1
AUTO-171L	Climate Control System Diagnosis and Repair Laboratory	1
AUTO-171T	Climate Control System 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 Emission Systems Laboratory	1
AUTO-183T	Engine Performance II Intake Exhaust Emission Systems Assessment Test Out	0.5
AUTO-214	General Motors ASEP Work Experience <sup>1</sup>	12
<b>Total Units</b>		<b>53</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## CADD Technology



- CADD Technology: Building Design Industry Associate in Science and Certificate of Achievement (p. 138)
- CADD Technology: Manufacturing Industry Associate in Science and Certificate of Achievement (p. 139)
- CADD/Manufacturing Technology Certificate of Specialization (p. 140)

## CADD Technology: Building Design Industry Associate in Science and Certificate of Achievement



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

Code	Title	Units
<b>Core Curriculum</b>		
CADD-115	Engineering Graphics	3
CADD-120	Introduction to Computer-Aided Drafting and Design	3
<b>Total Units</b>		<b>6</b>

### Area of Emphasis: Building Design Industry

Code	Title	Units
Core Courses		
CADD-127/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-200/OH-200	Introduction to Computer-Aided Landscape Design	3
Select two of the following:		6
CADD-126	Electronic Drafting	
CADD-128	Geometric Dimensioning and Tolerancing (GDT)	
CADD-132	Advanced Computer-Aided Drafting and Design in 3D Modeling	
CADD-201/OH-201	Advanced Computer-Aided Landscape Design	
<b>Total Units</b>		<b>24</b>

Plus General Education Requirements (p. 55)

## 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.

## CADD Technology: Manufacturing Industry Associate in Science and Certificate of Achievement



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

Code	Title	Units
<b>Core Curriculum</b>		
CADD-115	Engineering Graphics	3
CADD-120	Introduction to Computer-Aided Drafting and Design	3
<b>Total Units</b>		<b>6</b>

### Area of Emphasis: Manufacturing Industry

Code	Title	Units
Core Courses		
Select four of the following:		12
CADD-125/ ENGR-125	Solid Modeling Design	
CADD-126	Electronic Drafting	
CADD-128	Geometric Dimensioning and Tolerancing (GDT)	
CADD-129/ ENGR-129	Engineering Solid Modeling	
CADD-132	Advanced Computer-Aided Drafting and Design in 3D Modeling	
Select two of the following:		6
CADD-127/ SURV-127	Survey Drafting Technology	
CADD-131	Architectural Computer-Aided Drafting and Design	
CADD-133	Advanced Architectural Computer-Aided Drafting and Design	

CADD-200/OH-200 Introduction to Computer-Aided Landscape Design

**Total Units** **24**

Plus General Education Requirements (p. 55)

## 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.

## CADD/Manufacturing Technology Certificate of Specialization



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

Code	Title	Units
CADD-115	Engineering Graphics	3
CADD-125/ENGR-125	Solid Modeling Design (SW) <sup>1</sup>	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
<b>Total Units</b>		<b>14</b>

<sup>1</sup> Students have also the opportunity to attain a certificate of "Certified SolidWorks Associate (CSWA)."

### Certificate of Specialization

Students who complete the requirements above 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.

## Center for Water Studies



- Advanced Water Treatment Associate in Science and Certificate of Achievement (p. 140)
- Backflow & Cross-Connection Control Associate in Science and Certificate of Achievement (p. 141)
- Wastewater Collection Systems Associate in Science and Certificate of Achievement (p. 142)
- Wastewater Treatment Operations Associate in Science and Certificate of Achievement (p. 142)
- Water Distribution Operations Associate in Science and Certificate of Achievement (p. 143)
- Water Resources Management Associate in Science and Certificate of Achievement (p. 144)
- Water Treatment Plant Operations Associate in Science and Certificate of Achievement (p. 145)
- Wastewater Collection Systems, Stackable Certificates of Specialization (p. 146)
- Wastewater Treatment Operations, Stackable Certificates of Specialization (p. 147)
- Water Distribution Operations, Stackable Certificates of Specialization (p. 148)
- Water Treatment Plant Operations, Stackable Certificates of Specialization (p. 148)

## Advanced Water Treatment Associate in Science and Certificate of Achievement



The most advanced and current wastewater treatment technology involves processing wastewater into purified drinking water. Wastewater Treatment Operators at these new treatment facilities will be required to have the new CWEA/AWWA Advanced Water Treatment certifications, AWTO 3-5. Students who complete the required courses for this certificate and/or degree program will be prepared to take and pass the CWEA AWTO 3 and AWTO 4 certification exams.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Perform advanced water treatment work functions in accordance with accepted water and wastewater industry standards and practices.

- Assess and resolve advanced water treatment process issues and problems using current water and wastewater industry-specific methods, tools, and resources.
- Communicate effectively, orally and in writing, to managers, peers, subordinates, and the public.
- Abide by water and wastewater industry codes and regulations regarding occupational health, safety, and environmental standards.

with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

## Backflow & Cross-Connection Control Associate in Science and Certificate of Achievement



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

Code	Title	Units
CWS-102	Calculations in Water & Wastewater	3
CWS-107	Safety in Water & Wastewater	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-116	Advanced Water Treatment I	3
CWS-134	Pumps, Motors & Valves	3
CWS-216	Advanced Water Treatment II	3
CWS-268	Membrane Plant Operation	3
Select at least six units from the following:		6-7
CWS-100	Career Pathways in Water & Wastewater	
CWS-101	Fundamentals of Water & Wastewater	
CWS-103	Water Resources Management	
CWS-106	Electrical & Instrumentation Processes	
CWS-130	Water Distribution Systems	
CWS-132	Wastewater Collection Systems	
CWS-204	Applied Hydraulics	
CWS-206	Advanced Electrical & Instrumentation Processes	
CWS-207	Practical Skills in Water & Wastewater Systems	
CWS-210	Advanced Laboratory Analysis for Water & Wastewater	
CWS-212	Advanced Water Treatment Plant Operations	
CWS-214	Advanced Wastewater Treatment Plant Operations	
CWS-232	Advanced Wastewater Collection Systems	
CWS-280	Backflow Tester Training	
CWS-282	Cross-Connection Control Specialist	
CWS-284	Cross-Connection Control Specialist-Recycled Water	
CWS-290	Cooperative Work Experience	
<b>Total Units</b>		<b>36-37</b>

Plus General Education Requirements (p. 55)

## Certificate of Achievement

Students who complete only the major requirements above qualify for a Certificate in Advanced Water Treatment. An official request must be filed

## Associate in Science Degree Requirements

Code	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
Select at least nine units from the following:		9-11
CWS-103	Water Resources Management	

CWS-105	Water Conservation
CWS-106	Electrical & Instrumentation Processes
CWS-110	Laboratory Analysis for Water & Wastewater
CWS-115	Wastewater Reclamation and Reuse
CWS-132	Wastewater Collection Systems
CWS-134	Pumps, Motors & Valves
CWS-290	Cooperative Work Experience
<b>Total Units</b>	<b>29-31</b>

Plus General Education Requirements (p. 55)

### 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.

## Wastewater Collection Systems Associate in Science and Certificate of Achievement



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

Code	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
Select at least six units from the following:		6-7
CWS-103	Water Resources Management	
CWS-110	Laboratory Analysis for Water & Wastewater	
CWS-112	Water Treatment Plant Operations	
CWS-114	Wastewater Treatment Plant Operations	
CWS-115	Wastewater Reclamation and Reuse	
CWS-130	Water Distribution Systems	
CWS-206	Advanced Electrical & Instrumentation Processes	
CWS-207	Practical Skills in Water & Wastewater Systems	
CWS-210	Advanced Laboratory Analysis for Water & Wastewater	
CWS-214	Advanced Wastewater Treatment Plant Operations	
CWS-230	Advanced Water Distribution Systems	
CWS-270	Public Works Supervision	
CWS-280	Backflow Tester Training	
CWS-284	Cross-Connection Control Specialist- Recycled Water	
CWS-290	Cooperative Work Experience	
<b>Total Units</b>		<b>36-37</b>

Plus General Education Requirements (p. 55)

### 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.

## Wastewater Treatment Operations Associate in Science and Certificate of Achievement



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

Code	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
Select at least six units from the following:		6-7
CWS-103	Water Resources Management	
CWS-112	Water Treatment Plant Operations	
CWS-115	Wastewater Reclamation and Reuse	
CWS-130	Water Distribution Systems	
CWS-132	Wastewater Collection Systems	
CWS-206	Advanced Electrical & Instrumentation Processes	
CWS-207	Practical Skills in Water & Wastewater Systems	
CWS-210	Advanced Laboratory Analysis for Water & Wastewater	
CWS-212	Advanced Water Treatment Plant Operations	

CWS-232	Advanced Wastewater Collection Systems
CWS-268	Membrane Plant Operation
CWS-270	Public Works Supervision
CWS-280	Backflow Tester Training
CWS-282	Cross-Connection Control Specialist
CWS-284	Cross-Connection Control Specialist-Recycled Water
CWS-290	Cooperative Work Experience
<b>Total Units</b>	<b>36-37</b>

Plus General Education Requirements (p. 55)

## 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.

## Water Distribution Operations Associate in Science and Certificate of Achievement



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

Code	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
Select at least six units from the following:		6-7
CWS-103	Water Resources Management	
CWS-105	Water Conservation	
CWS-112	Water Treatment Plant Operations	
CWS-115	Wastewater Reclamation and Reuse	
CWS-132	Wastewater Collection Systems	
CWS-206	Advanced Electrical & Instrumentation Processes	
CWS-207	Practical Skills in Water & Wastewater Systems	
CWS-210	Advanced Laboratory Analysis for Water & Wastewater	
CWS-212	Advanced Water Treatment Plant Operations	
CWS-232	Advanced Wastewater Collection Systems	
CWS-270	Public Works Supervision	
CWS-280	Backflow Tester Training	
CWS-282	Cross-Connection Control Specialist	
CWS-284	Cross-Connection Control Specialist-Recycled Water	
CWS-290	Cooperative Work Experience	
<b>Total Units</b>		<b>36-37</b>

Plus General Education Requirements (p. 55)

## 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.

## Water Resources Management Associate in Science and Certificate of Achievement



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

Code	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	
Select two of the following:		5-6
CWS-102	Calculations in Water & Wastewater	
CWS-112	Water Treatment Plant Operations	
CWS-114	Wastewater Treatment Plant Operations	
CWS-130	Water Distribution Systems	
CWS-132	Wastewater Collection Systems	
CWS-280	Backflow Tester Training	
CWS-282	Cross-Connection Control Specialist	
CWS-284	Cross-Connection Control Specialist-Recycled Water	
Select two of the following:		4-7
OH-102	Xeriscape: Water Conservation in the Landscape	
OH-140	Soils	
OH-174	Turf and Ground Cover Management	
OH-220	Landscape Construction: Concrete and Masonry	
OH-235	Principles of Landscape Irrigation	
OH-238	Irrigation System Design	
OH-255	Sustainable Urban Landscape Principles and Practices	
<b>Total Units</b>		<b>34-38</b>

Plus General Education Requirements (p. 55)

## 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.

## Water Treatment Plant Operations Associate in Science and Certificate of Achievement



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

Code	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
Select at least six units from the following:		6-7
CWS-103	Water Resources Management	
CWS-105	Water Conservation	
CWS-114	Wastewater Treatment Plant Operations	
CWS-115	Wastewater Reclamation and Reuse	
CWS-130	Water Distribution Systems	
CWS-206	Advanced Electrical & Instrumentation Processes	
CWS-207	Practical Skills in Water & Wastewater Systems	
CWS-210	Advanced Laboratory Analysis for Water & Wastewater	
CWS-214	Advanced Wastewater Treatment Plant Operations	
CWS-230	Advanced Water Distribution Systems	
CWS-268	Membrane Plant Operation	
CWS-270	Public Works Supervision	
CWS-280	Backflow Tester Training	
CWS-282	Cross-Connection Control Specialist	
CWS-290	Cooperative Work Experience	
<b>Total Units</b>		<b>36-37</b>

Plus General Education Requirements (p. 55)

## 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.

## 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

Code	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
<b>Total Units</b>		<b>12</b>

## 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

Code	Title	Units
CWS-132	Wastewater Collection Systems	3
CWS-134	Pumps, Motors & Valves	3
CWS-282	Cross-Connection Control Specialist	3
<b>Total Units</b>		<b>9</b>

## 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

Code	Title	Units
CWS-106	Electrical & Instrumentation Processes	3
CWS-204	Applied Hydraulics	3
CWS-232	Advanced Wastewater Collection Systems	3
<b>Total Units</b>		<b>9</b>

## Certificates of Specialization

Students who complete the requirements above 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.

## 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

Code	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
<b>Total Units</b>		<b>12</b>

## 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

Code	Title	Units
CWS-106	Electrical & Instrumentation Processes	3
CWS-110	Laboratory Analysis for Water & Wastewater	3
CWS-114	Wastewater Treatment Plant Operations	3
<b>Total Units</b>		<b>9</b>

## 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

Code	Title	Units
CWS-134	Pumps, Motors & Valves	3
CWS-204	Applied Hydraulics	3
CWS-214	Advanced Wastewater Treatment Plant Operations	3
<b>Total Units</b>		<b>9</b>

## Certificates of Specialization

Students who complete the requirements above 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

Code	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
<b>Total Units</b>		<b>12</b>

### 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

Code	Title	Units
CWS-106	Electrical & Instrumentation Processes	3
CWS-130	Water Distribution Systems	3

CWS-134	Pumps, Motors & Valves	3
<b>Total Units</b>		<b>9</b>

### 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

Code	Title	Units
CWS-110	Laboratory Analysis for Water & Wastewater	3
CWS-204	Applied Hydraulics	3
CWS-230	Advanced Water Distribution Systems	3
<b>Total Units</b>		<b>9</b>

### Certificates of Specialization

Students who complete the requirements above 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 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

Code	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
<b>Total Units</b>		<b>12</b>

## 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

Code	Title	Units
CWS-106	Electrical & Instrumentation Processes	3
CWS-110	Laboratory Analysis for Water & Wastewater	3
CWS-112	Water Treatment Plant Operations	3
<b>Total Units</b>		<b>9</b>

## 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

Code	Title	Units
CWS-134	Pumps, Motors & Valves	3
CWS-204	Applied Hydraulics	3
CWS-212	Advanced Water Treatment Plant Operations	3
<b>Total Units</b>		<b>9</b>

## Certificates of Specialization

Students who complete the requirements above 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.

## Computer and Information Science



- Networking, Security and System Administration - Enterprise Networking Associate in Science and Certificate of Achievement (p. 149)
- Networking, Security and System Administration - Enterprise System Administration Associate in Science and Certificate of Achievement (p. 151)
- Web Development Associate in Science and Certificate of Achievement (p. 152)
- Cisco Certified Network Associate Certificate of Specialization (p. 153)
- Cisco Network Professional Certificate of Specialization (p. 153)
- Computer Programming Certificate of Specialization (p. 154)
- Computer Support Technician Certificate of Specialization (p. 154)
- Cyber Security Specialist Certificate of Specialization (p. 154)
- Web Design Certificate of Specialization (p. 155)
- Web Programming Certificate of Specialization (p. 155)

## Networking, Security and System Administration - Enterprise Networking Associate in Science and Certificate of Achievement



See *Business Office Technology* for specific Microsoft applications (Word, Excel, PowerPoint, etc.).

## 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).

## 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<sup>1</sup>  
 Computing Analyst<sup>1</sup>  
 Cyber Security Specialist  
 Database Manager<sup>1</sup>  
 Information Specialist  
 Information Systems Programmer<sup>1</sup>  
 LAN/WAN Manager  
 Manufacturer's Representative  
 Network Administrator  
 Network Analyst<sup>1</sup>  
 Network Consultant  
 Network Control Technician  
 Network Training and Support Specialist  
 Programmer Analyst<sup>1</sup>  
 Sales and Service  
 Scientific Programmer<sup>1</sup>  
 Software Consultant  
 Software Developer<sup>1</sup>  
 Systems Analyst<sup>1</sup>  
 Systems Programmer<sup>1</sup>  
 Technical Support Representative  
 Telecommunications Programmer<sup>1</sup>  
 Telecommunications Technician  
 Telecommunications Technical Engineer<sup>1</sup>  
 Training Specialist  
 Web Designer  
 Web Developer

<sup>1</sup> 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-140	CSIS-180
CIS-190	CSIS-112
CIS-191	CSIS-113
CIS-211	CSIS-132
CIS-213	CSIS-133
CIS-215	CSIS-135
CS-119	CSIS-119
CS-181	CSIS-296
CS-182	CSIS-293
CS-281	CSIS-297
CS-282	CSIS-294

## 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

Code	Title	Units
<b>Core Curriculum</b>		
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
<b>Area of Emphasis</b>		
CIS-190 or CIS-191	Windows Operating System 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 or CIS-263	Cisco CyberOps Fundamentals of Network Security	3
Select three of the following:		6.5-10
CIS-101	Fundamentals of Information Technology	
CIS-210	Cisco Networking Academy - Voice	
CIS-261	NSSA Degree Capstone	
CIS-264	Ethical Cybersecurity Hacking	
CIS-265	Computer Forensics Fundamentals	
CIS-271	Palo Alto Networks - Certified Network Security Administrator (PCNSA)	

CIS-272	Palo Alto Networks Firewall Configuration, Management, and Threat Prevention
<b>Total Units</b>	<b>34.5-38</b>

Plus General Education Requirements (p. 55)

## 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.

## Networking, Security and System Administration - Enterprise System Administration Associate in Science and Certificate of Achievement



See *Business Office Technology for specific Microsoft applications (Word, Excel, PowerPoint, etc.)*.

## 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).

## 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<sup>1</sup>  
 Computing Analyst<sup>1</sup>  
 Cyber Security Specialist  
 Database Manager<sup>1</sup>  
 Information Specialist  
 Information Systems Programmer<sup>1</sup>

LAN/WAN Manager  
 Manufacturer's Representative  
 Network Administrator  
 Network Analyst<sup>1</sup>  
 Network Consultant  
 Network Control Technician  
 Network Training and Support Specialist  
 Programmer Analyst<sup>1</sup>  
 Sales and Service  
 Scientific Programmer<sup>1</sup>  
 Software Consultant  
 Software Developer<sup>1</sup>  
 Systems Analyst<sup>1</sup>  
 Systems Programmer<sup>1</sup>  
 Technical Support Representative  
 Telecommunications Programmer<sup>1</sup>  
 Telecommunications Technician  
 Telecommunications Technical Engineer<sup>1</sup>  
 Training Specialist  
 Web Designer  
 Web Developer

<sup>1</sup> 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-140	CSIS-180
CIS-190	CSIS-112
CIS-191	CSIS-113
CIS-211	CSIS-132
CIS-213	CSIS-133
CIS-215	CSIS-135
CS-119	CSIS-119
CS-181	CSIS-296
CS-182	CSIS-293
CS-281	CSIS-297
CS-282	CSIS-294

## 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

Code	Title	Units
<b>Core Curriculum</b>		
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
<b>Area of Emphasis</b>		
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
Select four of the following:		10-12
CIS-140	Databases	
CIS-162	Technical Diagramming Using Microsoft Visio	
CIS-170	Internet of Things (IoT) - Connecting Things	
CIS-172	Internet of Things (IoT) Security	
CIS-261	NSSA Degree Capstone	
CIS-263	Fundamentals of Network Security	
CIS-264	Ethical Cybersecurity Hacking	
CIS-265	Computer Forensics Fundamentals	
CIS-295	VMware Certified Professional	
<b>Total Units</b>		<b>38-40</b>

Plus General Education Requirements (p. 55)

## 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.

## Web Development Associate in Science and Certificate of Achievement



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.

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<sup>1</sup>  
 Computing Analyst<sup>1</sup>  
 Cyber Security Specialist  
 Database Manager<sup>1</sup>  
 Information Specialist  
 Information Systems Programmer<sup>1</sup>  
 LAN/WAN Manager  
 Manufacturer's Representative  
 Network Administrator  
 Network Analyst<sup>1</sup>  
 Network Consultant  
 Network Control Technician  
 Network Training and Support Specialist  
 Programmer Analyst<sup>1</sup>  
 Sales and Service  
 Scientific Programmer<sup>1</sup>  
 Software Consultant  
 Software Developer<sup>1</sup>  
 Systems Analyst<sup>1</sup>  
 Systems Programmer<sup>1</sup>  
 Technical Support Representative  
 Telecommunications Programmer<sup>1</sup>  
 Telecommunications Technician  
 Telecommunications Technical Engineer<sup>1</sup>  
 Training Specialist  
 Web Designer  
 Web Developer

<sup>1</sup> 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-140	CSIS-180
CIS-190	CSIS-112
CIS-191	CSIS-113
CIS-211	CSIS-132
CIS-213	CSIS-133
CIS-215	CSIS-135
CS-119	CSIS-119
CS-181	CSIS-296
CS-182	CSIS-293

CS-281	CSIS-297
CS-282	CSIS-294

## 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

Code	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
Select one of the following:		1-4
CIS-220	E-Commerce and Web Presence	
CIS-225	Web Development Capstone	
CIS-267	Directed Work Experience in CIS	
Select two of the following:		6-8
CIS-110	Principles of Information Systems	
CIS-191	Linux Operating System	
CS-182	Introduction to Java Programming	
GD-126	Adobe Photoshop Digital Imaging	
GD-130	Professional Business Practices	
GD-217	Web Graphics	
GD-222	Web Animation	
<b>Total Units</b>		<b>29-34</b>

Plus General Education Requirements (p. 55)

## 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.

## Cisco Certified Network Associate Certificate 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.

## 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

Code	Title	Units
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
<b>Total Units</b>		<b>12</b>

## Cisco Network Professional Certificate 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.

## 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

Code	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
<b>Total Units</b>		<b>12</b>

## Computer Programming Certificate 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.

### 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

Code	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	
CS-281	Intermediate C++ Programming and Fundamental Data Structures	4
or CS-282	Intermediate Java Programming and Fundamental Data Structures	
<b>Total Units</b>		<b>12</b>

## Computer Support Technician Certificate 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.

### 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

Code	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
<b>Total Units</b>		<b>15</b>

## Cyber Security Specialist Certificate 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.

### 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

Code	Title	Units
CIS-125	Network+ Certification	3
CIS-190	Windows Operating System	3

or CIS-191	Linux Operating System	
CIS-209	Cisco CyberOps	3
or CIS-263	Fundamentals of Network Security	
CIS-264	Ethical Cybersecurity Hacking	3
CIS-265	Computer Forensics Fundamentals	3
<b>Total Units</b>		<b>15</b>

## Web Design Certificate 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.

### 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

Code	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
<b>Total Units</b>		<b>15</b>

## Web Programming Certificate 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.

## 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

Code	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
<b>Total Units</b>		<b>15</b>

## Computer Science



- Computer Science for Transfer (AS-T) (p. 155)
- Mechatronics Certificate of Achievement (p. 156)



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

## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
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	
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
PHYC-201	Mechanics and Waves	5
<b>Units in the Major</b>		<b>33</b>
Double-Counted Units		10
Plus General Education Requirements (IGETC only) <sup>1</sup>		37
<b>Total Units</b>		<b>60</b>

<sup>1</sup> General Education Requirements (IGETC only). (p. 55)

## Mechatronics Certificate of Achievement



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

Code	Title	Units
CADD-125/ENGR-125 or CADD-129/ ENGR-129	Solid Modeling Design Engineering Solid Modeling	3
CS-181	Introduction to C++ Programming	4
CIS-267 or ENGR-182	Directed Work Experience in CIS Work Experience in Engineering Technology	1-4
ENGR-100	Introduction to Engineering and Design	4
ET-110	Introduction to Electricity and Electronics	4
<b>Total Units</b>		<b>16-19</b>

## 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



- Environmental Management Associate in Science (p. 157)
- Environmental Technician Certificate of Achievement (p. 158)
- Laboratory Occupational Safety and Health Technician Certificate of Achievement (p. 158)
- Occupational Safety and Health (OSH) Management Associate in Science (p. 159)
- Occupational Safety and Health (OSH) Technician Certificate of Achievement (p. 159)

## Environmental Management Associate in Science



### Environmental Health and Safety Management

Nearly every industry worldwide needs environmental health and safety management. In compliance with federal, state, and local legislation, EHS professionals will support businesses lessening their impact on the environment and reducing risks and hazards in their workplaces. Hazard management includes air, soil, and water pollution, hazardous chemicals and wastes, solid waste, ergonomics, workplace safety, chemical, physical, and biological exposures, noise and lighting hazards, recycling, and sustainability management. EHS also provides emergency response to chemical, biological and nuclear spills and provides compliance with emergency response planning.

The Environmental Health and Safety Management department offers degrees and certificates to provide entry-level skills or upgrade and refine existing skills to perform EHS functions in manufacturing, healthcare, laboratory research, construction, and maritime industries. The programs are specifically designed to prepare students to interpret, analyze and implement various regulations, interpret injury and illness data, and minimize chemical, biological, and physical hazards for employees and the environment. This program emphasizes multicultural applications for training, digital literacy, professional written communications, leadership, and teamwork.

#### Career Opportunities

- Environmental Health and Safety Technician/Specialist
- Toxic Waste Specialist
- Hazardous Waste Technician
- HAZWOPER Emergency Response
- Industrial Hygiene Technician
- Environmental Compliance
- Environmental Protection Specialist
- Environmental Research
- Stormwater/Wastewater Sampling
- Sustainability Technician/Specialist
- Air Quality Specialist
- Phase 1 Investigator
- Phase 2 Sampling Technician
- EHS Consultant
- COVID-19 Program Management
- Environmental Remediation

Risk Management

## Environmental Management Associate in Science

California leads the United States in environmental protection and sustainability efforts, creating a demand for environmental technicians and specialists in every region and most industries. Whether serving entry-level students or refining the skills of existing EHS professionals, students in the EHSM department will receive innovative hands-on training, in-depth regulatory comprehension, and work experience in air, water, hazardous waste, solid waste, and pollution prevention topics. The program prepares students in a broad understanding of environmental topics currently affecting the local, state, federal, and global populations while including culturally sensitive management techniques. Graduates earning an associate degree in Environmental Management may work as a technician or specialist serving hazardous waste, solid waste, environmental health and safety, environmental sciences, sustainability, water pollution, and air pollution industries.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry regulations regarding occupational health and safety, and/or environmental standards.

### Associate in Science Degree Requirements

Code	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	Hazwoper Certification	3
List A		
Select one of the following:		1-4
EHSM-240	Cooperative Work Experience	
EHSM-250	EHS Field Applications	
List B		
Select either:		4-5
BIO-130 & BIO-131 or BIO-240	General Biology I and General Biology I Laboratory Principles of Ecology, Evolution and Organismal Biology	
List C		
Select one of the following:		4-5

CHEM-120	Preparation for General Chemistry	
CHEM-141	General Chemistry I	
List D		
Select one of the following:		3-5
CIS-110	Principles of Information Systems	
COMM-122	Public Speaking	
COMM-124	Intercultural Communication	
SPAN-120	Spanish I	
<b>Total Units</b>		<b>37-44</b>

Plus General Education Requirements (p. 55)

## Environmental Technician Certificate of Achievement



California leads the United States in environmental protection and sustainability efforts, creating a demand for environmental technicians and specialists in every region and most industries. Students in the EHSM department will receive innovative hands-on training, in-depth regulatory comprehension, and work experience in air, water, hazardous waste, solid waste, and pollution prevention topics. The program provides a broad understanding of environmental topics affecting local, state, federal, and global populations while including culturally sensitive management techniques. Graduates earning a Certificate of Achievement may work as an environmental technician serving hazardous waste, solid waste, environmental health and safety, environmental sciences, sustainability, water pollution, and air pollution industries.

### Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry regulations regarding occupational health and safety, and/or environmental standards.

### Certificate Requirements

Code	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	Hazwoper Certification	3
Select one of the following:		1-4
EHSM-240	Cooperative Work Experience	
EHSM-250	EHS Field Applications	
<b>Total Units</b>		<b>26-29</b>

## 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.

## Laboratory Occupational Safety and Health Technician Certificate of Achievement



With thousands of research institutes and industrial biotechnology companies doing business in San Diego, there is now a demand for specifically trained Laboratory Safety Technicians to enter the job market. The EHSM department and industry partners have created robust coursework to meet the needs of laboratory-specific regulations, including hazardous materials and waste management, HAZWOPER certification, and biological, chemical, and radiological regulatory compliance specific to a laboratory setting. Graduates will obtain positions in the laboratory setting as safety technicians, hazardous-waste technicians, environmental technicians, and occupational safety and health technicians.

### 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 in a laboratory setting.
- Perform laboratory hazard recognition, evaluation and control of chemical, biological and physical hazards.
- Properly manage EHS programs in a laboratory setting by providing employee training, program audits, and conducting site inspections.

### Certificate Requirements

Code	Title	Units
EHSM-130	Environmental/Occupational Health Effects of Hazardous Materials	3
EHSM-140	Laboratory Safety Management	4
EHSM-150	Hazardous Waste Management Applications	4
EHSM-200	Hazardous Materials Management (HMM) Applications	4
EHSM-230	Hazwoper Certification	3
Select one of the following:		1-4
EHSM-240	Cooperative Work Experience	



EHSM-250	EHS Field Applications
<b>Total Units</b>	<b>19-22</b>

## Certificate of Achievement

Students who complete the requirements above qualify for a Certificate in Laboratory Safety Technician. An official request must be filed with the Admissions and Records Office prior to the deadline as stated in the Academic Calendar.

## Occupational Safety and Health (OSH) Management Associate in Science



Since the beginning of the industrial revolution, there has been a steady increase in workplace injuries, illnesses, and death. California has the second-highest demand for Occupational Safety and Health technicians in the United States. OSH Technicians inspect workplaces, evaluate hazards, train employees, implement personal protective equipment programs, and help employers comply with safety regulations from local, state, and federal regulatory agencies. The EHSM program has developed a broad range of classes to ensure students have experience and in-depth understanding of safety inspections, air, noise, ventilation, radiological and biological testing, ergonomic services, and providing workplace illness and injury programs. We offer specialty courses in construction and laboratory safety. Students completing the associate degree in OSH management will obtain jobs as an Occupational Safety and Health Technician or Specialist, Environmental Safety and Health Technician or Specialist, Safety Technician or Specialist, Industrial Hygiene Technician or Specialist, and Risk Manager.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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-205	Safety and Risk Management Administration	4
EHSM-230	Hazwoper Certification	3
List A		
Select one of the following:		3-4
EHSM-140	Laboratory Safety Management	
EHSM-145	Construction Safety Standards	
List B		
Select one of the following:		1-4
EHSM-240	Cooperative Work Experience	
EHSM-250	EHS Field Applications	
List C		
Select either:		4-5
BIO-130 & BIO-131	General Biology I and General Biology I Laboratory	
BIO-240	Principles of Ecology, Evolution and Organismal Biology	
List D		
Select one of the following:		4-5
CHEM-120	Preparation for General Chemistry	
CHEM-141	General Chemistry I	
List E		
Select one of the following:		3-5
CIS-110	Principles of Information Systems	
COMM-122	Public Speaking	
COMM-124	Intercultural Communication	
SPAN-120	Spanish I	

**Total Units** 40-48

Plus General Education Requirements (p. 55)

## Occupational Safety and Health (OSH) Technician Certificate of Achievement



Since the beginning of the industrial revolution, there has been a steady increase in workplace injuries, illnesses, and death. California has the second-highest demand for Occupational Safety and Health technicians in the United States. OSH Technicians inspect workplaces, evaluate hazards, train employees, implement personal protective equipment programs, and help employers comply with safety regulations from local, state, and federal regulatory agencies. The EHSM program has developed a broad range of classes to ensure students have experience and in-depth understanding of safety inspections, air, noise, ventilation, radiological and biological testing, ergonomic services, and providing workplace illness and injury programs. We offer specialty courses in

construction and laboratory safety. Students completing the Certificate of Achievement in OSH management will obtain jobs as an Occupational Safety and Health Technician, Environmental Safety and Health Technician, Safety Technician, Industrial Hygiene Technician, and Risk Manager.

## Program Learning Outcomes

Upon successful completion of this certificate, students will be able to:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry regulations regarding occupational health and safety, and/or environmental standards.

## Certificate Requirements

Code	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-205	Safety and Risk Management Administration	4
EHSM-230	Hazwoper Certification	3
List A		
Select one of the following:		3-4
EHSM-140	Laboratory Safety Management	
EHSM-145	Construction Safety Standards	
List B		
Select one of the following:		1-4
EHSM-240	Cooperative Work Experience	
EHSM-250	EHS Field Applications	
<b>Total Units</b>		<b>29-33</b>

## 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



- Arboriculture Associate in Science and Certificate of Achievement (p. 160)
- Floral Design Associate in Science and Certificate of Achievement (p. 161)
- Golf Course and Sports Turf Management Associate in Science and Certificate of Achievement (p. 162)
- Irrigation Technology Associate in Science and Certificate of Achievement (p. 162)
- Landscape Architecture Associate in Science and Certificate of Achievement (p. 163)
- Landscape Technology Associate in Science and Certificate of Achievement (p. 164)
- Nursery Technology Associate in Science and Certificate of Achievement (p. 165)
- Sustainable Urban Landscapes Associate in Science and Certificate of Achievement (p. 165)
- Basic Ornamental Horticulture Certificate of Specialization (p. 166)

## Arboriculture Associate in Science and Certificate of Achievement



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<sup>1</sup>
- Agricultural Researcher<sup>2</sup>
- Arboretum/Park Director<sup>1</sup>
- Arboriculture Technician
- Botanical Illustrator
- County/State Agricultural Advisor<sup>1</sup>
- Environmental Designer<sup>2</sup>
- Floral Designer
- Flower Shop Manager
- Golf Course Superintendent
- Golf Course Worker
- Greenhouse Manager
- Grounds Maintenance Manager
- Grower/Production Manager
- Horticultural Journalist<sup>1</sup>
- Irrigation Consultant
- Landscape Architect<sup>1</sup>
- Landscape Contractor
- Landscape Designer
- Landscape Technician
- Nursery/Garden Center Manager
- Park Planner/Manager<sup>1</sup>
- Plant Breeder/Propagator

Sports Field Manager  
 Turf Manager  
 Urban Forester  
 Water Auditor  
 Water Conservationist<sup>1</sup>

<sup>1</sup> Bachelor Degree normally recommended.

<sup>2</sup> Bachelor Degree or higher required.

## Arboriculture Associate in Science and Certificate of Achievement

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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

### Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select two of the following:		2
OH-263	Urban Forestry	
OH-264	Safe Work Practices in Tree Climbing and Arboriculture	
OH-266	Science in Practice for Arboriculture	
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select nine units from the following:		9
OH-102	Xeriscape: Water Conservation in the Landscape	
OH-150	Landscape Architecture I	

OH-174	Turf and Ground Cover Management
OH-221	Landscape Construction: Irrigation and Carpentry
OH-235	Principles of Landscape Irrigation
OH-250	Landscape Water Management
OH-255	Sustainable Urban Landscape Principles and Practices
OH-275	Diagnosing Horticultural Problems
SPAN-120	Spanish I

**Total Units** **32**

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

### Floral Design Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

### Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select nine units from the following:		9
ART-120	Two-Dimensional Design	
ART-124	Drawing I	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-128	Business Communication	
OH-121	Plant Propagation	
OH-170	Plant Materials: Trees and Shrubs	
OH-240	Greenhouse Plant Production	
<b>Total Units</b>		<b>33</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Golf Course and Sports Turf Management Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.

- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select seven units from the following:		7
OH-102	Xeriscape: Water Conservation in the Landscape	
OH-220	Landscape Construction: Concrete and Masonry	
OH-221	Landscape Construction: Irrigation and Carpentry	
OH-250	Landscape Water Management	
OH-265	Golf Course and Sports Turf Management	
OH-275	Diagnosing Horticultural Problems	
SPAN-120	Spanish I	
<b>Total Units</b>		<b>32</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Irrigation Technology Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select nine units from the following:		9
OH-130	Plant Pest Control	
OH-150	Landscape Architecture I	
OH-170	Plant Materials: Trees and Shrubs	
OH-174	Turf and Ground Cover Management	
OH-200/CADD-200	Introduction to Computer-Aided Landscape Design <sup>2</sup>	
OH-225	Landscape Contracting	
OH-238	Irrigation System Design	
SPAN-120	Spanish I	
<b>Total Units</b>		<b>32</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> Student must complete six units within the major at Cuyamaca College to be eligible for this course.

<sup>2</sup> 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.

## Landscape Architecture Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
ART-140	Survey of Western Art I: Prehistory through Middle Ages	
ART-141	Survey of Western ART II: Renaissance through Modern	
ART-144	Architecture of the 20th and 21st Centuries	
Select four units (minimum) from the following:		4-6
OH-180	Plant Materials: Annuals and Perennials	
OH-201/CADD-201	Advanced Computer-Aided Landscape Design	
OH-221	Landscape Construction: Irrigation and Carpentry	
OH-222	Japanese Garden Design and Construction	
OH-225	Landscape Contracting	
OH-255	Sustainable Urban Landscape Principles and Practices	
OH-263	Urban Forestry	
<b>Total Units</b>		<b>34-36</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Landscape Technology Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select five units from the following:		5-5.5
OH-102	Xeriscape: Water Conservation in the Landscape	
OH-105	Edibles in Urban Landscapes	
OH-150	Landscape Architecture I	
OH-151	Landscape Architecture II	
OH-174	Turf and Ground Cover Management	
OH-220	Landscape Construction: Concrete and Masonry	
OH-221	Landscape Construction: Irrigation and Carpentry	
OH-222	Japanese Garden Design and Construction	
OH-225	Landscape Contracting	
OH-255	Sustainable Urban Landscape Principles and Practices	
OH-260	Arboriculture	
OH-275	Diagnosing Horticultural Problems	
SPAN-120	Spanish I	
<b>Total Units</b>		<b>32-32.5</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Nursery Technology Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select eight units from the following:		8-9
BIO-122	The Secret Life of Plants	

OH-102	Xeriscape: Water Conservation in the Landscape
OH-114	Floral Design I
OH-150	Landscape Architecture I
OH-240	Greenhouse Plant Production
SPAN-120	Spanish I
<b>Total Units</b>	<b>32-33</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Sustainable Urban Landscapes Associate in Science and Certificate of Achievement



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Career Opportunities

Irrigation Manager  
Landscape Design Consultant  
Landscape Maintenance Supervisor  
Landscape Manager  
Landscape Water Auditor

Water Conservation Specialist

## Associate in Science Degree Requirements

Code	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 <sup>1</sup>	3
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select a minimum of eight units from the following:		8-8.5
OH-102	Xeriscape: Water Conservation in the Landscape	
OH-105	Edibles in Urban Landscapes	
OH-150	Landscape Architecture I	
OH-180	Plant Materials: Annuals and Perennials	
OH-220	Landscape Construction: Concrete and Masonry	
OH-221	Landscape Construction: Irrigation and Carpentry	
OH-235	Principles of Landscape Irrigation	
OH-260	Arboriculture	
OH-266	Science in Practice for Arboriculture	
<b>Total Units</b>		<b>31-31.5</b>

Plus General Education Requirements (p. 55)

<sup>1</sup> 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.

## Basic Ornamental Horticulture Certificate of Specialization



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:

- Perform work-related functions according to current industry standards.
- Assess and resolve work-related problems using current industry-specific tools and resources.
- Communicate effectively to prospective clients, managers and coworkers in a workplace setting.
- Abide by industry and government regulations regarding occupational health and safety, and/or environmental standards.

## Certificate Requirements

Code	Title	Units
OH-120	Fundamentals of Ornamental Horticulture	3
OH-170	Plant Materials: Trees and Shrubs	3
Select one of the following:		3
OH-130	Plant Pest Control	
OH-140	Soils	
OH-180	Plant Materials: Annuals and Perennials	
Select one of the following:		3
BUS-110	Introduction to Business	
BUS-111	Entrepreneurship: Starting and Developing a Business	
BUS-125	Business Law: Legal Environment of Business	
Select at least three units from the following:		3
OH-114	Floral Design I	
OH-121	Plant Propagation	
OH-150	Landscape Architecture I	
OH-174	Turf and Ground Cover Management	
OH-220	Landscape Construction: Concrete and Masonry	
OH-221	Landscape Construction: Irrigation and Carpentry	
OH-260	Arboriculture	
<b>Total Units</b>		<b>15</b>

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 Associate in Science and Certificate of Achievement



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

Code	Title	Units
CADD-115 or ENGR-100	Engineering Graphics Introduction to Engineering and Design	3-4
CADD-120	Introduction to Computer-Aided Drafting and Design	3
SURV-127/CADD-127	Survey Drafting Technology	3
MATH-170	Analytic Trigonometry	3
PHYC-110	Introductory Physics	4
SURV-218/ENGR-218	Plane Surveying	4
SURV-220	Boundary Control and Legal Principles	3

SURV-240	Advanced Surveying	4
<b>Total Units</b>		<b>27-28</b>

Plus General Education Requirements (p. 55)

## 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 Sciences



- Biological Sciences: Pre-Allied Health Associate in Science (p. 168)
- General Studies: Lifelong Health, Well-Being and Self-Development (p. 168)
- Kinesiology (p. 169)
- Public Health Science for Transfer (AS-T) (p. 172)

### Biological Sciences: Pre-Allied Health Associate in Science



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

Code	Title	Units
BIO-140	Human Anatomy	4
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
COMM-122	Public Speaking	3
PSY-120	Introductory Psychology	3
SOC-120	Introductory Sociology	3
<b>Total Units</b>		<b>27</b>

Plus General Education Requirements (p. 55)

**Recommended Electives:** CD-125 Child Growth and Development or PSY-150 Developmental Psychology; MATH-160 Elementary Statistics

### 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**  
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 Intercollegiate Basketball, ES-209 Intercollegiate Cross-Country, ES-213 Intercollegiate Golf, ES-218 Intercollegiate Soccer, ES-224 Intercollegiate Tennis, ES-227 Intercollegiate Track, ES-230 Intercollegiate Volleyball and ES-249 Competencies for Intercollegiate Athletes.

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.

## 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.

Code	Title	Units
<b>Health</b>		
BIO-115	Biology of Alcohol and Other Drugs	3
HED-105	Health Education for Teachers	1
HED-120	Personal Health and Lifestyles	3
HED-201	Introduction to Public Health	3
HED-202	Health Professions and Organizations	3
HED-203	Substance Abuse and Public Health	3
HED-204	Health and Social Justice	3
HED-251	Healthy Lifestyles: Theory and Application	3
<b>Exercise Science</b>		
ES-206	Intercollegiate Basketball	3
ES-209	Intercollegiate Cross-Country	3
ES-213	Intercollegiate Golf	3
ES-218	Intercollegiate Soccer	3
ES-224	Intercollegiate Tennis	3
ES-227	Intercollegiate Track	3
ES-230	Intercollegiate Volleyball	3
ES-248	Conditioning for Intercollegiate Athletes	1
ES-249	Competencies for Intercollegiate Athletes	2-4
ES-250	Introduction to Kinesiology	3
ES-253	Physical Education in Elementary Schools	3
ES-255	Care and Prevention of Athletic and Recreational Injuries	3
ES-270	Cooperative Games	1
ES-271	Fitness Walking with Children	1
ES-272	Issues in Childhood Obesity	1
<b>Nutrition</b>		
NUTR-155	Introduction to Nutrition	3
NUTR-158	Nutrition for Fitness and Sports	3
NUTR-255	Science of Nutrition	3
<b>Self-Development</b>		
COUN-110	Career Decision Making	1
COUN-120	College and Career Success	3
COUN-130	Study Skills and Time Management	1
COUN-140	Self Awareness and Interpersonal Relationships	3
COUN-150	Transfer Success	1

## Kinesiology



- Kinesiology for Transfer (AA-T) (p. 169)
- Exercise Science Associate in Science (p. 170)
- Recreational Leadership–School-Based Programs Certificate of Specialization (p. 171)



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

## 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
BIO-140	Human Anatomy	4
BIO-141	Human Physiology	3
BIO-141L	Laboratory in Human Physiology	1
ES-250	Introduction to Kinesiology	3
<b>Movement Based Courses</b>		
Select one course from three different areas for a minimum of three units:		3-4
<b>Combatives</b>		
ES-180	Self Defense for Women	
<b>Fitness</b>		
ES-009A	Beginning Aerobic Dance Exercise	
ES-009B	Intermediate Aerobic Dance Exercise	
ES-009C	Advanced Aerobic Dance Exercise	
ES-014A	Beginning Body Building	
ES-014B	Intermediate Body Building	
ES-014C	Advanced Body Building	
ES-019A	Beginning Physical Fitness	
ES-019B	Intermediate Physical Fitness	
ES-019C	Advanced Physical Fitness	
<b>Individual Sports</b>		
ES-060A	Beginning Badminton	
ES-060B	Intermediate Badminton	
ES-060C	Advanced Badminton	
ES-076A	Beginning Tennis	
ES-076B	Intermediate Tennis	
ES-076C	Advanced Tennis	
ES-125A	Beginning Golf	
ES-125B	Intermediate Golf	
ES-125C	Advanced Golf	
<b>Team Sports</b>		
ES-155A	Beginning Basketball	
ES-155B	Intermediate Basketball	
ES-155C	Advanced Basketball	
ES-170A	Beginning Soccer	
ES-170B	Intermediate Soccer	
ES-170C	Advanced Soccer	
ES-171A	Beginning Softball	
ES-171B	Intermediate Softball	
ES-171C	Advanced Softball	
ES-175A	Beginning Volleyball	
ES-175B	Intermediate Volleyball	
ES-175C	Advanced Volleyball	

### List A

Select one Chemistry course:	5
CHEM-102	Introduction to General, Organic and Biological Chemistry
MATH-160	Elementary Statistics
<b>Units in the Major</b>	<b>23-24</b>
10-11.5 units may be double-counted with GE	
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)	39/37
Total Transferable Elective Units	7.5-9
<b>Total Units</b>	<b>60</b>

Please note: SDSU accepts this degree for students transferring into Exercise Science Generalist.

## Exercise Science Associate in 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<sup>1</sup>  
 Cardiovascular Rehabilitation<sup>1</sup>  
 College Professor<sup>1</sup>

Elementary School Teacher<sup>1</sup>  
 Exercise Physiologist<sup>1</sup>  
 Health Club Manager<sup>1</sup>  
 Personal Trainer  
 Physical Therapist/ Assistant<sup>1</sup>  
 Registered Dietician<sup>1</sup>  
 Secondary School Teacher<sup>1</sup>  
 Teaching<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	Title	Units
BIO-130	General Biology I	3
BIO-131	General Biology I Laboratory	1
BIO-140	Human Anatomy	4
COMM-122	Public Speaking	3
ES-250	Introduction to Kinesiology	3
ES-255	Care and Prevention of Athletic and Recreational Injuries	3
PSY-120	Introductory Psychology	3
SOC-120	Introductory Sociology	3
Select one of the following:		4-5
CHEM-102	Introduction to General, Organic and Biological Chemistry	
CHEM-115	Fundamentals of Chemistry	
CHEM-120	Preparation for General Chemistry	
CHEM-141	General Chemistry I	
Select one of the following:		1.5
ES-014A	Beginning Body Building	
ES-014B	Intermediate Body Building	
ES-014C	Advanced Body Building	
ES-019A	Beginning Physical Fitness	
ES-019B	Intermediate Physical Fitness	
ES-019C	Advanced Physical Fitness	
Select one of the following:		3
NUTR-158	Nutrition for Fitness and Sports	
NUTR-255	Science of Nutrition <sup>1</sup>	
Select one of the following:		3-4
BIO-215	Statistics for Life Sciences	
MATH-160	Elementary Statistics	
PSY-215	Statistics for the Behavioral Sciences	
Select two of the following (fulfills the activity requirement for the associate degree):		2-3
ES-001	Adapted Physical Exercise	
ES-009A	Beginning Aerobic Dance Exercise	
ES-009B	Intermediate Aerobic Dance Exercise	
ES-009C	Advanced Aerobic Dance Exercise	
ES-019A	Beginning Physical Fitness	
ES-019B	Intermediate Physical Fitness	
ES-019C	Advanced Physical Fitness	
ES-028A	Beginning Yoga	

ES-028B	Intermediate Yoga
ES-028C	Advanced Yoga
ES-060A	Beginning Badminton
ES-060B	Intermediate Badminton
ES-060C	Advanced Badminton
ES-076A	Beginning Tennis
ES-076B	Intermediate Tennis
ES-076C	Advanced Tennis
ES-125A	Beginning Golf
ES-125B	Intermediate Golf
ES-125C	Advanced Golf
ES-155A	Beginning Basketball
ES-155B	Intermediate Basketball
ES-155C	Advanced Basketball
ES-170A	Beginning Soccer
ES-170B	Intermediate Soccer
ES-170C	Advanced Soccer
ES-171A	Beginning Softball
ES-171B	Intermediate Softball
ES-171C	Advanced Softball
ES-175A	Beginning Volleyball
ES-175B	Intermediate Volleyball
ES-175C	Advanced Volleyball
<b>Total Units</b>	<b>36.5-39.5</b>

<sup>1</sup> Students planning to transfer to SDSU must take NUTR-255 Science of Nutrition.

Plus General Education Requirements (p. 55)

## Recreational Leadership–School-Based Programs Certificate of Specialization



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

Code	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
<b>Total Units</b>		<b>12</b>



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

## 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 grade point average (GPA) of 2.0;
4. Minimum of 18 semester or 27 quarter units in the major or area of emphasis;
5. Grade of "C" or higher or "Pass" in all courses required for the major or area of emphasis.

## Program Learning Outcomes

Upon completion of this program, 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<sup>1</sup>, teaching<sup>1</sup>, research<sup>1</sup>, program planning<sup>1</sup>, health promotion<sup>1</sup>, 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

<sup>1</sup> Bachelor degree or higher recommended.

## Associate in Science for Transfer Degree Requirements

Code	Title	Units
<b>Core Curriculum Requirements</b>		
BIO-130	General Biology I	3

BIO-131	General Biology I Laboratory	1
BIO-140	Human Anatomy	4
BIO-141	Human Physiology	3
BIO-141L	Laboratory 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
<b>List A</b>		
Select one of the following:		3
ECON-120	Principles of Macroeconomics	
ECON-121	Principles of Microeconomics	
HED-202	Health Professions and Organizations	
HED-203	Substance Abuse and Public Health	
HED-204	Health and Social Justice	
PSY-134	Human Sexuality	
SOC-120	Introductory Sociology	
<b>Units in the Major</b>		<b>32</b>
16-19/13-16 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		5-8/4-7
<b>Total Units</b>		<b>60</b>



## Language and Communication



- American Sign Language (p. 174)
- Arabic Studies Associate in Arts and Certificate of Achievement (p. 175)
- Communication (p. 175)
- English (p. 177)
- General Studies: Communication and Language Arts (p. 179)
- Spanish (p. 180)
- University Studies: Communication and Language Arts (p. 181)

## American Sign Language



- American Sign Language Associate in Arts (p. 174)
- American Sign Language Certificate of Achievement (p. 174)

## American Sign Language Associate in Arts



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<sup>1</sup>  
 Interpreter<sup>2</sup>  
 Preschool Aide  
 Program Coordinator<sup>1</sup>  
 Rehabilitation Counselor<sup>1</sup>  
 Social Work<sup>1</sup>  
 Social Work Aide  
 Special Education Classroom Aide  
 Teacher<sup>1</sup>

<sup>1</sup> Bachelor degree or higher required.

<sup>2</sup> Certification required.

## Associate in Arts Degree Requirements

Code	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
Select one unit from the following:		1
ASL-125	American Sign Language with Infants and Toddlers	
ASL-126	American Sign Language With School Age Children	

**Total Units** **23**

Plus General Education Requirements (p. 55)

## American Sign Language 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.

- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

## Certificate Requirements

Code	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
Select five to six units from the following:		5-6
ASL-125	American Sign Language with Infants and Toddlers	
ASL-126	American Sign Language With School Age Children	
ASL-130	American Sign Language: Fingerspelling	
ASL-140	Inside Deaf Culture	
<b>Total Units</b>		<b>21-22</b>

## 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 Associate in Arts and Certificate of Achievement



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 clearly and effectively in a variety of media and/or contexts (speech, writing, and/or sign language).
- Apply discipline-specific theories about language and communication to students' own practice or work.

## Associate in Arts Degree Requirements

Code	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 or ARBC-220	Arabic for the Arabic Speaker I Arabic III	5
ARBC-180/BOT-180	Basic Computer Skills for Arabic Learners	1
ARBC-123 or ARBC-221	Arabic for the Arabic Speaker II Arabic IV	5
ARBC-250 or ARBC-254	Conversational Arabic I Conversational Iraqi Dialect	3
ARBC-251	Conversational Arabic II	3
<b>Total Units</b>		<b>33</b>

Plus General Education Requirements (p. 55)

## 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



- Communication Studies for Transfer (AA-T) (p. 175)
- Communication Studies 2.0 for Transfer (AA-T) (p. 176)
- Communication Associate in Arts (p. 177)



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

## 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 higher or "Pass" 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.
- Critically analyze, critique and synthesize arguments and information.
- Communicate clearly and effectively in a variety of media and/or contexts.
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

## Associate in Arts Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
COMM-122	Public Speaking	3
<b>List A</b>		
Select two of the following:		6
COMM-120	Interpersonal Communication	
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
<b>List B</b>		
Select two of the following:		6
COMM-110	Introduction to Mass Communication	
COMM-124	Intercultural Communication	
Any course from List A not selected above		
<b>List C</b>		
Select one of the following:		3
ANTH-120	Cultural Anthropology	
ENGL-122	Introduction to Literature	
ENGL-124	Advanced Composition: Critical Reasoning and Writing	
PSY-120	Introductory Psychology	
SOC-120	Introductory Sociology	
Any course from Lists A or B not selected above		
<b>Units in the Major</b>		<b>18</b>
12-15 units may be double counted		

Plus General Education Requirements (CSU GE or IGETC-CSU) 39/37 (p. 55)

Total Transferable Elective Units 18/17

**Total Units 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.



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

## Communication Studies 2.0 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 2.0 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 higher or "Pass" 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.
- Critically analyze, critique and synthesize arguments and information.
- Communicate clearly and effectively in a variety of media and/or contexts.
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

## Associate in Arts Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3
<b>List A</b>		
Select three of the following:		9
COMM-110	Introduction to Mass Communication	
COMM-124	Intercultural Communication	
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
<b>List B</b>		
Select one of the following:		3
COMM-123	Advanced Public Speaking	
ENGL-124	Advanced Composition: Critical Reasoning and Writing	
Any course from List A not selected above		
<b>Units in the Major</b>		<b>18</b>
12 units may be double-counted		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		15/17
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into the Health Communication Major and the Communication Major in Applied Arts and Sciences emphases.

## Communication Associate in Arts



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.
- Critically analyze, critique and synthesize arguments and information.
- Communicate clearly and effectively in a variety of media and/or contexts.
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

### Career Opportunities

Training

Education  
Consulting  
Human Resources  
Public Relations  
Sales

Communication graduates often pursue additional degrees in fields such as law, political science, management, and marketing.

## Associate in Arts Degree Requirements

Code	Title	Units
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3
List A: Select two from the following:		6
COMM-123	Advanced Public Speaking	
COMM-137	Critical Thinking in Group Communication	
COMM-145	Argumentation	
List B: Select two from the following:		6
COMM-110	Introduction to Mass Communication	
COMM-124	Intercultural Communication	
Any course not selected from list A above		
<b>Total Units</b>		<b>18</b>

Plus General Education Requirements (p. 55)

### English



- English for Transfer (AA-T) (p. 177)
- English Associate in Arts and Certificate of Achievement (p. 178)



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

### 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 higher or "Pass" 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:

- Communicate clearly and effectively in a variety of media and/or contexts.
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.
- Develop and support an original argument or interpretation with analysis of relevant evidence.
- Analyze how authors use language and/or texts to illuminate, critique, and/or shape reality.

## Associate in Arts Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
ENGL-122	Introduction to Literature	3
ENGL-124	Advanced Composition: Critical Reasoning and Writing	3
<b>List A</b>		
Select two of the following:		6
ENGL-221	British Literature I	
ENGL-222	British Literature II	
ENGL-231	American Literature I	
ENGL-232	American Literature II	
ENGL-270	World Literature I	
ENGL-271	World Literature II	
<b>List B</b>		
Select one of the following:		3
ENGL-126	Creative Writing	
ENGL-201	Women, Gender, and Sexuality in Literature	
ENGL-202	Introduction to Film as Literature	
ENGL-214	Masterpieces of Drama	
ENGL-217	Fantasy and Science Fiction	
Any course from List A not selected above		
<b>List C</b>		
Select one of the following:		3-5
ENGL-236	Chicana/o Literature	
ENGL-238	Black Literature	
ARBC-120	Arabic I	
ARBC-121	Arabic II	
ARBC-130	Arabic Literature and Culture	

ARBC-220	Arabic III	
ARBC-221	Arabic IV	
SPAN-120	Spanish I	
SPAN-121	Spanish II	
SPAN-220	Spanish III	
SPAN-221	Spanish IV	
Any course from Lists A or B not selected above		
<b>Units in the Major</b>		<b>18-20</b>
9 units may be double counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		37-39
Total Transferable Elective Units		10-14
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into English-Applied Arts and Sciences major.

## English Associate in Arts and Certificate of Achievement



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:

- Communicate clearly and effectively in a variety of media and/or contexts.
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.
- Develop and support an original argument or interpretation with analysis of relevant evidence.
- Analyze how authors use language and/or texts to illuminate, critique, and/or shape reality.

## 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  
 Editor  
 Freelance Writer  
 Interpreter & Translator  
 Lawyer  
 Librarian  
 News Reporter  
 Paralegal  
 Public Relations Manager  
 Public Relations Specialist  
 Teacher  
 Technical Writer  
 Writer & Author

SOC-114/ Introduction to Race & Ethnicity  
 ETHN-114

**Total Units** **25-28**

Plus General Education Requirements (p. 55)

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).

## Associate in Arts Degree Requirements

Code	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
Select two of the following:		6
ENGL-221	British Literature I	
ENGL-222	British Literature II	
ENGL-231	American Literature I	
ENGL-232	American Literature II	
ENGL-270	World Literature I	
ENGL-271	World Literature II	
Select one of the following:		3
ENGL-130	Short Fiction Writing I	
ENGL-140	Poetry Writing I	
ENGL-201	Women, Gender, and Sexuality in Literature	
ENGL-202	Introduction to Film as Literature	
ENGL-214	Masterpieces of Drama	
ENGL-217	Fantasy and Science Fiction	
ENGL-236	Chicana/o Literature	
ENGL-238	Black Literature	
Select one of the following:		3
ANTH-120	Cultural Anthropology	
COMM-110	Introduction to Mass Communication	
COMM-124	Intercultural Communication	
COMM-145	Argumentation	
HIST-100	Early World History	
HIST-101	Modern World History	
HUM-111/ ETHN-111	Culture, Art & Ideas of the United States	
HUM-115	Arts and Culture in Local Context - San Diego	
HUM-155	World Mythology through the Humanities	
MUS-111	History of Jazz	
MUS-123	History of Hip-Hop Culture	
PHIL-110	A General Introduction to Philosophy	

## 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**  
 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.

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. .

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to analyze information and write effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

## Communication

Code	Title	Units
BUS-128	Business Communication	3
COMM-110	Introduction to Mass Communication	3
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3
COMM-123	Advanced Public Speaking	3
COMM-124	Intercultural Communication	3
COMM-137	Critical Thinking in Group Communication	3
COMM-145	Argumentation	3

## Language Arts

Code	Title	Units
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-250	Conversational Arabic I	3
ARBC-251	Conversational Arabic II	3
ARBC-254	Conversational Iraqi Dialect	3
ARBC-256	Conversational Levantine Dialect	3
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
ENGL-122	Introduction to Literature	3
ENGL-124	Advanced Composition: Critical Reasoning and Writing	3
ENGL-126	Creative Writing	3
ENGL-201	Women, Gender, and Sexuality in Literature	3
ENGL-202	Introduction to Film as Literature	3
ENGL-217	Fantasy and Science Fiction	3
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-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	3
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-220	Kumeyaay Language III	4
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

## Spanish



- Spanish for Transfer (AA-T) (p. 180)
- Spanish Associate in Arts and Certificate of Achievement (p. 181)



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

## 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 higher or "Pass" 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:

- Communicate clearly and effectively in a variety of media and/or contexts (speech, writing, and/or sign language).
- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

## Associate in Arts Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
SPAN-120	Spanish I	5
SPAN-121	Spanish II	5
SPAN-220	Spanish III	5
SPAN-221	Spanish IV	5
<b>List A</b>		
Select one of the following:		3
ETHN-118/ HIST-118	U.S. History: Chicano/Chicana Perspectives I	
ETHN-119/ HIST-119	U.S. History: Chicano/Chicana Perspectives II	
ETHN-236/ ENGL-236	Chicana/o Literature	
SPAN-141	Spanish and Latin American Cultures	
SPAN-145	Hispanic Civilizations	
SPAN-250	Conversational Spanish I <sup>1</sup>	
SPAN-251	Conversational Spanish II <sup>1</sup>	
<b>Units in the Major</b>		<b>23</b>
6-9 units CSU/3-6 units IGETC may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU (p. 55))		39/37
Total Transferable Elective Units		4-7/3-6
<b>Total Units</b>		<b>60</b>

<sup>1</sup> Substitution Courses:  
SPAN-250 Conversational Spanish I may be substituted for SPAN-120 Spanish I for students placing at the level of SPAN-121 Spanish II.  
SPAN-251 Conversational Spanish II may be substituted for SPAN-121 Spanish II for students placing into SPAN-220 Spanish III.

Please note: SDSU accepts this degree for students transferring into Spanish B.A.

## Spanish Associate in Arts and Certificate of Achievement



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:

- Communicate clearly and effectively in a variety of media and/or contexts (speech, writing, and/or sign language).

- Apply discipline-specific theories about language and communication to students' own practice or work.
- Navigate norms related to communicating in diverse environments, including professional, intercultural, and/or specialized settings.

## Career Opportunities

Bilingual Aide  
Border Patrol Officer  
Buyer  
Court Interpreter  
Counseling  
Customs Agent/Inspector  
Foreign Exchange Clerk  
Foreign Student Advisor<sup>1</sup>  
Interpreter  
Journalist<sup>1</sup>  
Museum Curator<sup>1</sup>  
Physician<sup>1</sup>  
Scientific Linguist<sup>1</sup>  
Tour Guide  
Tutor

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	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
Select one of the following:		3
HIST-118	U.S. History: Chicano/Chicana Perspectives I	
HIST-119	U.S. History: Chicano/Chicana Perspectives II	
SPAN-141	Spanish and Latin American Cultures	
SPAN-145	Hispanic Civilizations	
<b>Total Units</b>		<b>29</b>

Plus General Education Requirements (p. 55)

## 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

Choose a minimum of 18 units. 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.

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. .

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Demonstrate the ability to analyze information and write effectively.
- Organize thoughts and ideas in both oral and written format.
- Communicate effectively with diverse audiences.

## Communication

Code	Title	Units
BUS-128	Business Communication <sup>1</sup>	3
COMM-110	Introduction to Mass Communication	3
COMM-120	Interpersonal Communication	3
COMM-122	Public Speaking	3
COMM-123	Advanced Public Speaking	3
COMM-124	Intercultural Communication	3
COMM-137	Critical Thinking in Group Communication	3
COMM-145	Argumentation	3

<sup>1</sup> Course not UC transferable.

## Language Arts

Code	Title	Units
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-122	Arabic for the Arabic Speaker I	5
ARBC-123	Arabic for the Arabic Speaker II	5
ARBC-220	Arabic III	5
ARBC-221	Arabic IV	5
ARBC-254	Conversational Iraqi Dialect	3
ARBC-256	Conversational Levantine Dialect <sup>1</sup>	3
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 <sup>1</sup>	3
ENGL-122	Introduction to Literature	3
ENGL-124	Advanced Composition: Critical Reasoning and Writing	3

ENGL-126	Creative Writing	3
ENGL-201	Women, Gender, and Sexuality in Literature	3
ENGL-202	Introduction to Film as Literature	3
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-236	Chicana/o Literature	3
ENGL-238	Black Literature	3
ENGL-270	World Literature I	3
ENGL-271	World Literature II	3
ETHN-236	Chicana/o Literature	3
ETHN-238	Black Literature	3
KUMEY-120	Kumeyaay Language I	4
KUMEY-121	Kumeyaay Language II	4
KUMEY-220	Kumeyaay Language III	4
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

<sup>1</sup> Course not UC transferable.



## STEM



- Biological Sciences (p. 184)
- Chemistry Associate in Science (p. 186)
- Engineering (p. 187)
- Environmental Science for Transfer (AS-T) (p. 189)
- General Studies: Science and Mathematics (p. 190)
- Mathematics (p. 191)
- Physics (p. 193)
- University Studies: Science and Mathematics (p. 194)

## Biological Sciences



- Biology for Transfer (AS-T) (p. 184)
- Biological Sciences Associate in Science (p. 185)
- Marine Biology Associate in Science (p. 185)



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

### 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;<sup>1</sup>
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. A grade of "C" or higher or "Pass" 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

Code	Title	Units
<b>Required Core</b>		
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology	5
<b>List A</b>		
CHEM-141	General Chemistry I	5
CHEM-142	General Chemistry II	5
MATH-180	Analytic Geometry and Calculus I	5
Choose one sequence:		8-10
PHYC-130 & PHYC-131	Fundamentals of Physics and Fundamentals of Physics	
PHYC-201 & PHYC-202	Mechanics and Waves and Electricity, Magnetism, and Heat	
<b>List B</b>		
MATH-160	Elementary Statistics	4
<b>Units for the Major</b>		<b>36-38</b>
10 Double-Counted Units		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55) <sup>1</sup>		31
Electives		1-3
<b>Total Units</b>		<b>60</b>

<sup>1</sup> 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.

## Biological Sciences Associate in Science



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<sup>1</sup>  
 Athletic Trainer<sup>1</sup>  
 Biologist<sup>1</sup>  
 Biochemical Engineer<sup>1</sup>  
 Biological Technician  
 Biomedical Equipment Technician  
 Biotechnologist  
 Botanist<sup>1</sup>  
 Clinical Lab Technologist  
 Cytologist<sup>1</sup>  
 Ecologist<sup>1</sup>  
 Environmental Engineer<sup>1</sup>  
 Environmental Technician  
 Environmental Microbiologist<sup>1</sup>  
 Genetic Engineering Technician  
 Greenhouse Assistant  
 Laboratory Technician  
 Physical Therapist<sup>1</sup>  
 Public Health Biologist<sup>1</sup>  
 Purification Technician  
 Research Assistant  
 Safety Specialist  
 Teacher<sup>1</sup>  
 Technical Writer

Waste Management Technician

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	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 Units** **40**

Plus General Education Requirements (p. 55)

## Marine Biology Associate in Science



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 Degree Requirements

Code	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
Select one of the following options:		8-15
Option 1:		
PHYC-201	Mechanics and Waves	
PHYC-202	Electricity, Magnetism, and Heat	
PHYC-203	Light, Optics, and Modern Physics	
Option 2:		
PHYC-130	Fundamentals of Physics	
PHYC-131	Fundamentals of Physics	
<b>Total Units</b>		<b>40-47</b>

Plus General Education Requirements (p. 55)

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 Associate in Science



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<sup>1</sup>  
 Air Quality Control<sup>1</sup>  
 Analytical Chemist<sup>1</sup>  
 Biochemist<sup>1</sup>  
 Chemistry Teacher<sup>1</sup>  
 Dietician<sup>1</sup>  
 Environmental Technologist<sup>1</sup>  
 Fishery Specialist  
 Food And Drug Inspector<sup>1</sup>  
 Forensic Specialist<sup>1</sup>  
 Laboratory Technician  
 Materials Scientist<sup>1</sup>  
 Medical Technologist  
 Microbiologist<sup>1</sup>  
 Organic Chemist<sup>1</sup>  
 Physician<sup>1</sup>  
 Polymer Chemist<sup>1</sup>  
 Sales Representative  
 Sanitarian Technician

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	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-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5
<b>Total Units</b>		<b>43</b>

Plus General Education Requirements (p. 55)

Note:

1. Students pursuing an emphasis in biochemistry should also take the following courses: BIO-230 Principles of Cellular, Molecular and Evolutionary Biology, BIO-240 Principles of Ecology, Evolution and Organismal Biology.
2. Students who intend to enroll at UCSD should take MATH-285 Differential Equations and check with the Counseling Center regarding program options.

## Engineering



- Civil Engineering Associate in Science (p. 187)
- Electrical and Computer Engineering Associate in Science (p. 187)
- Mechanical and Aerospace Engineering Associate in Science (p. 188)

## Civil Engineering Associate in Science



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<sup>1</sup>  
 Agricultural Engineer<sup>1</sup>  
 Architectural Engineer<sup>1</sup>  
 Biomedical Engineer<sup>1</sup>  
 CAD/CAM Engineer<sup>1</sup>  
 Chemical Engineer<sup>1</sup>  
 Civil Engineer<sup>1</sup>  
 Civil Engineering Technician  
 Computer Engineer<sup>1</sup>  
 Electrical Engineer<sup>1</sup>  
 Electrical Engineering Technician  
 Environmental Engineer<sup>1</sup>  
 Geological Engineer<sup>1</sup>  
 Industrial Engineer<sup>1</sup>  
 Industrial Engineering Technician  
 Manufacturing Engineer<sup>1</sup>  
 Marine Engineer<sup>1</sup>  
 Materials Engineer<sup>1</sup>  
 Mechanical Engineer<sup>1</sup>  
 Mechanical Engineering Technician  
 Mining Engineer<sup>1</sup>  
 Nuclear Engineer<sup>1</sup>  
 Petroleum Engineer<sup>1</sup>  
 Structural Engineer<sup>1</sup>  
 Systems Engineer<sup>1</sup>  
 Robotics Engineer<sup>1</sup>

<sup>1</sup> Bachelor's degree or higher required.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Draw conclusions about simple and complex systems by collecting, assessing, and analyzing information.
- Communicate technical ideas in group and professional settings in both written and oral form.

## Associate in Science Degree Requirements

Code	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	
ENGR-120	Engineering Computer Applications	3
ENGR-218/SURV-218	Plane Surveying	4
ENGR-225	Mechanics for Civil Engineers	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-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
<b>Total Units</b>		<b>55</b>

Plus General Education Requirements (p. 55)

## Electrical and Computer Engineering Associate in Science



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<sup>1</sup>  
 Agricultural Engineer<sup>1</sup>  
 Architectural Engineer<sup>1</sup>  
 Biomedical Engineer<sup>1</sup>  
 CAD/CAM Engineer<sup>1</sup>  
 Chemical Engineer<sup>1</sup>  
 Civil Engineer<sup>1</sup>  
 Civil Engineering Technician  
 Computer Engineer<sup>1</sup>

- Electrical Engineer<sup>1</sup>
- Electrical Engineering Technician
- Environmental Engineer<sup>1</sup>
- Geological Engineer<sup>1</sup>
- Industrial Engineer<sup>1</sup>
- Industrial Engineering Technician
- Manufacturing Engineer<sup>1</sup>
- Marine Engineer<sup>1</sup>
- Materials Engineer<sup>1</sup>
- Mechanical Engineer<sup>1</sup>
- Mechanical Engineering Technician
- Mining Engineer<sup>1</sup>
- Nuclear Engineer<sup>1</sup>
- Petroleum Engineer<sup>1</sup>
- Structural Engineer<sup>1</sup>
- Systems Engineer<sup>1</sup>
- Robotics Engineer<sup>1</sup>

<sup>1</sup> Bachelor's degree or higher required.

## 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

Code	Title	Units
CHEM-141	General Chemistry I	5
CS-181 or CS-182	Introduction to C++ Programming Introduction to Java Programming	4
CS-281 or CS-282	Intermediate C++ Programming and Fundamental Data Structures 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	3-4

or MATH-281	Multivariable Calculus	
MATH-280	Analytic Geometry and Calculus II	4
MATH-284	Linear Algebra	3
MATH-285	Differential Equations	3
PHYC-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
<b>Total Units</b>		<b>53-54</b>

Plus General Education Requirements (p. 55)

## Mechanical and Aerospace Engineering Associate in Science



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<sup>1</sup>
- Agricultural Engineer<sup>1</sup>
- Architectural Engineer<sup>1</sup>
- Biomedical Engineer<sup>1</sup>
- CAD/CAM Engineer<sup>1</sup>
- Chemical Engineer<sup>1</sup>
- Civil Engineer<sup>1</sup>
- Civil Engineering Technician
- Computer Engineer<sup>1</sup>
- Electrical Engineer<sup>1</sup>
- Electrical Engineering Technician
- Environmental Engineer<sup>1</sup>
- Geological Engineer<sup>1</sup>
- Industrial Engineer<sup>1</sup>
- Industrial Engineering Technician
- Manufacturing Engineer<sup>1</sup>
- Marine Engineer<sup>1</sup>
- Materials Engineer<sup>1</sup>
- Mechanical Engineer<sup>1</sup>
- Mechanical Engineering Technician
- Mining Engineer<sup>1</sup>
- Nuclear Engineer<sup>1</sup>
- Petroleum Engineer<sup>1</sup>
- Structural Engineer<sup>1</sup>
- Systems Engineer<sup>1</sup>
- Robotics Engineer<sup>1</sup>

<sup>1</sup> Bachelor's degree or higher required.

## 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

Code	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-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
<b>Total Units</b>		<b>51</b>

Plus General Education Requirements (p. 55)



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

## 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 higher or "Pass" 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 data 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

Code	Title	Units
<b>Core Curriculum</b>		
Select one of the following options:		14
Option 1:		

BIO-230	Principles of Cellular, Molecular and Evolutionary Biology
BIO-240	Principles of Ecology, Evolution and Organismal Biology
CHEM-141	General Chemistry I

## Option 2:

BIO-230	Principles of Cellular, Molecular and Evolutionary Biology
CHEM-141	General Chemistry I
CHEM-142	General Chemistry II

## List A

BIO-112	Contemporary Issues in Environmental Resources	3
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Select one of the following: 4

GEOL-110 & GEOL-111	Planet Earth and Planet Earth Laboratory	
GEOG-120 & GEOG-121	Physical Geography: Earth Systems and Physical Geography: Earth Systems Laboratory	

MATH-160	Elementary Statistics	4
MATH-180 or MATH-178	Analytic Geometry and Calculus I Calculus for Business, Social and Behavioral Sciences	4-5

## List B

ECON-121	Principles of Microeconomics	3
PHYC-130	Fundamentals of Physics	4
PHYC-131	Fundamentals of Physics	4

Units for the Major 40-41

13 Double-Counted Units

General Education Requirements (IGETC for STEM) 31

Total Units 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**

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.

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.

### Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Solve problems using fundamentals of mathematics, engineering, natural and/or computer science.
- Utilize mathematical skills to analyze data and/or solve problems.
- 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.

Code	Title	Units
<b>Science</b>		
ANTH-130	Introduction to Biological Anthropology	3
ASTR-110	Descriptive Astronomy	3
ASTR-112	General Astronomy Laboratory	1
BIO-112	Contemporary Issues in Environmental Resources	3
BIO-115	Biology of Alcohol and Other Drugs	3
BIO-122	The Secret Life of Plants	4
BIO-130	General Biology I	3
BIO-131	General Biology I Laboratory	1
BIO-133	Ethnoecology	3
BIO-134	Ethnobotany	3
BIO-135	Ethnobotany/Ethnoecology Lab	1
BIO-140	Human Anatomy	4
BIO-141	Human Physiology	3
BIO-141L	Laboratory in Human Physiology	1
BIO-152	Paramedical Microbiology	5
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology	5
BIO-251	Human Dissection	1
CHEM-102	Introduction to General, Organic and Biological Chemistry	5
CHEM-115	Fundamentals of Chemistry	4
CHEM-120	Preparation for General Chemistry	4
CHEM-141	General Chemistry I	5
CHEM-142	General Chemistry II	5
CHEM-231	Organic Chemistry I	5
CHEM-232	Organic Chemistry II	5

ET-110	Introduction to Electricity and Electronics	4
GEOG-120	Physical Geography: Earth Systems	3
GEOG-121	Physical Geography: Earth Systems Laboratory	1
GEOL-104	Earth Science	3
GEOL-105	Physical Geology: Earth Systems Laboratory	1
GEOL-110	Planet Earth	3
GEOL-111	Planet Earth Laboratory	1
KUMEY-133	Ethnoecology	3
KUMEY-134	Ethnobotany	3
KUMEY-135	Ethnobotany/Ethnoecology Lab	1
OCEA-112	Introduction to Oceanography	3
OCEA-113	Oceanography Laboratory	1
PHYC-110	Introductory Physics	4
PHYC-130	Fundamentals of Physics	4
PHYC-131	Fundamentals of Physics	4
PHYC-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5

**Mathematics**

BIO-215	Statistics for Life Sciences	3
MATH-160	Elementary Statistics	4
MATH-170	Analytic Trigonometry	3
MATH-175	College Algebra	4
MATH-176	PreCalculus: Functions and Graphs	6
MATH-178	Calculus for Business, Social and Behavioral Sciences	4
MATH-180	Analytic Geometry and Calculus I	5
MATH-245	Discrete Mathematics	3
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
MATH-284	Linear Algebra	3
MATH-285	Differential Equations	3
PSY-215	Statistics for the Behavioral Sciences	4

**CADD and Engineering**

CADD-115	Engineering Graphics	3
CADD-120	Introduction to Computer-Aided Drafting and Design	3
CADD-125	Solid Modeling Design	3
CADD-129	Engineering Solid Modeling	3
CADD-131	Architectural Computer-Aided Drafting and Design	3
ENGR-100	Introduction to Engineering and Design	4
ENGR-119	Basic Engineering CAD	3
ENGR-120	Engineering Computer Applications	3
ENGR-125	Solid Modeling Design	3
ENGR-129	Engineering Solid Modeling	3
ENGR-200	Engineering Mechanics-Statics	3
ENGR-210	Electric Circuits	4
ENGR-218	Plane Surveying	4
ENGR-220	Engineering Mechanics-Dynamics	3
ENGR-270	Digital Design	4

**Computer Science**

CS-119	Program Design and Development	3
CS-119L	Program Design and Development Lab	1
CS-165	Assembly Language and Machine Architecture	4
CS-181	Introduction to C++ Programming	4
CS-182	Introduction to Java Programming	4
CS-240	Discrete Structures	3
CS-281	Intermediate C++ Programming and Fundamental Data Structures	4
CS-282	Intermediate Java Programming and Fundamental Data Structures	4

**Mathematics**

- Mathematics for Transfer (AS-T) (p. 191)
- Mathematics Associate in Science and Certificate of Achievement (p. 192)

**Associate Degree  
for Transfer<sup>SM</sup>****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 higher or "Pass" 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:

- Draw conclusions about simple and complex systems by collecting, assessing, and analyzing information.
- Communicate technical ideas in group and professional settings in both written and oral form.

## Associate in Science Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
<b>List A</b>		
Select one of the following:		3
MATH-284	Linear Algebra	
MATH-285	Differential Equations	
<b>List B</b>		
Select one of the following:		3-5
CS-181	Introduction to C++ Programming	
MATH-160	Elementary Statistics	
MATH-245	Discrete Mathematics	
PHYC-201	Mechanics and Waves	
Any course from List A not selected above		
<b>Units for the Major</b>		<b>19-21</b>
7 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		7-9
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into Mathematics (Science Emphasis) B.S.

## Mathematics Associate in Science and Certificate of Achievement



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:

- Draw conclusions about simple and complex systems by collecting, assessing, and analyzing information.
- Communicate technical ideas in group and professional settings in both written and oral form.

## Career Opportunities

- Accountant<sup>1</sup>
- Actuary<sup>1</sup>
- Air Traffic Controller
- Auditor<sup>1</sup>
- Bank Officer<sup>2</sup>
- Budget Analyst<sup>1</sup>
- Computer Operator
- Computer Programmer<sup>1</sup>
- Cost Estimator<sup>2</sup>
- Credit and Collection Manager<sup>2</sup>
- Data Processing Manager
- Economist<sup>1</sup>
- Engineer<sup>1</sup>
- Financial Planner<sup>1</sup>
- Insurance Agent/Broker
- Insurance Claim Examiner
- Laboratory Examiner
- Loan Officer
- Market Research Analyst<sup>1</sup>
- Mathematician<sup>1</sup>
- Mathematics Teacher<sup>1</sup>
- Securities Trader<sup>1</sup>
- Semiconductor Technician
- Statistician<sup>1</sup>
- Surveyor
- Systems Analyst<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

<sup>2</sup> Bachelor Degree normally recommended.

## Associate in Science Degree Requirements

Code	Title	Units
<b>Core Curriculum</b>		
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
<b>List A</b>		
Select one of the following:		3
MATH-284	Linear Algebra	
MATH-285	Differential Equations	

**List B**

Select one of the following:		3-5
CS-181	Introduction to C++ Programming	
ENGR-120	Engineering Computer Applications	
MATH-160	Elementary Statistics	
MATH-245	Discrete Mathematics	
PHYC-201	Mechanics and Waves	
Any course from List A not selected		

**Total Units** **19-21**

Plus General Education Requirements (p. 55)

**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:

Code	Title	Units
PHYC-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5

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**

- Physics for Transfer (AS-T) (p. 193)
- Physics Associate in Science (p. 193)



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

**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 higher or "Pass" 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:

- Draw scientific conclusions about simple and complex systems by collecting, assessing, and analyzing information.
- Communicate technical ideas in group and professional settings in both written and oral form.

**Associate in Science Degree Requirements**

Code	Title	Units
MATH-180	Analytic Geometry and Calculus I	5
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
PHYC-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5
<b>Units for the Major</b>		<b>28</b>
7 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		0/2
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into the B.S. Physics (General) or B.S. Physics (Modern Optics Emphasis).

**Physics Associate in Science**

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](http://www.assist.org) (<http://www.assist.org>) for requirements of specific transfer institution.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Draw scientific conclusions about simple and complex systems by collecting, assessing, and analyzing information.
- Communicate technical ideas in group and professional settings in both written and oral form.

## Career Opportunities

College or University Professor<sup>1</sup>  
 Data Scientist<sup>1</sup>  
 Engineer or Programmer<sup>1</sup>  
 Government Laboratory Scientist<sup>1</sup>  
 High School Physics Teacher<sup>1</sup>  
 Industry Consultant<sup>1</sup>  
 Medical Physicist<sup>1</sup>  
 Private Sector Research and Development Scientist<sup>1</sup>  
 Sales and Marketing Consultant<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Science Degree Requirements

Code	Title	Units
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-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5
<b>Total Units</b>		<b>38</b>

Plus General Education Requirements (p. 55)

## 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

Choose a minimum of 18 units. 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 either category.

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.

## Program Learning Outcomes

Upon successful completion of this program, students will be able to:

- Utilize high level mathematical skills to analyze data and/or solve problems.
- Use the scientific method of inquiry and techniques to answer questions about physical and biological processes.
- Analyze concepts of physical and biological science to evaluate scientific information and solve scientific problems.

## Science

Code	Title	Units
ANTH-130	Introduction to Biological Anthropology	3
ASTR-110	Descriptive Astronomy	3
ASTR-112	General Astronomy Laboratory	1
BIO-115	Biology of Alcohol and Other Drugs	3
BIO-122	The Secret Life of Plants	4
BIO-130	General Biology I	3
BIO-131	General Biology I Laboratory	1
BIO-133	Ethnoecology	3
BIO-134	Ethnobotany	3
BIO-135	Ethnobotany/Ethnoecology Lab <sup>1</sup>	1
BIO-140	Human Anatomy	4
BIO-141	Human Physiology	3
BIO-141L	Laboratory in Human Physiology	1
BIO-152	Paramedical Microbiology <sup>1</sup>	5
BIO-230	Principles of Cellular, Molecular and Evolutionary Biology	4
BIO-240	Principles of Ecology, Evolution and Organismal Biology	5
BIO-251	Human Dissection	1
CHEM-102	Introduction to General, Organic and Biological Chemistry	5
CHEM-115	Fundamentals of Chemistry	4
CHEM-120	Preparation for General Chemistry	4
CHEM-141	General Chemistry I	5
CHEM-142	General Chemistry II	5
CHEM-231	Organic Chemistry I	5
CHEM-232	Organic Chemistry II	5
CS-119	Program Design and Development	3
CS-119L	Program Design and Development Lab	1
CS-181	Introduction to C++ Programming	4
CS-182	Introduction to Java Programming	4

CS-281	Intermediate C++ Programming and Fundamental Data Structures	4
CS-282	Intermediate Java Programming and Fundamental Data Structures	4
GEOG-120	Physical Geography: Earth Systems	3
GEOG-121	Physical Geography: Earth Systems Laboratory	1
GEOL-104	Earth Science	3
GEOL-105	Physical Geology: Earth Systems Laboratory	1
GEOL-110	Planet Earth	3
GEOL-111	Planet Earth Laboratory	1
KUMEY-133	Ethnoecology	3
KUMEY-134	Ethnobotany	3
KUMEY-135	Ethnobotany/Ethnoecology Lab	1
OCEA-112	Introduction to Oceanography	3
OCEA-113	Oceanography Laboratory	1
PHYC-110	Introductory Physics	4
PHYC-130	Fundamentals of Physics	4
PHYC-131	Fundamentals of Physics	4
PHYC-201	Mechanics and Waves	5
PHYC-202	Electricity, Magnetism, and Heat	5
PHYC-203	Light, Optics, and Modern Physics	5

<sup>1</sup> Course not UC transferable.

## Mathematics

Code	Title	Units
BIO-215	Statistics for Life Sciences	3
MATH-160	Elementary Statistics	4
MATH-170	Analytic Trigonometry <sup>1</sup>	3
MATH-175	College Algebra	4
MATH-176	PreCalculus: Functions and Graphs	6
MATH-178	Calculus for Business, Social and Behavioral Sciences	4
MATH-180	Analytic Geometry and Calculus I	5
MATH-245	Discrete Mathematics	3
MATH-280	Analytic Geometry and Calculus II	4
MATH-281	Multivariable Calculus	4
MATH-284	Linear Algebra	3
MATH-285	Differential Equations	3
PSY-215	Statistics for the Behavioral Sciences	4

<sup>1</sup> Course not UC transferable.

# Visual & Performing Arts



- Art (p. 196)
- Graphic Design (p. 199)
- Music (p. 200)

## Art



- Art History for Transfer (AA-T) (p. 196)
- Studio Arts for Transfer (AA-T) (p. 197)
- Art and Design Associate in Arts (p. 197)
- Art–Drawing and Painting Associate in Arts (p. 198)



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

### 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 higher or “Pass” 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

Code	Title	Units
<b>Core Curriculum</b>		
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
<b>List A</b>		
Select one of the following:		3
ART-142	Art of Africa, Oceania and the Americas	
ART-146	Asian Art	
<b>List B</b>		
Select one of the following:		3
ART-120	Two-Dimensional Design	
ART-121	Painting I	
ART-129	Three-Dimensional Design	
ART-135	Watercolor I	
ART-230	Figure Drawing I	
GD-110	Graphic Design Principles	
<b>List C</b>		
Select one of the following:		3
Any List B course not already used		
ART-143	Modern Art	
ART-144	Architecture of the 20th and 21st Centuries	
ART-145	Contemporary Art	
HUM-110	Principles of the Humanities	
HUM-115	Arts and Culture in Local Context - San Diego	
HUM-116	Kumeyaay Arts and Culture I	
<b>Units for the Major</b>		<b>18</b>
6-9 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		9-12/11-14
<b>Total Units</b>		<b>60</b>



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

### 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 higher or "Pass" 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

Code	Title	Units
<b>Core Curriculum</b>		
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
<b>List A</b>		
Select one of the following:		3
ART-140	Survey of Western Art I: Prehistory through Middle Ages	
ART-143	Modern Art	
ART-144	Architecture of the 20th and 21st Centuries	
ART-145	Contemporary Art	
ART-146	Asian Art	
<b>List B</b>		
Select three of the following:		9
ART-121	Painting I	
ART-125	Drawing II	
ART-135	Watercolor I	
ART-148	Applied Design and Crafts	
ART-230	Figure Drawing I	
<b>Units for the Major</b>		<b>24</b>
6 units may be double-counted with GE		
Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55)		39/37
Total Transferable Elective Units		3-5
<b>Total Units</b>		<b>60</b>

Please note: SDSU accepts this degree for students transferring into Art (Studio Arts emphasis).

### Art and Design Associate in Arts



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<sup>1</sup>  
 Advertising  
 Art Director<sup>1</sup>  
 Desktop Publishing  
 Display Designer  
 Graphic Designer  
 Illustrator  
 Marketing Director<sup>1</sup>  
 Multimedia  
 Package Designer  
 Web Page Designer

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	Title	Units
ART-120	Two-Dimensional Design	3
ART-121	Painting I	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
Select twelve units from the following:		12
ART-104	Artists and Designers Today	
ART-119	Color Theory	
ART-177	Digital Drawing and Painting	
ART-230	Figure Drawing I	
ART-240	Portraiture and Character Design	
ART-241	Illustration I	
GD-105	Fundamentals of Digital Media	
GD-110	Graphic Design Principles	
GD-126	Adobe Photoshop Digital Imaging	
Recommended Electives		
ART-135	Watercolor I	
ART-151/ ETHN-151	Chicanx Art	
ART-242	Illustration II	
BUS-110	Introduction to Business	

GD-130	Professional Business Practices
GD-210	Professional Digital Photography I
GD-217	Web Graphics
GD-222	Web Animation
GD-225	Digital Illustration
GD-230	Graphic Design Work Experience

**Total Units**

**30**

Plus General Education Requirements (p. 55)

## Art—Drawing and Painting Associate in Arts



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<sup>1</sup>  
 Antique Dealer  
 Art Conservator<sup>1</sup>  
 Art Therapist<sup>1</sup>  
 Arts Administration  
 Cartoonist  
 Curator<sup>1</sup>  
 Display Manager  
 Fashion Designer<sup>1</sup>  
 Gallery Owner  
 Illustrator



Independent Artist  
 Interior Design<sup>1</sup>  
 Jewelry Designer  
 Museum Technician  
 Painter  
 Police Artist  
 Set Designer  
 Teacher/Professor<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	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
Select six units from the following:		6
ART-104	Artists and Designers Today	
ART-119	Color Theory	
ART-129	Three-Dimensional Design	
ART-135	Watercolor I	
ART-143	Modern Art	
ART-145	Contemporary Art	
ART-210	Introduction to Printmaking	
ART-211	Intermediate Printmaking	
ART-220	Painting II	
ART-231	Figure Drawing II	
ART-240	Portraiture and Character Design	
ART-241	Illustration I	
ART-242	Illustration II	
<b>Total Units</b>		<b>30</b>

Plus General Education Requirements (p. 55)

## Recommended Electives

Code	Title	Units
ART-151	Chicanx Art	3
ETHN-151	Chicanx Art	3
HIST-105	Early Western Civilization	3
HUM-155	World Mythology through the Humanities	3
RELG-120	World Religions	3

## Graphic Design



- Graphic Design Associate in Arts and Certificate of Achievement (p. 199)
- Digital Photography Certificate of Specialization (p. 200)
- Web Graphics Certificate of Specialization (p. 200)

## Graphic Design Associate in Arts and Certificate of Achievement



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

Animator  
 Art Director<sup>1</sup>  
 Creative Director<sup>1</sup>  
 Graphic Designer  
 Game Designer  
 Illustrator  
 Industrial Designer  
 Marketing Director<sup>1</sup>  
 Multimedia Designer  
 Package Designer  
 UX/UI Designer  
 Web Designer

<sup>1</sup> 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

Code	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
Select three of the following:		7-10
ART-230	Figure Drawing I	
GD-115	Introduction to Multimedia	
GD-120	User Experience Design	
GD-210	Professional Digital Photography I	
GD-211	Professional Digital Photography II	
GD-212	Professional Digital Photography III	
GD-217	Web Graphics	
GD-222	Web Animation	
GD-223	Advanced Web Animation	
GD-230	Graphic Design Work Experience	

**Total Units** 34-37

Plus General Education Requirements (p. 55)

## 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.

## Digital Photography Certificate 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.

## 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

Code	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
<b>Total Units</b>		<b>15</b>

## Web Graphics Certificate 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.

## 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

Code	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
<b>Total Units</b>		<b>15</b>

## Music



- Music for Transfer (AA-T) (p. 201)
- Music Education Associate in Arts (p. 201)
- Music Industry Studies Associate in Arts (p. 202)



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

### 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 higher or "Pass" 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 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

Code	Title	Units
<b>Core Curriculum</b>		
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-190	Performance Studies	0.5

MUS-191	Performance Studies	0.5
MUS-290	Performance Studies	0.5
MUS-291	Performance Studies	0.5
Choose four units from the following large ensemble courses:		4
MUS-152	Concert Band	
MUS-153	Concert Band	
MUS-252	Concert Band	
MUS-253	Concert Band	
MUS-158	Chorus	
MUS-159	Chorus	
MUS-258	Chorus	
MUS-259	Chorus	

#### List A

Select one of the following: 3-4

MUS-110	Great Music Listening	
MUS-206	Music Theory and Practice IV	

**Units for the Major** 21-22

3 units may be double-counted

Plus General Education Requirements (CSU GE or IGETC-CSU) (p. 55) 39/37

Total Transferable Elective Units 2-3/4-5

**Total Units** 60

Please note: SDSU accepts this degree for students transferring into Music B.A.

### Music Education Associate in Arts



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<sup>1</sup>  
 Choral Director<sup>1</sup>  
 Composer<sup>1</sup>  
 Conductor<sup>1</sup>  
 Copyist  
 Critic<sup>1</sup>  
 Instrumentalist  
 Music Instructor/Professor<sup>1</sup>  
 Music Librarian<sup>1</sup>  
 Music Therapist<sup>1</sup>  
 Music Typographer  
 Performer, Vocalist  
 Radio Programmer  
 Recording Company Representative  
 Teacher<sup>1</sup>

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	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	0.5
MUS-191	Performance Studies	0.5
MUS-232	Class Piano III	3
MUS-233	Class Piano IV	3
MUS-290	Performance Studies	0.5
MUS-291	Performance Studies	0.5
Select four of the following:		4
MUS-108	Rock, Pop and Soul Ensemble	
MUS-109	Rock, Pop and Soul Ensemble	
MUS-152	Concert Band	
MUS-153	Concert Band	
MUS-158	Chorus	
MUS-159	Chorus	
MUS-208	Rock, Pop and Soul Ensemble	
MUS-209	Rock, Pop and Soul Ensemble	
MUS-252	Concert Band	
MUS-253	Concert Band	
MUS-258	Chorus	
MUS-259	Chorus	
MUS-260	Conducting	

MUS-262

Woodwinds Methods

Total Units

40

Plus General Education Requirements (p. 55)

## Music Industry Studies Associate in Arts



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<sup>1</sup>  
 Arranger<sup>1</sup>  
 Artist and Repertoire Manager<sup>1</sup>  
 Artist Representative  
 Arts Administrator<sup>1</sup>  
 Attorney specializing in Performing Arts<sup>1</sup>  
 Composer<sup>1</sup>  
 Concert Producer<sup>1</sup>  
 Copyist  
 Instrumentalist  
 Musical Instrument Manufacturer Representative  
 Music Publisher<sup>1</sup>  
 Music Retail Manager  
 Professional Songwriter<sup>1</sup>  
 Publicist  
 Radio Programmer  
 Record Company representative<sup>1</sup>  
 Record Producer<sup>1</sup>  
 Recording Studio Engineer<sup>1</sup>  
 Teacher<sup>1</sup>  
 Video Game Composer

Vocalist

<sup>1</sup> Bachelor Degree or higher required.

## Associate in Arts Degree Requirements

Code	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
Select two of the following:		6
MUS-110	Great Music Listening	
MUS-111	History of Jazz	
MUS-115	History of Rock Music	
MUS-116	Introduction to World Music	
MUS-123	History of Hip-Hop Culture	
MUS-184	Digital Audio Recording and Production	
Select one of the following:		3-4
BUS-120	Financial Accounting	
BUS-125	Business Law: Legal Environment of Business	
Select four of the following:		2-4
MUS-108	Rock, Pop and Soul Ensemble	
MUS-109	Rock, Pop and Soul Ensemble	
MUS-152	Concert Band	
MUS-153	Concert Band	
MUS-158	Chorus	
MUS-159	Chorus	
MUS-190	Performance Studies	
MUS-191	Performance Studies	
MUS-208	Rock, Pop and Soul Ensemble	
MUS-209	Rock, Pop and Soul Ensemble	
MUS-252	Concert Band	
MUS-253	Concert Band	
MUS-258	Chorus	
MUS-259	Chorus	
MUS-290	Performance Studies	
MUS-291	Performance Studies	
<b>Total Units</b>		<b>36-39</b>

Plus General Education Requirements (p. 55)



## Pre Academic & Career Pathways



- California State University General Education Breadth (p. 204)
- Intersegmental General Education Transfer Curriculum (CSU or UC) (p. 204)

## 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 (p. 55)). Students must complete a minimum of 39 units, which are distributed among six 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 (p. 55)). 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

## A

- American Sign Language (ASL) (p. 206)
- Anthropology (ANTH) (p. 207)
- Arabic (ARBC) (p. 209)
- Aramaic (ARAM) (p. 208)
- Art (ART) (p. 211)
- Astronomy (ASTR) (p. 214)
- Automotive Technology (AUTO) (p. 215)

## B

- Biological Sciences (BIO) (p. 224)
- Business (BUS) (p. 226)
- Business Office Technology (BOT) (p. 228)

## C

- CADD Technology (CADD) (p. 232)
- Center for Water Studies (CWS) (p. 234)
- Chemistry (CHEM) (p. 237)
- Child Development (CD) (p. 238)
- Communication (COMM) (p. 241)
- Computer and Information Science (CIS) (p. 242)
- Computer Science (CS) (p. 248)
- Counseling (COUN) (p. 249)

## E

- Economics (ECON) (p. 250)
- Education (ED) (p. 251)
- Electronics Technology (ET) (p. 252)
- Engineering (ENGR) (p. 253)
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## G

- Geography (GEOG) (p. 270)
- Geology (GEOL) (p. 271)
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## H

- Health Education (HED) (p. 274)
- History (HIST) (p. 275)
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## I

- Interdisciplinary Studies (IS) (p. 279)

## K

- Kumeyaay Studies (KUMEY) (p. 280)

## M

- Mathematics (MATH) (p. 282)
- Music (MUS) (p. 285)

## N

- Nutrition (NUTR) (p. 290)

## O

- Oceanography (OCEA) (p. 291)
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## P

- Paralegal Studies (PARA) (p. 295)
- Personal Development-Success Services (PDSS) (p. 297)
- Philosophy (PHIL) (p. 298)
- Physics (PHYC) (p. 299)
- Political Science (POSC) (p. 300)
- Psychology (PSY) (p. 302)

## R

- Real Estate (RE) (p. 304)
- Religious Studies (RELG) (p. 305)

## S

- Science (SCI) (p. 306)
- Social Work (SW) (p. 307)
- Sociology (SOC) (p. 308)
- Spanish (SPAN) (p. 309)
- STEM (STEM) (p. 310)
- Surveying (SURV) (p. 311)

## T

- Theatre Arts (THTR) (p. 312)

## W

- Work Experience (WEX) (p. 313)

## American Sign Language (ASL)

### ASL-120

#### American Sign Language I

**4 UNITS**

4.0 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)

### ASL-121

#### American Sign Language II

**4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ASL 120 or equivalent

4.0 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)

### ASL-125

#### American Sign Language with Infants and Toddlers

**1 UNITS**

1.0 hours 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)

### ASL-126

#### American Sign Language With School Age Children

**1 UNITS**

1.0 hours 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)

### ASL-130

#### American Sign Language: Fingerspelling

**3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ASL 120 or equivalent ability to sign

3.0 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)

### ASL-140

#### Inside Deaf Culture

**3 UNITS**

3.0 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)

### ASL-220

#### American Sign Language III

**4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ASL 121 or equivalent

4.0 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)

### ASL-221

#### American Sign Language IV

**4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ASL 220 or equivalent

4.0 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)

### ANTH-120

#### Cultural Anthropology **3 UNITS**

3.0 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. (C-ID ANTH 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ANTH-130

#### Introduction to Biological Anthropology **3 UNITS**

3.0 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. (C-ID ANTH 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ANTH-140

#### Introduction to Archaeology **3 UNITS**

3.0 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. (C-ID ANTH 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ANTH-150

#### Introduction to Cultural Resource Management **3 UNITS**

2.0 hours lecture, 3.0 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. Also listed as KUMEY 150. Not open to students with credit in KUMEY 150. (AA/AS GE, CSU, CSU GE, UC)

### ANTH-160

#### Introduction to Archaeological Field Work **4 UNITS**

2.0 hours lecture, 6.0 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)

## Aramaic (ARAM)

### ARAM-120

#### Aramaic I 5 UNITS

5.0 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)

### ARAM-121

#### Aramaic II 5 UNITS

Prerequisite: "C" grade or higher or "Pass" in ARAM 120 or equivalent

5.0 hours lecture

Continuation of Aramaic I. Aramaic 121 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)

### ARAM-220

#### Aramaic III 5 UNITS

Prerequisite: "C" grade or higher or "Pass" in ARAM 121 or equivalent

5.0 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)



## Arabic (ARBC)

### ARBC-120

#### Arabic I

5 UNITS

5.0 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)

### ARBC-121

#### Arabic II

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in ARBC 120 or two years of high school Arabic or equivalent

5.0 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)

### ARBC-122

#### Arabic for the Arabic Speaker I

5 UNITS

5.0 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)

### ARBC-123

#### Arabic for the Arabic Speaker II

5 UNITS

Prerequisite: "C" grade or higher or Pass in ARBC 122 or equivalent

5.0 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)

### ARBC-130

#### Arabic Literature and Culture

3 UNITS

Recommended Preparation: "C" or higher or "Pass" in Arabic 121 or equivalent or "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 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, CSU GE, IGETC, UC)

### ARBC-145

#### Arabic Civilizations

3 UNITS

3.0 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)

### ARBC-180

#### Basic Computer Skills for Arabic Learners

1 UNITS

Recommended Preparation: "C" or higher or "Pass" in Arabic 120 or equivalent

1.0 hours 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)

### ARBC-220

#### Arabic III

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in ARBC 121 or three years of high school Arabic or equivalent

5.0 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)

### ARBC-221

#### Arabic IV

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in ARBC 220 or four years of high school Arabic or equivalent

5.0 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)

### ARBC-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

3.0 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)

### ARBC-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

3.0 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)

**ARBC-254****Conversational Iraqi Dialect 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

3.0 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)

**ARBC-256****Conversational Levantine Dialect 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

3.0 hours lecture

This course is an intermediate level conversation class with an emphasis on building vocabulary and developing communication skills using Levantine Arabic dialect ('lahjah shamiyyah'). The course aims on but not limited to develop speaking, listening, reading, and writing skills in a wide range of cultural contexts to enable students to interact effectively in everyday situations where Levantine Arabic is spoken. (AA/AS GE, CSU, UC)

## Art (ART)

### ART-100

#### Art Appreciation

3 UNITS

3.0 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. (C-ID ARTH 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ART-104

#### Artists and Designers Today

3 UNITS

3.0 hours lecture

This course examines the wide variety of formats that contemporary artists work in today. It is an overview of current practices that enables students to gain insight into art, design, craft, media, and new genre disciplines, including but not limited to painting, sculpture, graphic design, interior design, industrial design, furniture design, photography, fibers, ceramics, metalwork, installation, performance, street art, and multimedia arts. Students will be introduced to how visual culture is contextualized, theorized, and displayed through curatorial studies and social media. Students will be exposed to course content through lectures, visiting artists' talks, readings, and visits to local galleries and museums. This course is designed for students beginning the study of art and/or related disciplines. (CSU)

### ART-119

#### Color Theory

3 UNITS

2.0 hours lecture, 4.0 hours laboratory

In the visual arts, color theory is the body of practical guidance for color mixing and the visual effects of a specific color combination. As an element of visual expression, color is both physical and psychological. This course will explore the principles, theories, and applications of additive and subtractive color in two dimensions. Topics will include major historical and contemporary color systems, production of projects in applied color, and the elements of design as they apply to the optical perception of color. (CSU, UC)

### ART-120

#### Two-Dimensional Design

3 UNITS

2.0 hours lecture, 4.0 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. (C-ID ARTS 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ART-121

#### Painting I

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ART 120 or ART 124 or equivalent

2.0 hours lecture, 4.0 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. (C-ID ARTS 210) (CSU, UC)

### ART-124

#### Drawing I

3 UNITS

2.0 hours lecture, 4.0 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. (C-ID ARTS 110) (AA/AS GE, CSU, UC)

### ART-125

#### Drawing II

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent

2.0 hours lecture, 4.0 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. (C-ID ARTS 205) (CSU, UC)

### ART-129

#### Three-Dimensional Design

3 UNITS

2.0 hours lecture, 4.0 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. (C-ID ARTS 101) (AA/AS GE, CSU, UC)

### ART-135

#### Watercolor I

3 UNITS

2.0 hours lecture, 4.0 hours laboratory

Introduction to basic watercolor tools, materials and techniques emphasizing color principles and skill development in watercolor media. (CSU, UC)

### ART-140

#### Survey of Western Art I: Prehistory through Middle Ages

3 UNITS

3.0 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. (C-ID ARTH 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ART-141

#### Survey of Western Art II: Renaissance through Modern

3 UNITS

3.0 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. (C-ID ARTH 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ART-142****Art of Africa, Oceania and the Americas****3 UNITS**

3.0 hours lecture

This course is an introduction to the visual arts produced by peoples of Africa, Oceania, and the Americas from the prehistoric to contemporary periods. Topics include art, design, and architecture, and emphasize how art represents each region's cultural, religious, social, and political orientations. This course is designed for art and art history majors as well as others interested in the humanities. (C-ID ARTH 140) (AA/AS GE, CSU, UC)

**ART-143****Modern Art****3 UNITS**

3.0 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. (C-ID ARTH 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ART-144****Architecture of the 20th and 21st Centuries****3 UNITS**

3.0 hours lecture

Survey of the 20th and 21st 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)

**ART-145****Contemporary Art****3 UNITS**

3.0 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)

**ART-146****Asian Art****3 UNITS**

3.0 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. (C-ID ARTH 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ART-148****Applied Design and Crafts****3 UNITS**

2.0 hours lecture, 4.0 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. (C-ID ARTS 280) (AA/AS GE, CSU, CSU GE, UC)

**ART-151****Chicanx Art****3 UNITS**

3.0 hours lecture

This course is a comprehensive overview of the major influences, themes, and styles in Chicane Art from its emergence in the 1960s to the 21st century. Emphasis is placed on the historical, social, and cultural context of the Chicane Art movement and the major forces that shape artistic creation within this field. Topics include Chicane paintings, murals, prints, sculpture, installation, performance, and video. Students analyze the art and apply critical theory to describe critical events in the histories, cultures, and intellectual and artistic traditions of Latino/a Americans. This course is designed for all students interested in Chicane/o studies, Ethnic Studies, and for Art majors who want to explore a revolutionary contemporary art movement focused on cultural relevance, social action, and social justice, with a special focus on the lived experiences and social struggles of Latino/a Americans. Also listed as ETHN 151. Not open to students with credit in ETHN 151. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ART-177****Digital Drawing and Painting****3 UNITS**

2.0 hours lecture, 4.0 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)

**ART-210****Introduction to Printmaking****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ART 120 or ART 124

2.0 hours lecture, 4.0 hours laboratory

This course is an introduction to the basic materials, equipment, and processes of printmaking, including relief (linocut and woodcut), intaglio (drypoint and collagraph), planography (monotype), and stencil (screen print). Topics will include major historical and contemporary cultural movements in printmaking, color, and design applications, as well as creative responses to materials and subject matter. (CSU, UC)

**ART-211****Intermediate Printmaking****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 210 Introduction to Printmaking

2.0 hours lecture, 4.0 hours laboratory

This intermediate printmaking course explores color printing and approaches at a deeper level. It includes the integration of digital imagery and technologies to generate and alter images in preparation for traditional, physical, and hybrid printing processes. Topics will include current cultural movements in printmaking, complex color, and design applications, as well as individualized approaches to materials and subject matter. (CSU, UC)

**ART-220****Painting II****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 121 or equivalent

2.0 hours lecture, 4.0 hours laboratory

Continuation of Painting I with an emphasis on creative problem-solving skills. Students will develop a personal style of expression. (CSU, UC)

**ART-221****Painting III 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 220 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-222****Painting IV 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 221 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-224****Drawing III 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 125 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-225****Drawing IV 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 224 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-230****Figure Drawing I 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent  
2.0 hours lecture, 4.0 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. (C-ID ARTS 200) (CSU, UC)

**ART-231****Figure Drawing II 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 230 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-232****Figure Drawing III 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 231 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-233****Figure Drawing IV 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 232 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-235****Watercolor II 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 135 or equivalent  
2.0 hours lecture, 4.0 hours laboratory  
Continuation of Watercolor I techniques with an emphasis on creative problem solving and aesthetic compositions. (CSU, UC)

**ART-236****Watercolor III 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 235 or equivalent  
2.0 hours lecture, 4.0 hours laboratory  
Continuation of Watercolor II skill and composition techniques. Students will develop a personal style of expression. (CSU, UC)

**ART-240****Portraiture and Character Design 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ART 124 or equivalent  
2.0 hours lecture, 4.0 hours laboratory  
This course will enable students to develop a personal approach to portraiture through drawing methods and techniques, providing a concentrated examination of the human head, character, and anatomy. Students will explore how to work directly from the model using expressive drawing and multi-media approaches. Students will examine how portraiture and character design express ideas about power, social status, stages of life, gender, identity, and fantasy. They will also be introduced to a range of historical and contemporary artists whose work features the portrait as the subject matter. (CSU, UC)

**ART-241****Illustration I 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 124 or equivalent  
2.0 hours lecture, 4.0 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)

**ART-242****Illustration II 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ART 241 or equivalent  
2.0 hours lecture, 4.0 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)

### ASTR-110

#### Descriptive Astronomy

**3 UNITS**

3.0 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)

### ASTR-112

#### General Astronomy Laboratory

**1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ASTR 110 or equivalent or concurrent enrollment

3.0 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)

## AUTO-099

**Introduction to Automotive Technology** **3 UNITS**  
3.0 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)

## AUTO-100L

**Introduction to Automotive Technology Laboratory** **1 UNITS**  
3.0 hours laboratory

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)

## AUTO-111

**Engine Diagnosis and Repair** **2 UNITS**  
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T - Electronics Diagnosis and Repair Assessment Test Out  
2.0 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)

## AUTO-111L

**Engine Diagnosis and Repair Laboratory** **1 UNITS**  
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T - Electronics Diagnosis and Repair Assessment Test Out  
3.0 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)

## AUTO-111T

**Engine Diagnosis and Repair Assessment Test Out** **0.5 UNITS**  
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.

## AUTO-121

**Automatic Transmission Theory and Operation** **2 UNITS**  
2.0 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)

## AUTO-121L

**Automatic Transmission Theory and Operation Laboratory** **1 UNITS**  
3.0 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)

## AUTO-121T

**Automatic Transmission Theory and Operation Assessment Test Out** **0.5 UNITS**  
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.

**AUTO-126**

**Automatic Transmission Diagnosis and Testing** 2 UNITS  
2.0 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 complimented 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)

**AUTO-126L**

**Automatic Transmission Diagnosis and Testing Laboratory** 1 UNITS  
3.0 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)

**AUTO-126T**

**Automatic Transmission Diagnosis and Testing Assessment Test Out** 0.5 UNITS

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.

**AUTO-131**

**Manual Transmission and Transaxle Repair** 1 UNITS  
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T - Electronics Diagnosis and Repair Assessment Test Out  
1.0 hours 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)

**AUTO-131L**

**Manual Transmission and Transaxle Repair Laboratory** 1 UNITS  
Recommended Preparation: "C" grade or higher or "Pass" in Automotive Technology 162T - Electronics Diagnosis and Repair Assessment Test Out  
3.0 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)

**AUTO-131T**

**Manual Transmission and Transaxle Repair Assessment Test Out** 0.5 UNITS

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.

**AUTO-132**

**Differential and 4WD Systems Diagnosis and Service** 1 UNITS  
1.0 hours 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)

**AUTO-132L**

**Differential and 4WD Systems Laboratory** 1 UNITS  
3.0 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)

**AUTO-132T****Differential and 4WD Systems Assessment Test Out 0.5 UNITS**

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.

**AUTO-143****Steering and Suspension Diagnosis and Repair 1 UNITS**

1.0 hours 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 AUTO143L Steering and Suspension Diagnosis and Repair Laboratory, AUTO143T 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)

**AUTO-143L****Steering and Suspension Diagnosis and Repair Laboratory 1 UNITS**

3.0 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 143T 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)

**AUTO-143T****Steering and Suspension Diagnosis and Repair Assessment Test Out 0.5 UNITS**

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.

**AUTO-144****Noise, Vibration, and Harshness 0.5 UNITS**

0.5 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)

**AUTO-144L****Noise, Vibration, and Harshness Laboratory 1 UNITS**

3.0 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)

**AUTO-144T****Noise, Vibration, and Harshness Assessment Test Out 0.5 UNITS**

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.

**AUTO-151**

**Brake System Diagnosis and Repair** **2 UNITS**  
2.0 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)

**AUTO-151L**

**Brake System Diagnosis and Repair Laboratory** **1 UNITS**  
3.0 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)

**AUTO-151T**

**Brake System Diagnosis and Repair Assessment Test Out** **0.5 UNITS**  
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.

**AUTO-153**

**Advanced Brake System Diagnosis and Repair** **2 UNITS**  
2.0 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)

**AUTO-153L**

**Advanced Brake System Diagnosis and Repair Laboratory** **1 UNITS**  
3.0 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 covered 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)

**AUTO-153T**

**Advanced Brake System Assessment Test Out** **0.5 UNITS**  
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.

**AUTO-161**

**Electrical Diagnosis and Repair** **2 UNITS**  
2.0 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.

**AUTO-161L**

**Electrical Diagnosis and Repair Laboratory** **1 UNITS**  
3.0 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)

**AUTO-161T**

**Electrical Diagnosis and Repair Assessment Test Out** **0.5 UNITS**  
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.



**AUTO-162**

**Electronics Diagnosis and Repair** **2 UNITS**  
2.0 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.

**AUTO-162L**

**Electronics Diagnosis and Repair Laboratory** **1 UNITS**  
3.0 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)

**AUTO-162T**

**Electronics Diagnosis and Repair Assessment Test Out** **0.5 UNITS**  
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.

**AUTO-171**

**Climate Control System Diagnosis and Repair** **1 UNITS**  
1.0 hours 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)

**AUTO-171L**

**Climate Control System Diagnosis and Repair Laboratory** **1 UNITS**  
3.0 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)

**AUTO-171T**

**Climate Control System Diagnosis and Repair Assessment Test Out** **0.5 UNITS**

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.

**AUTO-181**

**Engine Performance I Ignition and Fuel Systems** **2 UNITS**  
2.0 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 complimented 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)

**AUTO-181L**

**Engine Performance I Ignition and Fuel Systems Laboratory** **1 UNITS**  
3.0 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)

**AUTO-181T****Engine Performance I Ignition and Fuel Systems Assessment Test Out 0.5 UNITS**

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.

**AUTO-183****Engine Performance II Intake Exhaust and Emission Systems 2 UNITS**

2.0 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)

**AUTO-183L****Engine Performance II Intake Exhaust Emission Systems Laboratory 1 UNITS**

3.0 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)

**AUTO-183T****Engine Performance II Intake Exhaust Emission Systems Assessment Test Out 0.5 UNITS**

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.

**AUTO-194****Diesel Engine Performance and Diagnosis 2 UNITS**

2.0 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)

**AUTO-194L****Diesel Engine Performance and Diagnosis Laboratory 1 UNITS**

3.0 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)

**AUTO-194T****Diesel Engine Performance and Diagnosis Assessment Test Out 0.5 UNITS**

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.

**AUTO-210****Service Management 3 UNITS**

3.0 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)

**AUTO-211****Automotive Customer Service 2 UNITS**

2.0 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)

**AUTO-212****Automotive Work Experience 1-4 UNITS**

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

**AUTO-213****ASCCA - Work Experience 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. 75 hours paid work experience per unit, 1-4 units. (CSU)

**AUTO-214****General Motors ASEP Work Experience 1-4 UNITS**

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. 75 hours paid work experience per unit, 1-4 units. (CSU)

**AUTO-215****Ford ASSET-Work Experience 1-4 UNITS**

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 - sixteen units, and students must work 75 paid hours per unit earned. 75 hours paid work experience per unit, 1-4 units. (CSU)

**AUTO-263****Advanced Electronics 1 UNITS**

1.0 hours 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)

**AUTO-263L****Advanced Electronics Laboratory 1 UNITS**

3.0 hours laboratory  
This laboratory course describes and demonstrates proper inspection and diagnostic techniques for various network symptoms and conditions, including programming 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)

**AUTO-263T****Advanced Electronics Assessment Test Out 0.5 UNITS**

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.

**AUTO-264****Hybrid and Electric Vehicle Operation and Diagnosis 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in AUTO 162T Electronics Diagnosis and Repair Assessment Test out or the equivalent  
1.0 hours 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)

**AUTO-264L****Hybrid and Electric Vehicle Operation and Diagnosis Laboratory****1 UNITS**

3.0 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)

**AUTO-264T****Hybrid and Electric Vehicle Operation and Diagnosis Assessment Test Out****0.5 UNITS**

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.

**AUTO-283****Advanced Engine Performance****1 UNITS**

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

1.0 hours 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)

**AUTO-283L****Advanced Engine Performance Laboratory****1 UNITS**

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

3.0 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)

**AUTO-283T****Advanced Engine Performance Assessment Test Out****0.5 UNITS**

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 complimented by Work Experience courses.

**AUTO-284****Level I Inspector Training Emission Control License****2 UNITS**

2.0 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)

**AUTO-284L**

**Level I Inspector Training Emission Control License Laboratory 1 UNITS**  
3.0 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)

**AUTO-284T**

**Level I Inspector Training Emission Control License Assessment Test Out 0.5 UNITS**

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 183T 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 complimented by Work Experience at a Smog Inspection Station.

**AUTO-285**

**Level II Inspector Training Emission Control License 1 UNITS**  
1.0 hours 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)

**AUTO-285L**

**Level II Inspector Training Emission Control License Laboratory 1 UNITS**  
3.0 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)

**AUTO-285T**

**Level II Inspector Training Emission Control License Assessment Test Out 0.5 UNITS**

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 183T 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 complimented by Work Experience at a Smog Inspection Station. This course may be used to satisfy BAR citation requirements.



## Biological Sciences (BIO)

### BIO-112

#### Contemporary Issues in Environmental Resources 3 UNITS

3.0 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)

### BIO-115

#### Biology of Alcohol and Other Drugs 3 UNITS

3.0 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)

### BIO-122

#### The Secret Life of Plants 4 UNITS

3.0 hours lecture, 3.0 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)

### BIO-130

#### General Biology I 3 UNITS

3.0 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)

### BIO-131

#### General Biology I Laboratory 1 UNITS

Prerequisite: "C" grade or higher or "Pass" in BIO 130 or equivalent or concurrent enrollment

3.0 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)

### BIO-133

#### Ethnoecology 3 UNITS

3.0 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. Also listed as KUMEY 133. Not open to students with credit in KUMEY 133. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### BIO-134

#### Ethnobotany 3 UNITS

3.0 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. Also listed as KUMEY 134. Not open to students with credit in KUMEY 134. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### BIO-135

#### Ethnobotany/Ethnoecology Lab 1 UNITS

Prerequisite: "C" grade or higher or "Pass" in either BIO 133 or BIO 134 or KUMEY 133 or KUMEY 134 or concurrent enrollment

3.0 hours laboratory

Laboratory experiments to complement KUMEY 133/BIO 133:

Ethnoecology and KUMEY 134/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. Also listed as KUMEY 135. Not open to students with credit in KUMEY 135. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### BIO-140

#### Human Anatomy 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent

2.0 hours lecture, 6.0 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 dissection of preserved specimens. (C-ID BIOL 110B) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**BIO-141****Human Physiology 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent  
3.0 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. (C-ID BIOL 120B (with BIO 141L)) (CSU, CSU GE, IGETC, UC)

**BIO-141L****Laboratory in Human Physiology 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 or equivalent, BIO 141 or equivalent or concurrent enrollment

3.0 hours laboratory

Laboratory course designed to illustrate the physiological principles studied in BIO 141. Emphasis is on lab-based investigations of human physiological processes. (C-ID BIOL 120B (with BIO 141)) (CSU, CSU GE, IGETC, UC)

**BIO-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

3.0 hours lecture, 6.0 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)

**BIO-215****Statistics for Life Sciences 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 130, MATH 110 or equivalent

2.0 hours lecture, 3.0 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)

**BIO-230****Principles of Cellular, Molecular and Evolutionary Biology 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CHEM 141 or equivalent  
3.0 hours lecture, 3.0 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. (C-ID BIOL 135S (with BIO 240), 190) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**BIO-240****Principles of Ecology, Evolution and Organismal Biology 5 UNITS**

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

4.0 hours lecture, 3.0 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. (C-ID BIOL 135S (with BIO 230), 140) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**BIO-251****Human Dissection 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 140 or equivalent and recommendation from the student's Human Anatomy instructor

3.0 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)

### BUS-109

#### Elementary Accounting

3 UNITS

3.0 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)

### BUS-110

#### Introduction to Business

3 UNITS

3.0 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. (C-ID BUS 110) (CSU, UC)

### BUS-111

#### Entrepreneurship: Starting and Developing a Business

3 UNITS

3.0 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 own 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)

### BUS-112

#### Craft Entrepreneur

2 UNITS

2.0 hours lecture

This course provides an introductory view of today's craft industry entrepreneurs whose businesses specialize in goods that are handmade by artisans or those skilled in a particular trade. Small businesses engaged in the craft industry range from beverages and culinary products to handmade textiles and art, and everything in between. Specific topics will include an introduction to craft industry entrepreneurship, government assistance programs, project management, customer relationship management, social networking and marketing, and exploring ethical and social responsibilities. (CSU)

### BUS-113

#### GIG Economy: The New Entrepreneurial Path

2 UNITS

2.0 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)

### BUS-115

#### Human Relations in Business

3 UNITS

3.0 hours lecture

This course explores the influence of individual differences, interpersonal dynamics and culture on human relations as it pertains to the model of business management. To develop future individual and organizational success, students will place a focus on diversity, globalization, skills of emotional intelligence, ethics, conflict resolution, cultural competency, active listening, and empathetic business practices. (CSU)

### BUS-120

#### Financial Accounting

4 UNITS

4.0 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. (C-ID ACCT 110) (CSU, UC)

### BUS-121

#### Managerial Accounting

4 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

4.0 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. (C-ID ACCT 120) (CSU, UC)

### BUS-122

#### Intermediate Accounting

4 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

4.0 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)

### BUS-124

#### Auditing

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

3.0 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)

**BUS-125****Business Law: Legal Environment of Business 3 UNITS**

3.0 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, regulation of property and protection of intellectual property interests, consumer protection, antitrust law and e-commerce. (C-ID BUS 120/125) (CSU, UC)

**BUS-128****Business Communication 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or ESL 122 or equivalent

3.0 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. (C-ID BUS 115) (CSU)

**BUS-129****Payroll Accounting and Business Taxes 2 UNITS**

2.0 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)

**BUS-150****Individual Income Tax Accounting 3 UNITS**

3.0 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)

**BUS-155****Human Resources Management 3 UNITS**

3.0 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)

**BUS-156****Principles of Management 3 UNITS**

3.0 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)

**BUS-161****Business Internship 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. 75 hours paid or 60 hours unpaid work experience per unit, 1-3 units. (CSU)

**BUS-162****Analysis of Financial Statements 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BUS 120 or equivalent

3.0 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)

**BUS-176****Computerized Accounting Applications 2 UNITS**

2.0 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)

**BUS-195****Principles of Money Management for Success 3 UNITS**

3.0 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)

## BOT-100

### Basic Keyboarding 1 UNITS

3.0 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)

## BOT-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)

## BOT-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)

## BOT-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)

## BOT-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)

## BOT-103A

### Building Keyboarding Skill I 0.5 UNITS

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)

## BOT-103B

### Building Keyboarding Skill II 0.5 UNITS

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)

## BOT-103C

### Building Keyboarding Skill III 0.5 UNITS

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)

## BOT-104

### Filing and Records Management 1 UNITS

0.5 hours 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)

## BOT-106

### Effective Job Search 1 UNITS

1.0 hours 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)

## BOT-107

### Office Systems and Procedures 2 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB, 119 or equivalent or concurrent enrollment

2.0 hours lecture

Content includes office ethics and professionalism; prioritizing and productivity; human relations; working in teams; customer service skills; telephone skills; scheduling appointments; using email, use of applications and devices to transmit documents; handling office mail; and using the Internet for common office functions such as travel reservations and ordering supplies. (CSU)



**BOT-114****Essential Word 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 119 or equivalent

0.5 hours 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)

**BOT-115****Essential Excel 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 119 or equivalent

0.5 hours 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)

**BOT-116****Essential Access 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 119 or equivalent

0.5 hours 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)

**BOT-117****Essential Powerpoint 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 119 or equivalent

0.5 hours 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)

**BOT-118****Integrated Office Projects 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" 114, 115, 116, 117 or equivalent

3.0 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)

**BOT-119****Windows for the Information Worker 2 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100 or equivalent or concurrent enrollment

2.0 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)

**BOT-120****Comprehensive Word, Level I 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB, 119 or equivalent

0.5 hours 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)

**BOT-121****Comprehensive Word, Level II 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 120 or equivalent

0.5 hours 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)

**BOT-122****Comprehensive Word, Level III 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BOT 121 or equivalent

0.5 hours 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)

**BOT-123****Comprehensive Excel, Level I 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 119 or equivalent

0.5 hours 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)

**BOT-124****Comprehensive Excel, Level II 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 123 or equivalent

0.5 hours 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)

**BOT-125****Comprehensive Excel, Level III 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BOT 124 or equivalent

0.5 hours 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)

**BOT-126****Comprehensive Access, Level I 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 116, 119 or equivalent

0.5 hours 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)

**BOT-127****Comprehensive Access, Level II 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 126 or equivalent

0.5 hours 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)

**BOT-128****Comprehensive Access, Level III 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BOT 127 or equivalent

0.5 hours 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)

**BOT-129****Comprehensive PowerPoint, Level I 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB, 114, 120 or equivalent

0.5 hours 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)

**BOT-130****Comprehensive PowerPoint, Level II 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 129 or equivalent

0.5 hours 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)

**BOT-132****Google Applications for Business 3 UNITS**

3.0 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 Sheets, Google Slides, and emerging trends in Google Apps. Students use the internet to access their files and the tools to manipulate and collaborate with them. (CSU)

**BOT-133****Adobe Acrobat for the Workplace 1 UNITS**

Recommended Preparation: "C" or higher or "Pass" in BOT 119 or equivalent

1.0 hours 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.

**BOT-150****Using Microsoft Publisher 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 101AB or 121 or equivalent

0.5 hours 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)

**BOT-151****Using Microsoft Outlook 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in BOT 100, 114, 119 or 120 or equivalent

0.5 hours 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)

**BOT-174****Computer Concepts and Applications 3 UNITS**

3.0 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)

**BOT-180****Basic Computer Skills for Arabic Learners 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in Arabic 120 or equivalent

1.0 hours 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)

**BOT-223****Office Work Experience 1 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

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. 75 hours paid or 60 hours non-paid work experience per semester, 1 unit. (CSU)

**BOT-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

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. 150 hours paid or 120 hours non-paid work experience per semester, 2 units. (CSU)

**BOT-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

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. 225 hours paid or 180 hours non-paid work experience per semester, 3 units. (CSU)

## CADD Technology (CADD)

**\*UC credit limit: all CADD courses, ENGR 119, ENGR 129, OH 200, OH 201 combined: maximum credit, one course.**

### CADD-115

#### Engineering Graphics 3 UNITS

2.0 hours lecture, 4.0 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)

### CADD-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

2.0 hours lecture, 4.0 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)

### CADD-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

2.0 hours lecture, 4.0 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)

### CADD-126

#### Electronic Drafting 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent

3.0 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)

### CADD-127

#### Survey Drafting Technology 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent

2.0 hours lecture, 4.0 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)

### CADD-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

3.0 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)

### CADD-129

#### Engineering Solid Modeling 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent

2.0 hours lecture, 4.0 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)

### CADD-131

#### Architectural Computer-Aided Drafting and Design 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CADD 120 or ENGR 119 or equivalent

2.0 hours lecture, 4.0 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)

**CADD-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

2.0 hours lecture, 4.0 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)

**CADD-133****Advanced Architectural Computer-Aided Drafting and Design 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CADD 131 or equivalent

2.0 hours lecture, 4.0 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)

**CADD-140****Introduction to Advanced CADD/ Manufacturing 2 UNITS**

2.0 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)

**CADD-141****Introduction to Technology of Machine Tools 2 UNITS**

2.0 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)

**CADD-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

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 nonpaid hours per unit earned. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

**CADD-200****Introduction to Computer-Aided Landscape Design 3 UNITS**

2.0 hours lecture, 3.0 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)

**CADD-201****Advanced Computer-Aided Landscape Design 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CADD/OH 200 or equivalent

2.0 hours lecture, 3.0 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 (CWS)

### CWS-100

**Career Pathways in Water & Wastewater** 3 UNITS  
3.0 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)

### CWS-101

**Fundamentals of Water & Wastewater** 3 UNITS  
3.0 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. (CSU)

### CWS-102

**Calculations in Water & Wastewater** 3 UNITS  
Recommended Preparation: Competency in basic math skills  
3.0 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. (CSU)

### CWS-103

**Water Resources Management** 3 UNITS  
3.0 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. (CSU)

### CWS-105

**Water Conservation** 3 UNITS  
3.0 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. (CSU)

### CWS-106

**Electrical & Instrumentation Processes** 3 UNITS  
3.0 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. (CSU)

### CWS-107

**Safety in Water & Wastewater** 3 UNITS  
3.0 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)

### CWS-110

**Laboratory Analysis for Water & Wastewater** 3 UNITS  
3.0 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. (CSU)

### CWS-112

**Water Treatment Plant Operations** 3 UNITS  
Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent  
3.0 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. (CSU)

### CWS-114

**Wastewater Treatment Plant Operations** 3 UNITS  
3.0 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. (CSU)

### CWS-115

**Wastewater Reclamation and Reuse** 3 UNITS  
3.0 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. (CSU)

**CWS-116****Advanced Water Treatment I****3 UNITS**

Prerequisite: Any one of the following will satisfy the prerequisite for CWS 116: 1) Proof of a passing grade for the SWRCB T2 Water Treatment certification exam 2) Possession of a valid SWRCB T2 (or Higher) Water Treatment certification 3) Proof of a passing grade for the SWRCB Grade 2 Wastewater Treatment certification exam 4) Possession of a valid SWRCB Grade 2 (or higher) Wastewater Treatment certification  
3.0 hours lecture

This course is a study of the basic principles involved in the theory, components, and operations of an Advanced Water Treatment Facility where reclaimed water is treated to augment potable water supplies and teach recycled water standards. Overview of treatment theory, design, operation, and monitoring, of components that complete an Advanced Water Treatment, multi barrier treatment facility. (CSU)

**CWS-130****Water Distribution Systems****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent

3.0 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. (CSU)

**CWS-132****Wastewater Collection Systems****3 UNITS**

3.0 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. (CSU)

**CWS-134****Pumps, Motors & Valves****3 UNITS**

3.0 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. (CSU)

**CWS-204****Applied Hydraulics****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CWS 102 or equivalent

3.0 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. (CSU)

**CWS-206****Advanced Electrical & Instrumentation Processes****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 106 or equivalent  
3.0 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)

**CWS-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)

**CWS-210****Advanced Laboratory Analysis for Water & Wastewater****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 110 or equivalent  
3.0 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)

**CWS-212****Advanced Water Treatment Plant Operations****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 112 or equivalent  
3.0 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. (CSU)

**CWS-214****Advanced Wastewater Treatment Plant Operations****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 114 or equivalent  
3.0 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, & safety/regulatory compliance. (CSU)

**CWS-216****Advanced Water Treatment II 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 116 or equivalent  
3.0 hours lecture

This course is an advanced study of the principals involved in the theory, components, and operations of an Advanced Water Treatment Facility where reclaimed water is treated to augment potable water supplies and teach recycled water standards. Overview of treatment theory, design, operation, and monitoring, of components that complete an Advanced Water Treatment, multi barrier treatment facility. (CSU)

**CWS-230****Advanced Water Distribution Systems 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 130 or equivalent  
3.0 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, CWS 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. (CSU)

**CWS-232****Advanced Wastewater Collection Systems 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 132 or equivalent  
3.0 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. (CSU)

**CWS-268****Membrane Plant Operation 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 112 or 114 or equivalent  
3.0 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 considerations. (CSU)

**CWS-270****Public Works Supervision 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CWS 101 or equivalent  
3.0 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. (CSU)

**CWS-280****Backflow Tester Training 2 UNITS**

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. (CSU)

**CWS-282****Cross-Connection Control Specialist 3 UNITS**

3.0 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. (CSU)

**CWS-284****Cross-Connection Control Specialist- Recycled Water 3 UNITS**

3.0 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. (CSU)

**CWS-290****Cooperative Work Experience 1-4 UNITS**

Recommended Preparation: Successful completion of at least three Water/Wastewater technology courses prior to enrolling in Cooperative Work Experience is highly recommended  
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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units.

## Chemistry (CHEM)

### CHEM-012

#### Strategies for Success in Chem 102 Introduction to General, Organic and Biological Chemistry 1 UNITS

Corequisite: Concurrent enrollment in CHEM 102

3.0 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.

### CHEM-020

#### Strategies For Success In CHEM 120 1 UNITS

Corequisite: Concurrent enrollment in CHEM 120

3.0 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.

### CHEM-102

#### Introduction to General, Organic and Biological Chemistry 5 UNITS

Prerequisite: Appropriate mathematics placement

4.0 hours lecture, 3.0 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 or 116 (offered at Grossmont College) are not eligible for this class. (AA/AS GE, CSU, CSU GE, IGETC, UC, UC credit limit)

### CHEM-115

#### Fundamentals of Chemistry 4 UNITS

Prerequisite: Appropriate mathematics placement

3.0 hours lecture, 3.0 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. (C-ID CHEM 101) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

### CHEM-120

#### Preparation for General Chemistry 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or equivalent

3.0 hours lecture, 3.0 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)

### CHEM-141

#### General Chemistry I 5 UNITS

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 the MATH 110 or equivalent

3.0 hours lecture, 6.0 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. (C-ID CHEM 110, 120S (with CHEM 142)) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

### CHEM-142

#### General Chemistry II 5 UNITS

Prerequisite: "C" grade or higher or "Pass" in CHEM 141 or equivalent

3.0 hours lecture, 6.0 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, coordination compounds. The laboratory is a continuation of CHEM 141 with the quantitative analysis of matter and also includes qualitative analysis. (C-ID CHEM 120S (with CHEM 141)) (CSU, CSU GE, IGETC, UC)

### CHEM-231

#### Organic Chemistry I 5 UNITS

Prerequisite: "C" grade or higher or "Pass" in CHEM 142 or equivalent

3.0 hours lecture, 6.0 hours laboratory

First of a two semester organic chemistry sequence. Includes nomenclature, structure/function relationships, and reaction mechanisms. Lab reinforces chemical principles and teaches proper lab technique. Course intended for science/pre-med majors. (C-ID CHEM 150, CHEM 160S (with CHEM 232)) (CSU, CSU GE, IGETC, UC)

### CHEM-232

#### Organic Chemistry II 5 UNITS

Prerequisite: "C" grade or higher or "Pass" in CHEM 231 or equivalent

3.0 hours lecture, 6.0 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. (C-ID CHEM 160S (with CHEM 231)) (AA/AS GE, CSU, CSU GE, IGETC, UC)



## Child Development (CD)

### CD-106

#### Practicum: Beginning Observation and Experience 1 UNITS

Prerequisite: CD 123 or 125 or previous completion of either course with a "C" grade or higher or "Pass"

3.0 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)

### CD-115

#### Changing American Family 3 UNITS

3.0 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)

### CD-123

#### Principles and Practices of Programs and Curriculum for Young Children 3 UNITS

3.0 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. (C-ID ECE 120) (CSU)

### CD-124

#### Infant and Toddler Development 3 UNITS

3.0 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)

### CD-125

#### Child Growth and Development 3 UNITS

3.0 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. (C-ID CDEV 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### CD-126

#### Art for Child Development 3 UNITS

3.0 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)

### CD-127

#### Science and Mathematics for Child Development 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CD 125 or equivalent

3.0 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)

### CD-128

#### Music and Movement for Child Development 3 UNITS

3.0 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)

### CD-129

#### Language and Literature for Child Development 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CD 125 or equivalent

3.0 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)

### CD-130

#### Curriculum: Design and Implementation 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CD 123, 125, 126, 127, 128, 129, 131 or equivalent

3.0 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, and math and science will be provided. (C-ID ECE 130) (CSU)



**CD-131****Child, Family and Community****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CD 123, 125 or equivalent

3.0 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. (C-ID CDEV 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**CD-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

3.0 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)

**CD-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

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. 75 hours paid or 60 hours non-paid work experience per unit, 2 units. (CSU)

**CD-134****Health, Safety and Nutrition of Young Children****3 UNITS**

3.0 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. (C-ID ECE 220) (CSU)

**CD-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)

3.0 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)

**CD-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)

3.0 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)

**CD-138****Administration of Child Development Programs II****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CD 137 or equivalent

3.0 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)

**CD-141****Working with Children with Special Needs****3 UNITS**

3.0 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)

**CD-143****Responsive Planning for Infant/Toddler Care****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CD 124 or 125 or equivalent

3.0 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)

**CD-145****Child Abuse and Family Violence in Our Society 3 UNITS**

3.0 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)

**CD-153****Teaching in a Diverse Society 3 UNITS**

3.0 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. (C-ID ECE 230) (CSU)

**CD-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

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. 75 hours paid or 60 hours unpaid work experience per unit, 2 units. (CSU)

**CD-210****Working with Young Children with Challenging Behaviors 3 UNITS**

3.0 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)

**CD-212****Practicum in Early Childhood Education 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CD 123, 125, 130, and 131 or equivalent

2.0 hours lecture, 3.0 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. (C-ID ECE 210) (CSU)

**CD-213****Observation and Assessment 3 UNITS**

3.0 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. (C-ID ECE 200) (CSU)

## Communication (COMM)

### COMM-110

#### Introduction to Mass Communication

**3 UNITS**

3.0 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. (C-ID JOUR 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### COMM-120

#### Interpersonal Communication

**3 UNITS**

3.0 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. (C-ID COMM 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### COMM-122

#### Public Speaking

**3 UNITS**

3.0 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. (C-ID COMM 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### COMM-123

#### Advanced Public Speaking

**3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in COMM 122 or equivalent

3.0 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)

### COMM-124

#### Intercultural Communication

**3 UNITS**

3.0 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. (C-ID COMM 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### COMM-137

#### Critical Thinking in Group Communication

**3 UNITS**

3.0 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. (C-ID COMM 140) (AA/AS GE, CSU, CSU GE, UC)

### COMM-145

#### Argumentation

**3 UNITS**

3.0 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. (C-ID COMM 120) (AA/AS GE, CSU, CSU GE, UC)

# Computer and Information Science (CIS)

## CIS-101

### Fundamentals of Information Technology 1.5 UNITS

1.0 hours 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)

## CIS-110

### Principles of Information Systems 4 UNITS

3.0 hours lecture, 3.0 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. (C-ID BUS 140/ITIS 120) (CSU, CSU GE, UC)

## CIS-120

### Computer Maintenance and A+ Certification 3 UNITS

Recommended Preparation: Basic computer skills (basic knowledge of hardware, operating systems, applications software)

2.0 hours lecture, 3.0 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)

## CIS-121

### Network Cabling Systems 3 UNITS

2.0 hours lecture, 3.0 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 develop the knowledge and skills required to build, test, operate and maintain the physical aspects of voice, video and data networks. (CSU)

## CIS-125

### Network+ Certification 3 UNITS

Recommended Preparation: Basic computer skills (basic knowledge of hardware, operating systems, applications software)

2.0 hours lecture, 3.0 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. (C-ID ITIS 150) (CSU)

## CIS-140

### Databases 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent

2.0 hours lecture, 3.0 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)

## CIS-162

### Technical Diagramming Using Microsoft Visio 2 UNITS

Recommended Preparation: Basic computer skills

1.0 hours lecture, 3.0 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)

**CIS-170****Internet of Things (IoT) - Connecting Things****3 UNITS**

2.0 hours lecture, 3.0 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)

**CIS-172****Internet of Things (IoT) Security****3 UNITS**

Prerequisite: Successful completion of CIS 170

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-201****Cisco Academy - Introduction to Networking****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CIS 125 or equivalent

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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 RIPv3), 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. (C-ID ITIS 151) (CSU)



**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-205****Implementing Cisco IP Routing (Route) 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or successful completion of the current version of CCNA1, 2, and 3 at another Cisco Networking Academy or possess a current CCNA

2.0 hours lecture, 3.0 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)

**CIS-206****Cisco Networking Academy VI 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 205 or equivalent

2.0 hours lecture, 3.0 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)

**CIS-207****Cisco Networking Academy VII 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or successful completion of the current version of CCNA1, 2, and 3 at another Cisco Networking Academy or possess a current CCNA certification

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-210****Cisco Networking Academy - Voice****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 203 or equivalent or Cisco Networking Academy CCNA1, 2, 3; or possess current CCNA certification

3.0 hours lecture, 3.0 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)

**CIS-211****Web Development I****3 UNITS**

Recommended Preparation: Basic computer skills (ability to use the Internet, word process documents, manage electronic files)

2.0 hours lecture, 3.0 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)

**CIS-213****Web Development II****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in CIS 211 or equivalent

2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-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.

2.0 hours lecture, 3.0 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)

**CIS-220****E-Commerce and Web Presence****3 UNITS**

Recommended Preparation: Basic familiarity with the PC or Mac and Web browsing is strongly recommended. Basic Web site creation skills are also recommended.

3.0 hours lecture

This course covers the principles and technologies involved in creating a Web presence for a small or medium sized business (SMB). Students will create a starter e-business website. (CSU)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-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, 209, 210, 263, 290, 291, 293, 294, 295, CS 119, 119L or equivalent  
1.0 hours lecture, 3.0 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)

**CIS-263****Fundamentals of Network Security 3 UNITS**

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  
2.0 hours lecture, 3.0 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. (C-ID ITIS 160) (CSU)

**CIS-264****Ethical Cybersecurity Hacking 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 263 or CIS 209  
2.0 hours lecture, 3.0 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)

**CIS-265****Computer Forensics Fundamentals 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 264 or equivalent  
2.0 hours lecture, 3.0 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)

**CIS-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  
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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

**CIS-270****Palo Alto Network Security I 3 UNITS**

Recommended Preparation: CCNA 1-4, CCNA Security, Security +  
2.0 hours lecture, 3.0 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)

**CIS-271****Palo Alto Networks - Certified Network Security Administrator (PCNSA) 3 UNITS**

Recommended Preparation: CIS 270  
2.0 hours lecture, 3.0 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)

**CIS-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

2.0 hours lecture, 3.0 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)

**CIS-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

1.0 hours lecture, 3.0 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)

**CIS-291****Linux System Administration 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 191 or equivalent

2.0 hours lecture, 3.0 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 4.5 exam and the Red Hat Systems Administrator certification. (CSU)

**CIS-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

1.0 hours lecture, 3.0 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)

**CIS-294****Windows Server-Advanced Configuration 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CIS 190 or equivalent or current Microsoft Certified Technology Specialist (MCTS) 70-680 certification

1.0 hours lecture, 3.0 hours laboratory

Comprehensive hands-on system administration course focusing on advanced Windows server configuration tasks, including: fault tolerance, certificate services and identity federation. (CSU)

**CIS-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

2.0 hours lecture, 3.0 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)

## CS-119

### Program Design and Development 3 UNITS

Corequisite: CS 119L

Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent

3.0 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, and introductory graphics and networking. (C-ID COMP 112 (with CS 119L)) (CSU, UC)

## CS-119L

### Program Design and Development Lab 1 UNITS

Corequisite: CS 119

Recommended Preparation: "C" grade or higher or "Pass" in CIS 110 or equivalent

3.0 hours laboratory

Laboratory tutorials, drills and programming problems designed to help students master the concepts and programming projects presented/assigned in CS 119. (C-ID COMP 112 (with CS 119)) (CSU, UC)

## CS-165

### Assembly Language and Machine Architecture 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in CS 181 or CS 182 or equivalent, or experience programming in C/C++ or Java

3.0 hours lecture, 3.0 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. (C-ID COMP 142) (CSU, UC)

## CS-181

### Introduction to C++ Programming 4 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in CS 119 or equivalent, and intermediate algebra

3.0 hours lecture, 3.0 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. (C-ID COMP 122) (CSU, UC)

## CS-182

### Introduction to Java Programming 4 UNITS

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

3.0 hours lecture, 3.0 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. (C-ID COMP 122) (CSU, UC)

## CS-240

### Discrete Structures 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in CS 181 or CS 182 or equivalent, or experience programming in C/C++ or Java

3.0 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. (C-ID COMP 152) (CSU, CSU GE, IGETC, UC)

## CS-281

### Intermediate C++ Programming and Fundamental Data Structures 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in CS 181 or equivalent

3.0 hours lecture, 3.0 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. (C-ID COMP 132) (CSU, UC)

## CS-282

### Intermediate Java Programming and Fundamental Data Structures 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in CS 182 or equivalent

3.0 hours lecture, 3.0 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 will gain experience by working on larger programs and managing large, multi-programmer projects. Laboratory instruction includes program development and execution. Mobile and database applications will be introduced. (C-ID COMP 132) (CSU, UC)



## Counseling (COUN)

### COUN-095

#### Academic and Financial Aid Planning

0.5 UNITS

0.5 hours 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.

### COUN-101

#### Introduction to College

0.5-1 UNITS

0.5 hours 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; campus, services, academic regulations, general education requirements, and certificate, degree and transfer options. Students will receive education planning. Pass/No Pass only. Non-degree applicable. 0.5 hour lecture (0.5 unit), 1 hour lecture (1 unit).

### COUN-110

#### Career Decision Making

1 UNITS

1.0 hours lecture

Lecture, group discussion, experiential activities and career assessment tools will be utilized to assist students in identifying their individual interests, values, and personality styles. Students will conduct educational and career research that will help them relate their career assessment results to setting academic and career goals. Students will also learn essential skills for obtaining employment such as resume building and job interviewing techniques. (CSU)

### COUN-120

#### College and Career Success

3 UNITS

3.0 hours lecture

This course teaches academic and career success strategies to enhance lifelong learning and well-being. Students will explore and discover values, interests, and personal strengths to make meaningful choices about their educational, career, and personal goals. Students will learn how to be successful in college by improving study skills and exploring motivation. Success topics include managing stress, developing creativity, improving communications and relationships, and maintaining wellness in a diverse society. COUN 120 and COUN 150 combined; maximum UC credit, one course. (CSU, CSU GE, UC credit limit)

### COUN-130

#### Study Skills and Time Management

1 UNITS

1.0 hours lecture

This course is 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)

### COUN-140

#### Self Awareness and Interpersonal Relationships

3 UNITS

3.0 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. (AA/AS GE, CSU, CSU GE)

### COUN-150

#### Transfer Success

1 UNITS

1.0 hours 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 validation of one's educational goal. COUN 120 and COUN 150 combined; maximum UC credit, one course. (CSU, UC credit limit)

## Economics (ECON)

### ECON-110

#### Economic Issues and Policies

**3 UNITS**

3.0 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)

### ECON-120

#### Principles of Macroeconomics

**3 UNITS**

Prerequisite: Appropriate mathematics placement

3.0 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. (C-ID ECON 202) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ECON-121

#### Principles of Microeconomics

**3 UNITS**

Prerequisite: Appropriate mathematics placement

3.0 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. (C-ID ECON 201) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## Education (ED)

### ED-151

#### Effective Tutoring Strategies

**1 UNITS**

1.0 hours lecture

This course is designed to prepare students for tutoring college students. Provides an overview of effective learner-centered and 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.

### ED-200

#### Teaching as a Profession

**3 UNITS**

3.0 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. (C-ID EDUC 200) (CSU, UC)

# Electronics Technology (ET)

ET-110

**Introduction to Electricity and Electronics**

**4 UNITS**

3.0 hours lecture, 3.0 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**

### ENGR-100

#### Introduction to Engineering and Design

**4 UNITS**

3.0 hours lecture, 3.0 hours laboratory

Introduction to engineering as a way of perceiving the world. Overview of design and analytical techniques, problem solving and strategic thinking. 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. (C-ID ENGR 110) (AA/AS GE, CSU, UC)

### ENGR-103

#### Environmental Engineering Seminar

**3 UNITS**

3.0 hours lecture

Exploring the breadth and depth of environmental engineering field through presentations by invited faculty, guests, and seminar enrollees; includes individual library/internet research with written and oral presentations on selected environmental topics. (CSU)

### ENGR-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

2.0 hours lecture, 4.0 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)

### ENGR-120

#### Engineering Computer Applications

**3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent or concurrent enrollment

2.0 hours lecture, 3.0 hours laboratory

Use of computerized mathematical analysis, computer programming, and computer graphics as tools for solving engineering problems. (CSU, UC)

### ENGR-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

2.0 hours lecture, 4.0 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)

### ENGR-129

#### Engineering Solid Modeling

**3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CADD 115 or ENGR 100 or equivalent

2.0 hours lecture, 4.0 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)

### ENGR-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.

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-3 units. (CSU)

### ENGR-199

#### Special Studies or Projects in Engineering

**1-3 UNITS**

Prerequisite: Consent of instructor

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. 48-54 hours (1 unit), 96-108 hours (2 units), 144-162 hours (3 units).



**ENGR-200****Engineering Mechanics-Statics 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PHYC 201 or equivalent

Corequisite: MATH 280 or previous enrollment

3.0 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)

**ENGR-210****Electric Circuits 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 280, PHYC 202 or equivalent

3.0 hours lecture, 3.0 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)

**ENGR-218****Plane Surveying 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 170 or MATH 176, or equivalent or concurrent enrollment

2.0 hours lecture, 6.0 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)

**ENGR-220****Engineering Mechanics-Dynamics 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in ENGR 200 or equivalent

3.0 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. (C-ID ENGR 230) (CSU, UC)

**ENGR-225****Mechanics for Civil Engineers 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PHYC 201 or equivalent

Corequisite: MATH 280 or previous enrollment

Recommended Preparation: Review of materials covered in the prerequisite for the course

3.0 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; centroids and moments of inertia; kinematics and Newtonian laws of motion for particles. (CSU, UC)

**ENGR-260****Engineering Materials 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PHYC 201 or equivalent

Corequisite: CHEM 141 or previous enrollment

3.0 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)

**ENGR-261****Materials Laboratory 1 UNITS**

Corequisite: ENGR 260

3.0 hours laboratory

Experimental methods used to characterize engineering materials and their mechanical behavior. Students will use a variety of material testing equipment to gain hands-on experience testing for materials properties and exploring the mechanical behaviors of materials. (CSU)

**ENGR-270****Digital Design 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 175 or 176 or equivalent

3.0 hours lecture, 3.0 hours laboratory

Modeling, analysis, simulation, design and construction of combinational and sequential digital logic systems and networks. (CSU, UC)

# English (ENGL)

## ENGL-020

### Support for Freshman Composition 1 UNITS

Prerequisite: Appropriate Placement.

Corequisite: Concurrent enrollment in ENGL 120

1.0 hours lecture

This course is designed to review and reinforce the skills necessary to be successful in ENGL 120 (Freshman Composition). Students study the elements and principles of composition through the practice of editing and revising narrative, expository, and argumentative essays. Students are also introduced to effective reading skills and strategies necessary for the analysis of college level material. Pass/No Pass only. Non-degree applicable.

## ENGL-030

### Comprehensive Support for Freshman Composition 2 UNITS

Corequisite: Concurrent enrollment in ENGL 120

2.0 hours lecture

This course is designed to offer thorough, comprehensive support for students who are enrolled in English 120 (Freshman Composition), and for whom the 1-unit ENGL 020 Support for Freshman Composition co-requisite may be inadequate. In a highly supported learning environment, students practice reading, writing, and revision strategies through scaffolded assignments that build transfer-level academic skills. Course emphasizes in-class writing, directly incorporates student support services, and fosters student self-awareness, reflection, and advocacy. Pass/No Pass Only. Non-Degree Applicable.

## ENGL-120

### College Composition and Reading 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ESL 2 or ESL 2B or equivalent or assessment

3.0 hours lecture, 1.0 hours laboratory

Freshman composition course. Students study the elements and principles of composition through the practice of writing expository essays and a research paper. Analysis of assigned readings stimulate critical thinking and serve as models of effective writing. Emphasis is on integrating outside sources as evidence in students' argumentative essays, documenting source material in MLA format, and using the reading, writing, and revision processes to build effective skills. The course allows students to develop metacognitive awareness of the roles that writing can play in their lives. (C-ID ENGL 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## ENGL-122

### Introduction to Literature 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 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. (C-ID ENGL 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## ENGL-124

### Advanced Composition: Critical Reasoning and Writing 3 UNITS

Prerequisite: "C" grade or higher or "Pass" in ENGL 120 or ESL 122 or equivalent

3.0 hours lecture, 1.0 hours laboratory

This course offers advanced instruction in critical reading, writing, and thinking, with particular emphasis on argumentation and analysis of complex and diverse texts. (C-ID ENGL 105) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## ENGL-126

### Creative Writing 3 UNITS

Prerequisite: Placement into ENGL 120 or equivalent

3.0 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. (C-ID ENGL 200) (AA/AS GE, CSU, UC)

## ENGL-130

### Short Fiction Writing I 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 126 or equivalent

3.0 hours lecture

The first in a four-course sequence, this class is designed to familiarize students with the study, analysis, and application of fundamental tools, techniques, and forms used by established and contemporary authors of fiction. By composing and submitting original short fiction, students learn to use the writers' workshop to develop their skills as critics and writers of fiction. Students have opportunities for recognition and public readings of their own work. Students may enroll in this class without having to enroll in the other courses in the sequence. (CSU, UC)

## ENGL-140

### Poetry Writing I 3 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 126 or equivalent

3.0 hours lecture

The first of a four-course sequence, this class is designed to familiarize students with the study, analysis, and application of the fundamental tools, techniques, and forms of poetry used by established and contemporary poets. By composing and submitting original poems, students learn to use the writer's workshop to develop their skills as writers and critics. Students have opportunities for recognition and public readings of their own work. Students may enroll in this class without having to enroll in the other courses in the sequence. (CSU)

## ENGL-200

### Cooperative Work Experience in English 1-4 UNITS

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units.

**ENGL-201****Women, Gender, and Sexuality in Literature 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 hours lecture

This course is designed to examine gender and sexuality in diverse literature with emphasis on the representations of women. Students learn to use different theoretical lenses to critically interpret and discuss fiction, graphic literature, poetry, drama, and creative nonfiction in historical, political, literary, and cultural contexts. Through active reading and discussion, students interrogate how literature informs, reinforces, challenges, alters, resists, or otherwise influences social constructions of gender and sexuality. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-202****Introduction to Film as Literature 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 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)

**ENGL-214****Masterpieces of Drama 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 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)

**ENGL-217****Fantasy and Science Fiction 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or ESL 122 or equivalent

3.0 hours lecture

An introductory survey of the genres of fantasy and science fiction, ranging from Gothic literature to Afrofuturism, and from Frankenstein to works being published right now. The course will examine the historical and socio-cultural contexts which informed and continue to influence this literature, and it will explore the place of fantasy and science fiction in popular culture past and present. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-221****British Literature I 3 UNITS**

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

3.0 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 Jonson, John Milton, Lady Mary Wroth, Aphra Behn, and Jonathan Swift. (C-ID ENGL 160) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-222****British Literature II 3 UNITS**

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

3.0 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. (C-ID ENGL 165) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-231****American Literature I 3 UNITS**

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

3.0 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 Castañeda, 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. (C-ID ENGL 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-232****American Literature II****3 UNITS**

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

3.0 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. (C-ID ENGL 135) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-236****Chicana/o Literature****3 UNITS**

Recommended Preparation: Placement into ENGL 120 or equivalent

3.0 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)

**ENGL-238****Black Literature****3 UNITS**

Recommended Preparation: Placement into ENGL 120 or equivalent

3.0 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)

**ENGL-270****World Literature I****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 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. (C-ID ENGL 140) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ENGL-271****World Literature II****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ENGL 120 or equivalent

3.0 hours lecture

This class offers a survey and analysis of diverse literary texts across the world. Students examine how literature shapes and reflects the human experience as well as global struggles over power, identity, and language. Students learn to use different theoretical lenses to interpret critically the historical, political, social, psychological, philosophical, aesthetic, and cultural aspects of literature from Africa, the Middle East, South and East Asia, the Caribbean, Oceania, Latin America, and Europe. Primary texts consist of fiction, graphic literature, poetry, drama, creative nonfiction, and film. (C-ID ENGL 145) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## English as a Second Language (ESL)

### ESL-1A

#### Accelerated Reading and Writing for English as a Second Language **6 UNITS**

Recommended Preparation: Grade of "Pass" in ESL 050 or equivalent or assessment into ESL 1A

6.0 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.

### ESL-1AG

#### Grammar for ESL Accelerated Reading and Writing **3 UNITS**

3.0 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 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.

### ESL-1AS

#### Support for EsL Accelerated Reading and Writing **3 UNITS**

Corequisite: Concurrent enrollment in ESL 1A or ESL 1B

3.0 hours lecture

This course focuses on supplemental instruction in grammar, reading, writing, listening, and speaking to complement the studies in ESL 1A (Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar, sentence structure, text analysis, and oral communication such as is utilized in ESL 1A. Software may be utilized to reinforce skills introduced in class. Pass/No Pass only. Non-degree applicable.

### ESL-1B

#### Advanced Accelerated Reading and Writing for English as a Second Language **6 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ESL 1A or equivalent placement into ESL 1B

6.0 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.

### ESL-1BG

#### Grammar for Advanced ESL Accelerated Reading and Writing **3 UNITS**

3.0 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 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.

### ESL-1BS

#### Support for Advanced ESL Reading and Writing **3 UNITS**

Corequisite: Concurrent enrollment in ESL 1A or ESL 1B

3.0 hours lecture

This course focuses on supplemental instruction in grammar, reading, writing, listening, and speaking to complement the studies in ESL 1B (Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar, sentence structure, text analysis, and oral communication such as is utilized in ESL 1B. Software may be utilized to reinforce skills introduced in class. Pass/No Pass only. Non-degree applicable.

### ESL-2

#### Accelerated Composition for English as a Second Language **6 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ESL 1A or 1B, or assessment into ESL 2

6.0 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. (CSU, UC)

### ESL-2A

#### Accelerated Composition for English as a Second Language **6 UNITS**

6.0 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)

### ESL-2AG

#### Grammar for ESL Accelerated Composition **3 UNITS**

3.0 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.



**ESL-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  
6.0 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)

**ESL-2BG****Advanced Grammar for ESL Accelerated Composition 3 UNITS**

3.0 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 2 or 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 2 or 2B. Software is utilized to reinforce grammar skills introduced in class. Pass/No Pass only. Non-degree applicable.

**ESL-2S****Support for ESL Accelerated Composition 3 UNITS**

Corequisite: Concurrent enrollment in ESL 2  
3.0 hours lecture

This course focuses on supplemental instruction in grammar, reading, writing, listening, and speaking to complement the studies in ESL 2 (Accelerated Composition for English as a Second Language). It develops and adds to skills in grammar, sentence structure, text analysis, and oral communication such as is utilized in ESL 2. Software may be utilized to reinforce skills introduced in class. Pass/No Pass only. Non-degree applicable.

**ESL-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  
2.0 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.

**ESL-010****American Culture I 3 UNITS**

3.0 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.

**ESL-020****American Culture II 3 UNITS**

3.0 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.

**ESL-026****ESL Computer Skills Introduction and Vocabulary 2 UNITS**

2.0 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.

**ESL-045****Introduction to English Listening 6 UNITS**

6.0 hours lecture

ESL 045 is an English language course that introduces spoken English to those who have had little or no exposure to the English language. This course utilizes the most frequent words in the English language in input-based, meaningful tasks that make language comprehensible through methods developed by the principles of Teaching Proficiency through Reading and Storytelling with slight adaptations suggested by the principles of Accelerated Language Learning as developed by the ESL Department at Cuyamaca College. Students interact with the language in meaningful and engaging ways, with communicatively embedded comprehensible input, acquiring the language at the Intermediate Low level target according to the ACTFL proficiency guidelines with no explicit grammar instruction. Students will engage with and respond to the language, but they are not required to produce spontaneous speech at this level. Students are encouraged to take ESL 045R concurrently and before taking ESL 050. Pass/No Pass only. Non-degree applicable.

**ESL-045R****Introduction to English Reading 6 UNITS**

6.0 hours lecture

ESL 045R is an English language course that introduces reading in English to those who have had little or no exposure to the English language. This course utilizes the most frequent words in the English language in discussion as well as books that are specifically selected based on comprehensible (optimum) input so that students with no prior knowledge of English can begin reading on the first day. This course aims to help students develop reading skills in English at the Intermediate Low level according to the ACTFL proficiency guidelines while learning frequent vocabulary. Students will interact with the texts in meaningful and engaging ways. Students are encouraged to take ESL 045 concurrently or before taking ESL 050. Pass/No Pass only. Non-degree applicable.

**ESL-050****Basic Accelerated Reading and Writing for English as a Second Language 6 UNITS**

Recommended Preparation: "Pass" in ESL 045 or 045R or assessment into ESL 050  
6.0 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.

**ESL-050G****Basic Grammar for ESL Accelerated Reading and Writing 3 UNITS**

3.0 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.

**ESL-050S****Basic Support for ESL Accelerated Reading and Writing 3 UNITS**

3.0 hours lecture

This course focuses on supplemental instruction in grammar, reading, writing listening, and speaking to complement the studies in ESL 050 (Basic Accelerated Reading and Writing for English as a Second Language). It develops and adds to skills in grammar, sentence structure, text analysis, and oral communication such as is utilized in ESL 050. Software may be utilized to reinforce skills introduced in class. Pass/No Pass only. Non-degree applicable.

**ESL-099A****ESL for the Workplace I 3 UNITS**

Prerequisite: Placement based on assessment

3.0 hours lecture, 1.0 hours 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.

**ESL-099B****ESL for the Workplace II 3 UNITS**

Prerequisite: Grade of "Pass" in ESL 099A or equivalent or assessment

3.0 hours lecture, 1.0 hours 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.

**ESL-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

6.0 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. (C-ID ENGL 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

# Environmental Health and Safety Management (EHSM)

## EHSM-100

### Introduction to Environmental and Occupational Safety and Health (OSH) Technology **4 UNITS**

4.0 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)

## EHSM-110

### Pollution Prevention **3 UNITS**

3.0 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)

## EHSM-130

### Environmental/Occupational Health Effects of Hazardous Materials **3 UNITS**

3.0 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)

## EHSM-135

### General Industry Safety Standards **3 UNITS**

3.0 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)

## EHSM-140

### Laboratory Safety Management **4 UNITS**

4.0 hours lecture

An overview of laboratory safety management which may be performed by a safety technician in biotechnology, chemical manufacturing, university and private laboratory settings. Topics include recognition, evaluation and control of laboratory hazards associated with chemicals, radioactive materials, lasers, animals, laboratory equipment, and biological materials. Emphasis will be on environmental health and safety management duties performed in laboratory settings. (CSU)

## EHSM-145

### Construction Safety Standards **3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in EHSM 100 or equivalent

3.0 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)

## EHSM-150

### Hazardous Waste Management Applications **4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment

4.0 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)

## EHSM-200

### Hazardous Materials Management (HMM) Applications **4 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment

4.0 hours lecture

Requirements and applications of federal, state and local hazardous materials laws and 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)

**EHSM-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

3.0 hours lecture, 3.0 hours laboratory

Anticipation, recognition, reevaluation 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)

**EHSM-205****Safety and Risk Management Administration 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment

4.0 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)

**EHSM-210****Industrial Wastewater and Stormwater Management 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment

4.0 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)

**EHSM-215****Air Quality Management 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent or concurrent enrollment

3.0 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)

**EHSM-230****Hazwoper Certification 3 UNITS**

3.0 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)

**EHSM-240****Cooperative Work Experience 1-4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent

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 sixteen 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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

**EHSM-250****EHS Field Applications 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in EHSM 100 or equivalent

Recommended Preparation: Occupational Safety and Health

Management degree/certificate students should complete EHSM

130, 135, 200, 201, 205 and 230. Environmental Management degree/certificate students should complete EHSM 150, 200, 210, 215 and 230.

1.0 hours lecture, 6.0 hours laboratory

Field experiences will enhance student abilities to perform various Environmental Health and Safety Management (EHSM) applications under the direction of a qualified EHS professional. Applied experience will provide students with important workplace critical thinking, written and verbal communication, and technical skills difficult to learn in the classroom environment. (CSU)

## Ethnic Studies (ETHN)

### ETHN-107

**History of Race & Ethnicity in the United States** 3 UNITS  
3.0 hours lecture

An introduction to the social, cultural, and historical experiences of racial and ethnic groups and their roles in shaping the United States. Focus will be on migration, colonization, racialization, discrimination, assimilation, social stratification, resistance and agency, liberation movements, and the intersection of racial, ethnic, gender, and sexual identities as they relate to African Americans, Asian Americans, Latinas/os/x, and Native Americans. Also listed as HIST 107. Not open to students with credit in HIST 107. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### ETHN-111

**Culture, Art & Ideas of the United States** 3 UNITS  
3.0 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, IGETC, UC)

### ETHN-114

**Introduction to Race & Ethnicity** 3 UNITS  
3.0 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, IGETC, UC)

### ETHN-118

**U.S. History: Chicano/Chicana Perspectives I** 3 UNITS  
3.0 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, CSU GE, IGETC, UC credit limit)

### ETHN-119

**U.S. History: Chicano/Chicana Perspectives II** 3 UNITS  
3.0 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, CSU GE, IGETC, UC credit limit)

### ETHN-130

**U.S. History and Cultures: Native American Perspectives I** 3 UNITS  
3.0 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, CSU GE, IGETC, UC credit limit)

### ETHN-131

**U.S. History and Cultures: Native American Perspectives II** 3 UNITS  
3.0 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, CSU GE, IGETC, UC credit limit)

### ETHN-132

**Kumeyaay History I: Precontact - 1845** 3 UNITS  
3.0 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. (AA/AS GE, CSU, CSU GE, IGETC, UC)



**ETHN-133****Kumeyaay History II: 1846 - Present****3 UNITS**

3.0 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. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ETHN-150****Latinx Sociology****3 UNITS**

3.0 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, CSU GE, IGETC, UC)

**ETHN-151****Chicanx Art****3 UNITS**

3.0 hours lecture

This course is a comprehensive overview of the major influences, themes, and styles in Chicanx Art from its emergence in the 1960s to the 21st century. Emphasis is placed on the historical, social, and cultural context of the Chicanx Art movement and the major forces that shape artistic creation within this field. Topics include Chicanx paintings, murals, prints, sculpture, installation, performance, and video. Students analyze the art and apply critical theory to describe critical events in the histories, cultures, and intellectual and artistic traditions of Latino/a Americans. This course is designed for all students interested in Chicana/o studies, Ethnic Studies, and for Art majors who want to explore a revolutionary contemporary art movement focused on cultural relevance, social action, and social justice, with a special focus on the lived experiences and social struggles of Latino/a Americans. Also listed as ART 151. Not open to students with credit in ART 151. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**ETHN-165****Introduction to the Politics of Race and Gender****3 UNITS**

3.0 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, IGETC, UC)

**ETHN-180****U.S. History: Black Perspectives I****3 UNITS**

3.0 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, CSU GE, IGETC, UC credit limit)

**ETHN-181****U.S. History: Black Perspectives II****3 UNITS**

3.0 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, CSU GE, IGETC, UC credit limit)

**ETHN-236****Chicana/o Literature****3 UNITS**

Recommended Preparation: Placement into ENGL 120 or equivalent

3.0 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, IGETC, UC)

**ETHN-238****Black Literature****3 UNITS**

Recommended Preparation: Placement into ENGL 120 or equivalent

3.0 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, IGETC, UC)

## Exercise Science (ES)

### ES-001

#### Adapted Physical Exercise 1 UNITS

1.0 hours lecture, 1.0 hours 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)

### ES-008A

#### Beginning Indoor Cycling 1 UNITS

1.0 hours lecture, 1.0 hours 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, UC)

### ES-008B

#### Intermediate Indoor Cycling 1 UNITS

Recommended Preparation: ES 008A Beginning Indoor Cycling

1.0 hours lecture, 1.0 hours 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, UC)

### ES-008C

#### Advanced Indoor Cycling 1 UNITS

Recommended Preparation: ES 008B Intermediate Indoor Cycling

1.0 hours lecture, 1.0 hours 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, UC)

### ES-009A

#### Beginning Aerobic Dance Exercise 1 UNITS

1.0 hours lecture, 1.0 hours 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)

### ES-009B

#### Intermediate Aerobic Dance Exercise 1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 009A or equivalent or specified skill competencies

1.0 hours lecture, 1.0 hours 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)

### ES-009C

#### Advanced Aerobic Dance Exercise 1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in ES 009B or equivalent or specified skill competencies

1.0 hours lecture, 1.0 hours 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)

### ES-010

#### Cardiovascular Fitness and Nutrition 1 UNITS

3.0 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)

### ES-011

#### Circuit Training 1 UNITS

3.0 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)

### ES-012

#### Individualized Sports Conditioning 1 UNITS

3.0 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)

**ES-013****Flexibility Fitness 1.5 UNITS**

1.0 hours lecture, 2.0 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)

**ES-014A****Beginning Body Building 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

Instruction and practice in conditioning, running and resistance exercises, with emphasis on total fitness of the individual.\* (CSU, UC credit limit)

**ES-014B****Intermediate Body Building 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 014A or equivalent

1.0 hours lecture, 2.0 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)

**ES-014C****Advanced Body Building 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 014B or equivalent

1.0 hours lecture, 2.0 hours laboratory

Advanced skills and techniques of body building.\* (CSU, UC credit limit)

**ES-019A****Beginning Physical Fitness 1.5 UNITS**

1.0 hours lecture, 2.0 hours laboratory

Instruction in physical conditioning, nutrition and weight control.\* (CSU, CSU GE, UC credit limit)

**ES-019B****Intermediate Physical Fitness 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 019A or equivalent

1.0 hours lecture, 2.0 hours laboratory

Further emphasis on individual physical conditioning, nutrition and weight control.\* (CSU, CSU GE, UC credit limit)

**ES-019C****Advanced Physical Fitness 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 019B or equivalent

1.0 hours lecture, 2.0 hours laboratory

Advanced skills and techniques of physical fitness with an emphasis on new concepts and techniques.\* (CSU, CSU GE, UC credit limit)

**ES-024A****Beginning Fitness Boot Camp 1 UNITS**

1.0 hours lecture, 1.0 hours 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)

**ES-024B****Intermediate Fitness Boot Camp 1 UNITS**

Recommended Preparation: ES 024A Beginning Fitness Boot Camp

1.0 hours lecture, 1.0 hours 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)

**ES-024C****Advanced Fitness Boot Camp 1 UNITS**

Recommended Preparation: ES 024B Intermediate Fitness Boot Camp

1.0 hours lecture, 1.0 hours 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)

**ES-028A****Beginning Yoga 1.5 UNITS**

1.0 hours lecture, 2.0 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)

**ES-028B****Intermediate Yoga 1.5 UNITS**

Recommended Preparation: ES 028A Beginning Yoga

1.0 hours lecture, 2.0 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)

**ES-028C****Advanced Yoga 1.5 UNITS**

Recommended Preparation: ES 028B Intermediate Yoga

1.0 hours lecture, 2.0 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)

**ES-060A****Beginning Badminton 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Presentation of the official singles and doubles games including the six basic strokes, footwork, strategy and etiquette.\* (CSU, UC credit limit)

**ES-060B****Intermediate Badminton 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 060A or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 060A with an emphasis on playing strategy and match play in singles and doubles.\* (CSU, UC credit limit)

**ES-060C****Advanced Badminton 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 060B or equivalent

1.0 hours lecture, 1.0 hours laboratory

Advanced playing techniques, strategy, knowledge and attitudes for students who wish to excel in badminton and increase aerobic capacity.\* (CSU, UC credit limit)

**ES-076A****Beginning Tennis 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Presentation of the official singles and doubles games including basic strokes, rules, strategy and etiquette.\* (CSU, UC credit limit)

**ES-076B****Intermediate Tennis 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 076A or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 076A with an emphasis on individual stroke analysis, playing strategy and match play, singles and doubles.\* (CSU, UC credit limit)

**ES-076C****Advanced Tennis 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 076B or equivalent

1.0 hours lecture, 1.0 hours 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)

**ES-125A****Beginning Golf 1 UNITS**

1.0 hours lecture, 1.0 hours 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)

**ES-125B****Intermediate Golf 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125A or equivalent

1.0 hours lecture, 2.0 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)

**ES-125C****Advanced Golf 1.5 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 125B or equivalent

1.0 hours lecture, 2.0 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)

**ES-155A****Beginning Basketball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Instruction and practice in the basic skills of basketball with 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)

**ES-155B****Intermediate Basketball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155A or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 155A with 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)

**ES-155C****Advanced Basketball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 155B or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 155B with 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)

**ES-170A****Beginning Soccer 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Basic skills and strategy of soccer with an emphasis on team play and individual skills.\* (CSU, UC credit limit)

**ES-170B****Intermediate Soccer 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170A or equivalent

1.0 hours lecture, 1.0 hours 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)

**ES-170C****Advanced Soccer 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 170B or equivalent

1.0 hours lecture, 1.0 hours laboratory

Advanced individual soccer skills and team play. Emphasizes techniques and team strategy.\* (CSU, UC credit limit)

**ES-171A****Beginning Softball 1 UNITS**

1.0 hours lecture, 1.0 hours 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)

**ES-171B****Intermediate Softball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 171A or equivalent

1.0 hours lecture, 1.0 hours 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)

**ES-171C****Advanced Softball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 171B or equivalent

1.0 hours lecture, 1.0 hours 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)

**ES-175A****Beginning Volleyball 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Competency development in the team sport of volleyball with an emphasis on individual techniques and team strategy.\* (CSU, UC credit limit)

**ES-175B****Intermediate Volleyball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175A or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 175A with emphasis on intermediate level play and strategy and four-person teams.\* (CSU, UC credit limit)

**ES-175C****Advanced Volleyball 1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in ES 175B or equivalent

1.0 hours lecture, 1.0 hours laboratory

Continuation of ES 175B with emphasis on advanced play and strategy and four-person teams.\* (CSU, UC credit limit)

**ES-180****Self Defense for Women 1 UNITS**

1.0 hours lecture, 1.0 hours laboratory

Basic principles of practical personal protection for women, with 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 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)

**ES-206****Intercollegiate Basketball 3 UNITS**

Prerequisite: Tryout

10.0 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. (CSU, UC credit limit)

**ES-209****Intercollegiate Cross-Country 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Open to students with advanced cross-country skills who wish to compete at the intercollegiate level. Athletic insurance fee is required. (CSU, UC credit limit)

**ES-213****Intercollegiate Golf 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Instruction in team play and strategy. Competition in practice and league play. Athletic insurance fee is required. (CSU, UC credit limit)

**ES-218****Intercollegiate Soccer 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Open to students with advanced soccer skills who wish to compete at the intercollegiate level. Athletic insurance fee is required. (CSU, UC credit limit)

**ES-224****Intercollegiate Tennis 3 UNITS**

Prerequisite: Tryout

10.0 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. (CSU, UC credit limit)

**ES-227****Intercollegiate Track 3 UNITS**

Prerequisite: Tryout

10.0 hours laboratory

Open to students with advanced track skills who wish to compete at the intercollegiate level. Athletic insurance fee is required. (CSU, UC credit limit)



**ES-230****Intercollegiate Volleyball****3 UNITS**

Prerequisite: Tryout

10.0 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. (CSU, UC credit limit)

**ES-248****Conditioning for Intercollegiate Athletes****1 UNITS**

1.0 hours lecture, 1.0 hours 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. (CSU, UC)

**ES-249****Competencies for Intercollegiate Athletes****2-4 UNITS**

Prerequisite: Recommendation of Intercollegiate Coach

1.0 hours lecture, 3.0 hours laboratory

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. 1 hour lecture, 3 hours laboratory (2 units), 1 hour lecture, 6 hours laboratory (3 units), 1 hour lecture, 9 hours laboratory (4 units). (CSU, UC)

**ES-250****Introduction to Kinesiology****3 UNITS**

3.0 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. (C-ID KIN 100) (CSU, UC)

**ES-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)

**ES-255****Care and Prevention of Athletic and Recreational Injuries****3 UNITS**

3.0 hours lecture, 1.0 hours 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)

**ES-270****Cooperative Games****1 UNITS**

1.0 hours 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)

**ES-271****Fitness Walking with Children****1 UNITS**

1.0 hours 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)

**ES-272****Issues in Childhood Obesity****1 UNITS**

1.0 hours 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)

## Exercise Science Degree Requirements

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.*

## Geography (GEOG)

### GEOG-106

#### World Regional Geography

3 UNITS

3.0 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. (C-ID GEOG 125) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOG-120

#### Physical Geography: Earth Systems

3 UNITS

3.0 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. (C-ID GEOG 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOG-121

#### Physical Geography: Earth Systems Laboratory

1 UNITS

Prerequisite: "C" grade or higher or "Pass" in GEOG 120 or GEOL 104 or equivalent or concurrent enrollment in either course  
3.0 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. (C-ID GEOG 111, GEOL 120L) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOG-122

#### Regional Field Studies in Physical Geography and Geology of Desert Environments

1 UNITS

Recommended Preparation: "C" grade or higher or "Pass" in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment  
1.0 hours lecture, 1.0 hours 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. (C-ID GEOG 160) (CSU)

### GEOG-130

#### Human Geography: the Cultural Landscape

3 UNITS

3.0 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. (C-ID GEOG 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## Geology (GEOL)

### GEOL-104

#### Earth Science

**3 UNITS**

3.0 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. (C-ID GEOL 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOL-105

#### Physical Geology: Earth Systems Laboratory

**1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in GEOG 120 or GEOL 104 or equivalent or concurrent enrollment in either course

3.0 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. (C-ID GEOG 111) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOL-110

#### Planet Earth

**3 UNITS**

3.0 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. (C-ID GEOL 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOL-111

#### Planet Earth Laboratory

**1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in GEOL 110 or equivalent or concurrent enrollment

3.0 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. (C-ID GEOL 100L) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### GEOL-122

#### Regional Field Studies in Physical Geography and Geology of Desert Environments

**1 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GEOG 120, GEOL 104, or GEOL 110 or concurrent enrollment

1.0 hours lecture, 1.0 hours 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)

## GD-105

### Fundamentals of Digital Media **3 UNITS**

Recommended Preparation: Basic computer and file management skills  
2.0 hours lecture, 3.0 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)

## GD-110

### Graphic Design Principles **3 UNITS**

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

2.0 hours lecture, 3.0 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. (C-ID ARTS 250)(CSU)

## GD-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

2.0 hours lecture, 3.0 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)

## GD-120

### User Experience Design **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

2.0 hours lecture, 3.0 hours laboratory

This introductory course is designed to equip you with a broad understanding of user experience (UX) and covers the foundations of User Experience Design and process including; user journeys, prototypes, information architecture, wireframes and prototypes. We will also be considering the critical role user experience plays in allowing businesses to access their target audience and how organizations can use user experience to increase customer engagement and revenue as well as reducing costs. (CSU)

## GD-125

### Typography **3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent

2.0 hours lecture, 3.0 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)

## GD-126

### Adobe Photoshop Digital Imaging **3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 105 or equivalent

2.0 hours lecture, 3.0 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)

## GD-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

2.0 hours lecture, 3.0 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)

## GD-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

3.0 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)

**GD-210****Professional Digital Photography I****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 126 or equivalent, or experience using industry standard image editing software.

2.0 hours lecture, 3.0 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)

**GD-211****Professional Digital Photography II****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 210 or equivalent

2.0 hours lecture, 3.0 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)

**GD-212****Professional Digital Photography III****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 211 or equivalent

2.0 hours lecture, 3.0 hours laboratory

Project based course concentrates on advanced photographic shooting and post processing techniques, with an introduction to photo-illustration. 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)

**GD-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

2.0 hours lecture, 3.0 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)

**GD-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

2.0 hours lecture, 3.0 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)

**GD-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

2.0 hours lecture, 3.0 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)

**GD-225****Digital Illustration****3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in GD 110 or equivalent

2.0 hours lecture, 3.0 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)

**GD-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

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)



## Health Education (HED)

### HED-105

#### Health Education for Teachers

1 UNITS

1.0 hours 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)

### HED-120

#### Personal Health and Lifestyles

3 UNITS

3.0 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. (C-ID PHS 100) (AA/AS GE, CSU, CSU GE, UC, UC credit limit)

### HED-201

#### Introduction to Public Health

3 UNITS

3.0 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. (C-ID PHS 101) (AA/AS GE, CSU, CSU GE, UC)

### HED-202

#### Health Professions and Organizations

3 UNITS

3.0 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)

### HED-203

#### Substance Abuse and Public Health

3 UNITS

3.0 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. (C-ID PHS 103) (AA/AS GE, CSU, CSU GE, UC)

### HED-204

#### Health and Social Justice

3 UNITS

3.0 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. (C-ID PHS 102) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### HED-251

#### Healthy Lifestyles: Theory and Application

3 UNITS

2.0 hours lecture, 3.0 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)

## HIST-100

### Early World History

3 UNITS

3.0 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. (C-ID HIST 150) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

## HIST-101

### Modern World History

3 UNITS

3.0 hours lecture

Examination of the civilizations, societies and global interrelationships of the peoples of Africa, the Americas, Asia, Europe, and Oceania since 1500. (C-ID HIST 160) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

## HIST-105

### Early Western Civilization

3 UNITS

3.0 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. (C-ID HIST 170) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## HIST-106

### Modern Western Civilization

3 UNITS

3.0 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, nineteenth-century ideologies, imperialism, the world wars, the Cold War, and contemporary Europe. (C-ID HIST 180) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## HIST-107

### History of Race & Ethnicity in the United States

3 UNITS

3.0 hours lecture

An introduction to the social, cultural, and historical experiences of racial and ethnic groups and their roles in shaping the United States. Focus will be on migration, colonization, racialization, discrimination, assimilation, social stratification, resistance and agency, liberation movements, and the intersection of racial, ethnic, gender, and sexual identities as they relate to African Americans, Asian Americans, Latinas/os/x, and Native Americans. Also listed as ETHN 107. Not open to students with credit in ETHN 107. (AA/AS GE, CSU, CSU GE, IGETC, UC)

## HIST-108

### Early American History

3 UNITS

3.0 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. (C-ID HIST 130) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

## HIST-109

### Modern American History

3 UNITS

3.0 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. (C-ID HIST 140) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

## HIST-114

### Comparative History of the Early Americas

3 UNITS

3.0 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)

## HIST-115

### Comparative History of the Modern Americas

3 UNITS

3.0 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)

## HIST-118

### U.S. History: Chicano/Chicana Perspectives I

3 UNITS

3.0 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)

## HIST-119

### U.S. History: Chicano/Chicana Perspectives II

3 UNITS

3.0 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)

## HIST-122

### Women in Early American History

3 UNITS

3.0 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)

## HIST-123

### Women in Modern American History

3 UNITS

3.0 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)

**HIST-124****History of California****3 UNITS**

3.0 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)

**HIST-128****Kumeyaay History I: Precontact - 1845****3 UNITS**

3.0 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 KUMEY 128. Not open to students with credit in KUMEY 128. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**HIST-129****Kumeyaay History II: 1846 - Present****3 UNITS**

3.0 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 KUMEY 129. Not open to students with credit in KUMEY 129. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**HIST-130****U.S. History and Cultures: Native American Perspectives I****3 UNITS**

3.0 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)

**HIST-131****U.S. History and Cultures: Native American Perspectives II****3 UNITS**

3.0 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)

**HIST-148****The Modern Middle East****3 UNITS**

3.0 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)

**HIST-180****U.S. History: Black Perspectives I****3 UNITS**

3.0 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)

**HIST-181****U.S. History: Black Perspectives II****3 UNITS**

3.0 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)

**HIST-275****Historical Period****3 UNITS**

3.0 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)

**HIST-276****Geographical Area****3 UNITS**

3.0 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)

**HIST-277**

**Historical Theme**

**3 UNITS**

3.0 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)

## Humanities (HUM)

### HUM-110

**Principles of the Humanities** **3 UNITS**  
3.0 hours lecture

Humanities of the world explored through film and television, music, dance, graphic novels, writing, photography, handicrafts (i.e. weaving, pottery, quilting, etc.), architecture, food, philosophy, etc. Focus will be on the forms of cultural expression produced by a variety of diverse artists and on the context in which they were produced; will include present-day creative forms of expression. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### HUM-111

**Culture, Art & Ideas of the United States** **3 UNITS**  
3.0 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, IGETC, UC)

### HUM-115

**Arts and Culture in Local Context - San Diego** **3 UNITS**  
3.0 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)

### HUM-116

**Kumeyaay Arts and Culture I** **3 UNITS**  
3.0 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. Also listed as KUMEY 116. Not open to students with credit in KUMEY 116. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### HUM-117

**Kumeyaay Arts and Culture II** **3 UNITS**  
3.0 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. Also listed as KUMEY 117. Not open to students with credit in KUMEY 117. (AA/AS GE, CSU, UC)

### HUM-118

**Introduction to Kumeyaay Basketry & Pottery** **3 UNITS**  
3.0 hours lecture

An introductory course to teach the traditional Kumeyaay process of creating juncus baskets and pottery. Students will learn gathering, material processing, and the cultural importance and uses of various basketry patterns and pottery styles and types. Field trips to various cultural sites for gathering purposes are a required component of this class. Also listed as KUMEY 118. Not open to students with credit in KUMEY 118. (AA/AS GE, CSU, UC)

### HUM-120

**European Humanities** **3 UNITS**  
3.0 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)

### HUM-140

**Humanities of the Americas** **3 UNITS**  
3.0 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)

### HUM-155

**World Mythology through the Humanities** **3 UNITS**  
3.0 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)

IS-198

**Supervised Tutoring**

**0 UNITS**

72.0 hours laboratory

TBA hours (1 - 72 hours laboratory). 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 course.

## Kumeyaay Studies (KUMEY)

### KUMEY-116

#### Kumeyaay Arts and Culture I

3 UNITS

3.0 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. Also listed as HUM 116. Not open to students with credit in HUM 116. (AA/AS GE, CSU, UC)

### KUMEY-117

#### Kumeyaay Arts and Culture II

3 UNITS

3.0 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. Also listed as HUM 117. Not open to students with credit in HUM 117. (AA/AS GE, CSU, UC)

### KUMEY-118

#### Introduction to Kumeyaay Basketry & Pottery

3 UNITS

3.0 hours lecture

An introductory course to teach the traditional Kumeyaay process of creating juncus baskets and pottery. Students will learn gathering, material processing, and the cultural importance and uses of various basketry patterns and pottery styles and types. Field trips to various cultural sites for gathering purposes are a required component of this class. Also listed as HUM 118. Not open to students with credit in HUM 118. (AA/AS GE, CSU, UC)

### KUMEY-120

#### Kumeyaay Language I

4 UNITS

4.0 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. (formerly NAKY-120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### KUMEY-121

#### Kumeyaay Language II

4 UNITS

Prerequisite: "C" grade or higher or "Pass" in KUMEY 120 or equivalent  
4.0 hours lecture

Continuation of KUMEY 120. Students will continue to develop oral skills based on practical everyday situations and contexts. (formerly NAKY-121) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### KUMEY-128

#### Kumeyaay History I: Precontact - 1845

3 UNITS

3.0 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 128. Not open to students with credit in HIST 128. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### KUMEY-129

#### Kumeyaay Hist II: 1846 - Present

3 UNITS

3.0 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 129. Not open to students with credit in HIST 129. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### KUMEY-133

#### Ethnoecology

3 UNITS

3.0 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. Also listed as BIO 133. Not open to students with credit in BIO 133. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### KUMEY-134

#### Ethnobotany

3 UNITS

3.0 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. Also listed as BIO 134. Not open to students with credit in BIO 134. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**KUMEY-135****Ethnobotany/Ethnoecology Lab 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 133 or BIO 134 or KUMEY 133 or KUMEY 134 or concurrent enrollment

3.0 hours laboratory

Laboratory experiments to complement KUMEY 133/BIO 133:

Ethnoecology and KUMEY 134/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. Also listed as BIO 135. Not open to students with credit in BIO 135. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**KUMEY-150****Introduction to Cultural Resource Management 3 UNITS**

2.0 hours lecture, 3.0 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. Also listed as ANTH 150. Not open to students with credit in ANTH 150. (AA/AS GE, CSU, CSU GE, UC)

**KUMEY-166****Introduction to Native American Politics and Policy 3 UNITS**

3.0 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, CSU GE, IGETC, UC)

**KUMEY-170****Kumeyaay Conflict Resolution 3 UNITS**

3.0 hours lecture

This course provides an overview of Kumeyaay conflict resolution techniques and strategies as well as the history and current context surrounding controversial topics and issues within the Kumeyaay community and other Native American groups, including but not limited to: tribal governance, interpersonal (family and friends), generational (youth/elders), on reservation/off reservation, urban/rural, casinos, blood quantum, education, land, and natural resources (water, etc.). Also listed as SW 170. Not open to students with credit in SW 170. (AA/AS GE, CSU, UC)

**KUMEY-220****Kumeyaay Language III 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in KUMEY 121 or equivalent

4.0 hours lecture

Continuation of KUMEY 121. Students will develop increasingly advanced oral, listening and speaking skills in the Kumeyaay language. (formerly NAKY-220) (AA/AS GE, CSU, CSU GE, IGETC, UC)

# Mathematics (MATH)

## MATH-020

### Foundations for Quantitative Reasoning

1 UNITS

Corequisite: MATH 120

1.0 hours 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.

## MATH-060

### Foundations for Elementary Statistics

2 UNITS

Prerequisite: Appropriate placement

Corequisite: Concurrent enrollment in MATH 160 OR PSY 215

2.0 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.

## MATH-076

### Foundations for PreCalculus

2 UNITS

Prerequisite: Appropriate placement

Corequisite: MATH 176

2.0 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.

## MATH-078

### Foundations for Calculus for Business Social & Behavioral Sciences

2 UNITS

Prerequisite: Appropriate placement

Corequisite: MATH 178

2.0 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.

## MATH-080

### Foundations for Calculus & Analytic Geometry I

2 UNITS

Prerequisite: Appropriate placement

Corequisite: Concurrent enrollment in MATH 180

2.0 hours lecture

Support for this course focuses on the skills and concepts needed for success in Calculus and Analytic Geometry I. This course is for students concurrently enrolled in Calculus I (Math 180) at Cuyamaca College. Students will receive extra support in algebra, analytic geometry, trigonometry, technology, and study skills. Pass/No Pass only. Non-degree applicable.

## MATH-110

### Intermediate Algebra for Business, Math, Science and Engineering Majors

5 UNITS

Prerequisite: Appropriate placement

5.0 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)

## MATH-120

### Quantitative Reasoning

3 UNITS

Prerequisite: Appropriate mathematics placement

3.0 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)

## MATH-121

### Quantitative Reasoning for Career Education

3 UNITS

3.0 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)

## MATH-125

### Structure and Concepts of Elementary Mathematics I

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate placement

3.0 hours lecture, 1.0 hours 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. (C-ID MATH 120) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

## MATH-126

### Structure and Concepts of Elementary Mathematics II

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 125 or equivalent

3.0 hours lecture, 1.0 hours 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)

**MATH-160****Elementary Statistics****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate mathematics placement

4.0 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. (C-ID MATH 110) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

**MATH-170****Analytic Trigonometry****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate placement

3.0 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)

**MATH-175****College Algebra****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate placement

4.0 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. (C-ID MATH 151) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

**MATH-176****PreCalculus: Functions and Graphs****6 UNITS**

Prerequisite: Appropriate placement or Intermediate Algebra

6.0 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)

**MATH-178****Calculus for Business, Social and Behavioral Sciences****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 110 or appropriate placement

4.0 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. (C-ID MATH 140) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

**MATH-180****Analytic Geometry and Calculus I****5 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 170 and 175, or MATH 176 or equivalent

5.0 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. (C-ID MATH 210, 900S [with MATH 280]) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

**MATH-245****Discrete Mathematics****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

3.0 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. (C-ID MATH 160) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**MATH-280****Analytic Geometry and Calculus II****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent

4.0 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. (C-ID MATH 220, 900S [with MATH 180]) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**MATH-281****Multivariable Calculus****4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

4.0 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. (C-ID MATH 230) (AA/AS GE, CSU, CSU GE, IGETC, UC)



**MATH-284****Linear Algebra****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

3.0 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. (C-ID MATH 250, 910S [with MATH 285]) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**MATH-285****Differential Equations****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 280 or equivalent

3.0 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. (C-ID MATH 240, 910S [with MATH 284]) (CSU, CSU GE, IGETC, UC)

## Music (MUS)

### MUS-001

#### Music Fundamentals 4 UNITS

4.0 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. (C-ID MUS 110) (CSU, UC)

### MUS-008

#### Rock, Pop and Soul Ensemble for the Adult Learner 0 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 209 or equivalent  
3.0 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.

### MUS-052

#### Concert Band for the Adult Learner 0 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 253 or equivalent  
3.0 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.

### MUS-058

#### Choir for the Adult Learner 0 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 259 or equivalent  
3.0 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.

### MUS-090

#### Preparatory Performance Studies I 0.5 UNITS

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.

### MUS-091

#### Preparatory Performance Studies II 0.5 UNITS

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.

### MUS-104

#### Introduction to the Music Industry 3 UNITS

3.0 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)

### MUS-105

#### Music Theory and Practice I 4 UNITS

3.0 hours lecture, 3.0 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. (C-ID MUS 120, 125) (CSU, UC)

### MUS-106

#### Music Theory and Practice II 4 UNITS

Prerequisite: "C" grade or higher or "Pass" in MUS 105 or equivalent  
3.0 hours lecture, 3.0 hours laboratory

Continuation of Music Theory I (MUS 105) including both written and aural aspects of music theory. Additionally, the course will include diatonic harmony, two-part counterpoint, four-part voice leading and an introduction to secondary function and modulation. The written aspects of the course will be approached via composition and analysis while the aural aspects of the course will include rhythmic, melodic and harmonic dictation as well as sight singing. (C-ID MUS 130, MUS 135) (CSU, UC)

### MUS-108

#### Rock, Pop and Soul Ensemble 1 UNITS

Prerequisite: Audition

3.0 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)

### MUS-109

#### Rock, Pop and Soul Ensemble 1 UNITS

Prerequisite: Audition

3.0 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)

### MUS-110

#### Great Music Listening 3 UNITS

3.0 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. (C-ID MUS 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### MUS-111

#### History of Jazz 3 UNITS

3.0 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)

### MUS-115

#### History of Rock Music 3 UNITS

3.0 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)

### MUS-116

#### Introduction to World Music 3 UNITS

3.0 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)

**MUS-117****Introduction to Music History and Literature 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 001 or equivalent

3.0 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)

**MUS-118****Introduction to Music 4 UNITS**

4.0 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)

**MUS-119****Cooperative Work Experience in Music Education 1-4 UNITS**

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. 75 hours paid or 60 hours unpaid work experience per unit, 1-4 units. (CSU)

**MUS-120****Introduction to Music Technology 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in MUS 001 or equivalent

2.0 hours lecture, 3.0 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)

**MUS-121****Music Industry Seminar 1 UNITS**

3.0 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)

**MUS-122****Music Industry Seminar 1 UNITS**

3.0 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)

**MUS-123****History of Hip-Hop Culture 3 UNITS**

3.0 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, IGETC, UC)

**MUS-126****Class Guitar I 2 UNITS**

2.0 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)

**MUS-127****Class Guitar II 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 126 or equivalent

2.0 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)

**MUS-132****Class Piano I 3 UNITS**

3.0 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)

**MUS-133****Class Piano II 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 132 or equivalent

3.0 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)

**MUS-136****Chamber Singers 1 UNITS**

Prerequisite: Audition

3.0 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)

<b>MUS-137</b>			
<b>Chamber Singers</b>	<b>1 UNITS</b>		
Prerequisite: Audition			
3.0 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)			
<b>MUS-152</b>			
<b>Concert Band</b>	<b>1 UNITS</b>		
3.0 hours laboratory			
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)			
<b>MUS-153</b>			
<b>Concert Band</b>	<b>1 UNITS</b>		
Prerequisite: "C" grade or higher or "Pass" in MUS 152 or equivalent			
3.0 hours laboratory			
Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)			
<b>MUS-156</b>			
<b>Jazz Ensemble</b>	<b>1 UNITS</b>		
Prerequisite: Audition			
3.0 hours laboratory			
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)			
<b>MUS-157</b>			
<b>Jazz Ensemble</b>	<b>1 UNITS</b>		
Prerequisite: Audition			
3.0 hours laboratory			
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)			
<b>MUS-158</b>			
<b>Chorus</b>	<b>1 UNITS</b>		
3.0 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. (C-ID MUS 180) (CSU, UC)			
<b>MUS-159</b>			
<b>Chorus</b>	<b>1 UNITS</b>		
Prerequisite: "C" grade or higher or "Pass" in MUS 158 or equivalent			
3.0 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. (C-ID MUS 180) (CSU, UC)			
<b>MUS-161</b>			
<b>Cooperative Work Experience in Music Industry</b>	<b>1-4 UNITS</b>		
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. 75 hours paid or 60 hours unpaid work experience per unit, 1-4 units. (CSU)			
<b>MUS-170</b>			
<b>Class Voice</b>	<b>2 UNITS</b>		
Recommended Preparation: Ability to read music			
2.0 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)			
<b>MUS-171</b>			
<b>Class Voice</b>	<b>2 UNITS</b>		
Recommended Preparation: Ability to read music			
2.0 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)			
<b>MUS-184</b>			
<b>Digital Audio Recording and Production</b>	<b>3 UNITS</b>		
Prerequisite: "C" grade or higher or "Pass" in MUS 120 or equivalent			
2.0 hours lecture, 3.0 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)			
<b>MUS-190</b>			
<b>Performance Studies</b>	<b>0.5 UNITS</b>		
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. (C-ID MUS 160) (CSU)			
<b>MUS-191</b>			
<b>Performance Studies</b>	<b>0.5 UNITS</b>		
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. (C-ID MUS 160) (CSU)			

**MUS-205****Music Theory and Practice III 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 106 or equivalent  
3.0 hours lecture, 3.0 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. (C-ID MUS 140, 145) (CSU, UC)

**MUS-206****Music Theory and Practice IV 4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 205 or equivalent  
3.0 hours lecture, 3.0 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. (C-ID MUS 150, 155) (CSU, UC)

**MUS-208****Rock, Pop and Soul Ensemble 1 UNITS**

Prerequisite: Audition  
3.0 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)

**MUS-209****Rock, Pop and Soul Ensemble 1 UNITS**

Prerequisite: Audition  
3.0 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)

**MUS-221****Music Industry Seminar 1 UNITS**

3.0 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)

**MUS-222****Music Industry Seminar 1 UNITS**

3.0 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)

**MUS-226****Class Guitar III 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 127 or equivalent  
2.0 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)

**MUS-227****Class Guitar IV 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 226 or equivalent  
2.0 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)

**MUS-232****Class Piano III 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 133 or equivalent  
3.0 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)

**MUS-233****Class Piano IV 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 232 or equivalent  
3.0 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)

**MUS-236****Chamber Singers 1 UNITS**

Prerequisite: Audition  
3.0 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)

**MUS-237****Chamber Singers 1 UNITS**

Prerequisite: Audition  
3.0 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)

**MUS-252****Concert Band 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 153 or equivalent  
3.0 hours laboratory

Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)

**MUS-253****Concert Band 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MUS 252 or equivalent  
3.0 hours laboratory

Study of representative concert band compositions in a wide variety of styles at regular rehearsals and public performances. (C-ID MUS 180) (CSU, UC)

**MUS-256****Jazz Ensemble 1 UNITS**

Prerequisite: Audition  
3.0 hours laboratory

Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances. (CSU, UC)



<b>MUS-257</b>		<b>MUS-291</b>	
<b>Jazz Ensemble</b>	<b>1 UNITS</b>	<b>Performance Studies</b>	<b>0.5 UNITS</b>
Prerequisite: Audition		Prerequisite: Audition	
3.0 hours laboratory		1.5 hours laboratory	
Study of representative jazz ensemble compositions in a wide variety of styles at regular rehearsals and public performances. (CSU, UC)		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. (C-ID MUS 160) (CSU)	
<b>MUS-258</b>			
<b>Chorus</b>	<b>1 UNITS</b>		
Prerequisite: "C" grade or higher or "Pass" in MUS 159 or equivalent			
3.0 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. (C-ID MUS 180) (CSU, UC)			
<b>MUS-259</b>			
<b>Chorus</b>	<b>1 UNITS</b>		
Prerequisite: "C" grade or higher or "Pass" in MUS 258 or equivalent			
3.0 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. (C-ID MUS 180) (CSU, UC)			
<b>MUS-260</b>			
<b>Conducting</b>	<b>1 UNITS</b>		
Corequisite: One of the following: MUS 152, 153, 158, 159, 252, 253, 258, 259			
Recommended Preparation: Experience playing or singing in a large musical ensemble			
1.0 hours lecture, 1.0 hours laboratory			
Fundamentals of conducting including basic technique, score study and rehearsal techniques. Designed for music majors. (CSU, UC)			
<b>MUS-262</b>			
<b>Woodwinds Methods</b>	<b>1 UNITS</b>		
1.0 hours lecture, 1.0 hours laboratory			
Beginning instruction on provided Woodwind instruments with an emphasis on pedagogy. Open to all students and designed for music education majors. (CSU, UC)			
<b>MUS-270</b>			
<b>Class Voice</b>	<b>2 UNITS</b>		
Recommended Preparation: Ability to read music			
2.0 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)			
<b>MUS-271</b>			
<b>Class Voice</b>	<b>2 UNITS</b>		
Recommended Preparation: Ability to read music			
2.0 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)			
<b>MUS-290</b>			
<b>Performance Studies</b>	<b>0.5 UNITS</b>		
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. (C-ID MUS 160)(CSU)			

## Nutrition (NUTR)

### NUTR-155

#### Introduction to Nutrition

**3 UNITS**

3.0 hours lecture

Introduction to the basic principles of nutrition and its relationship to good health. Evaluation of current nutritional information (and misinformation) with 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. (AA/AS GE, CSU, CSU GE, UC)

### NUTR-158

#### Nutrition for Fitness and Sports

**3 UNITS**

3.0 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. (CSU, CSU GE)

### NUTR-255

#### Science of Nutrition

**3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in BIO 130, 131 and CHEM 115 or 120 or equivalent

3.0 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. (C-ID NUTR 110) (CSU, CSU GE, UC)

## Oceanography (OCEA)

### OCEA-112

#### Introduction to Oceanography

**3 UNITS**

3.0 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)

### OCEA-113

#### Oceanography Laboratory

**1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in OCEA 112 or equivalent or concurrent enrollment

3.0 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**

### OH-102

#### Xeriscape: Water Conservation in the Landscape **2 UNITS**

2.0 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)

### OH-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)

### OH-114

#### Floral Design I **3 UNITS**

2.0 hours lecture, 3.0 hours laboratory

Theory and practice of basic geometric floral design, identification of flowers and foliage, and practical skills necessary for employment in the floral industry. Fresh, silk and dried flowers will be used. (CSU)

### OH-116

#### Floral Design II **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in OH 114 or equivalent

2.0 hours lecture, 3.0 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, foliage, organic and inorganic materials for creating floral designs with an emphasis on European influence and trends. (CSU)

### OH-117

#### Wedding Design I **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in OH 114 or equivalent

2.0 hours lecture, 3.0 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)

### OH-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

2.0 hours lecture, 3.0 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)

### OH-120

#### Fundamentals of Ornamental Horticulture **3 UNITS**

2.0 hours lecture, 3.0 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)

### OH-121

#### Plant Propagation **3 UNITS**

2.0 hours lecture, 3.0 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. (C-ID AG-EH 116L) (CSU, UC)

### OH-130

#### Plant Pest Control **3 UNITS**

2.0 hours lecture, 3.0 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. (C-ID AG-EH 120X) (CSU)

### OH-140

#### Soils **3 UNITS**

2.0 hours lecture, 3.0 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)

### OH-150

#### Landscape Architecture I **3 UNITS**

2.0 hours lecture, 3.0 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)

### OH-151

#### Landscape Architecture II **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in OH 150 or equivalent

2.0 hours lecture, 3.0 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)

- OH-170**  
**Plant Materials: Trees and Shrubs** **3 UNITS**  
 3.0 hours lecture  
 Identification, cultural requirements, and landscape uses of ornamental trees and shrubs common to the California landscape. (CSU, UC)
- OH-174**  
**Turf and Ground Cover Management** **3 UNITS**  
 2.0 hours lecture, 3.0 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)
- OH-180**  
**Plant Materials: Annuals and Perennials** **3 UNITS**  
 3.0 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)
- OH-200**  
**Introduction to Computer-Aided Landscape Design** **3 UNITS**  
 2.0 hours lecture, 3.0 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)
- OH-201**  
**Advanced Computer-Aided Landscape Design** **3 UNITS**  
 Prerequisite: "C" grade or higher or "Pass" in CADD/OH 200 or equivalent  
 2.0 hours lecture, 3.0 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)
- OH-220**  
**Landscape Construction: Concrete and Masonry** **3 UNITS**  
 2.0 hours lecture, 3.0 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. (C-ID AG-EH 132X) (CSU)
- OH-221**  
**Landscape Construction: Irrigation and Carpentry** **3 UNITS**  
 2.0 hours lecture, 3.0 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)
- OH-222**  
**Japanese Garden Design and Construction** **1 UNITS**  
 0.5 hours 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.
- OH-225**  
**Landscape Contracting** **3 UNITS**  
 3.0 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)
- OH-235**  
**Principles of Landscape Irrigation** **4 UNITS**  
 4.0 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)
- OH-238**  
**Irrigation System Design** **3 UNITS**  
 Prerequisite: "C" grade or higher or "Pass" in OH 235 or equivalent or concurrent enrollment  
 2.0 hours lecture, 3.0 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)
- OH-240**  
**Greenhouse Plant Production** **3 UNITS**  
 2.0 hours lecture, 3.0 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)
- OH-250**  
**Landscape Water Management** **2 UNITS**  
 1.0 hours lecture, 3.0 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)



**OH-255****Sustainable Urban Landscape Principles and Practices 2 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in OH 120, 170 or equivalent

2.0 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)

**OH-260****Arboriculture 3 UNITS**

2.0 hours lecture, 3.0 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)

**OH-263****Urban Forestry 1 UNITS**

1.0 hours lecture, 0.5 hours 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)

**OH-264****Safe Work Practices in Tree Climbing and Arboriculture 1 UNITS**

0.5 hours 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)

**OH-265****Golf Course and Sports Turf Management 3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in OH 174 or equivalent or concurrent enrollment

2.0 hours lecture, 3.0 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)

**OH-266****Science in Practice for Arboriculture 1 UNITS**

1.0 hours 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)

**OH-275****Diagnosing Horticultural Problems 3 UNITS**

Recommended Preparation: "C" grade or higher or "Pass" in OH 120, 130, 170 or equivalent

2.0 hours lecture, 3.0 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)

**OH-290****Cooperative Work Experience Education 1-4 UNITS**

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. 75 hours paid or 60 hours unpaid work experience per unit, 1-4 units. (CSU)

## Paralegal Studies (PARA)

### PARA-100

#### Introduction to Paralegal Studies **3 UNITS**

3.0 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)

### PARA-110

#### Civil Litigation Practice and Procedures **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

3.0 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)

### PARA-120

#### Introduction to Administrative Law **2 UNITS**

2.0 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)

### PARA-121

#### Social Security Disability Law **1 UNITS**

1.0 hours 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)

### PARA-125

#### Business Organizations **1 UNITS**

1.0 hours lecture

This course covers the fundamentals of the formation of business entities such as sole proprietorships, partnerships, limited liability companies and various types of corporations. Emphasis will be on formation, maintenance, taxation, and termination of business entities particularly in the use of electronic resources. There will also be a focus on the ethical responsibilities of paralegals working in the business organization environment. (CSU)

### PARA-130

#### Legal Research and Writing **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

3.0 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)

### PARA-132

#### Computer Assisted Legal Research (CALR) **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

3.0 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)

### PARA-135

#### Bankruptcy Law **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

3.0 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)

### PARA-140

#### Introduction to Criminal Law and Procedures **1 UNITS**

1.0 hours 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)

### PARA-145

#### Estate Planning **2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

Recommended Preparation: Familiarity with Canvas learning platform, basic computing, rudimentary understanding of contracts and property law

2.0 hours lecture

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)

### PARA-146

#### Probate and Administration of Estates **1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

1.0 hours 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)

**PARA-150****Family Law (Divorce, Separation, Nullity, and Paternity) 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

Recommended Preparation: Familiarity with Canvas learning platform, basic computing

2.0 hours lecture

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)

**PARA-151****Family Law (Custody, Visitation, Support) 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

Recommended Preparation: PARA 150

1.0 hours 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)

**PARA-160****Personal Injury 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

1.0 hours 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)

**PARA-170****Workers' Compensation 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

1.0 hours 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)

**PARA-175****Electronic Discovery: Fundamentals and Procedure 1 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

Recommended Preparation: PARA 110

1.0 hours 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 distinctions in applicable Federal and California laws and study the ethics issues implicit in e-discovery. (CSU)

**PARA-176****Electronic Discovery: Advanced Practice 2 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 175 or equivalent

2.0 hours lecture

This course explores advanced practices involving the application of e-discovery in litigation and general practice. This course provides training on advanced eDiscovery processes and software programs. Students are introduced to a variety of commonly used eDiscovery applications and how to use these tools in practice. Students will also study ethics issues implicit in e-discovery. (CSU)

**PARA-199****Special Studies or Projects in Paralegal Studies 1-3 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. 48-54 hours (1 unit), 96-108 hours (2 units), 144-162 hours (3 units).

**PARA-250****Internship 1-4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PARA 100 or equivalent

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 non-paid hours per unit earned. May be taken for a maximum of nine units in Paralegal. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

# Personal Development-Success Services (PDSS)

## PDSS-080

### Educational Assessment and Prescriptive Planning 0.5 UNITS

0.5 hours 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 (DSPP) Specialist. Pass/No Pass only. Non-degree applicable.

## PDSS-081

### Self-Advocacy 1 UNITS

1.0 hours 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 repeated for a maximum of 4 units. Pass/No Pass only. Non-degree applicable.

## PDSS-085

### Adapted Computer Basics 1 UNITS

1.0 hours lecture, 1.0 hours 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.

## PDSS-087

### Adapted Computer Studies 1 UNITS

1.0 hours lecture, 1.0 hours 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.

## PDSS-090

### Learning Strategies Practicum 1 UNITS

1.0 hours 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.

## PDSS-092

### Math Strategies for Students With Disabilities 1 UNITS

1.0 hours 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.

## PDSS-096

### Cognitive Communication Skills and Strategies 1 UNITS

1.0 hours 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. The course 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)

### PHIL-110

#### A General Introduction to Philosophy

**3 UNITS**

3.0 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? 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. (C-ID PHIL 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### PHIL-115

#### History of Philosophy I: Ancient

**3 UNITS**

3.0 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. (C-ID PHIL 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### PHIL-117

#### History of Philosophy II: Modern and Contemporary

**3 UNITS**

3.0 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)

### PHIL-125

#### Critical Thinking

**3 UNITS**

3.0 hours lecture

Introduction to critical thinking with 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)

### PHIL-130

#### Logic

**3 UNITS**

3.0 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)

### PHIL-140

#### Problems in Ethics

**3 UNITS**

3.0 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. (C-ID PHIL 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### PHIL-141

#### Bioethics

**3 UNITS**

3.0 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 decision making takes place in the medical field. (AA/AS GE, CSU, UC)

### PHIL-170

#### Philosophy of Religion: A Cross-Cultural Introduction

**3 UNITS**

3.0 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)

### PHYC-110

#### Introductory Physics

4 UNITS

3.0 hours lecture, 3.0 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)

### PHYC-130

#### Fundamentals of Physics

4 UNITS

Prerequisite: "C" grade or higher or "Pass" or concurrent enrollment in MATH 180 or equivalent

3.0 hours lecture, 3.0 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 calculus, trigonometry and algebra-based problem solving. Laboratory experience is an integral part of this course. (C-ID PHYS 105, C-ID PHYS 100S(with PHYC 131)) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

### PHYC-131

#### Fundamentals of Physics

4 UNITS

Prerequisite: "C" grade or higher or "Pass" in PHYC 130 or equivalent

3.0 hours lecture, 3.0 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. (C-ID PHYS 110, C-ID PHYS 100S(with PHYC 130)) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

### PHYC-201

#### Mechanics and Waves

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in MATH 180 or equivalent

4.0 hours lecture, 3.0 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. (C-ID PHYS 205, C-ID PHYS 200S (with PHYC 202, 203)) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### PHYC-202

#### Electricity, Magnetism, and Heat

5 UNITS

Prerequisite: "C" grade or higher or "pass" in PHYC 201 or equivalent; and "C" grade or higher or pass or concurrent enrollment in MATH 280 or equivalent

4.0 hours lecture, 3.0 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. (C-ID PHYS 210, C-ID PHYS 200S (with PHYC 201, 203)) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### PHYC-203

#### Light, Optics, and Modern Physics

5 UNITS

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

4.0 hours lecture, 3.0 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. (C-ID PHYS 215, C-ID PHYS 200S (with PHYC 201, 202)) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## Political Science (POSC)

### POSC-120

**Introduction to Politics and Political Analysis** 3 UNITS  
3.0 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. (C-ID POLS 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### POSC-121

**Introduction to U.S. Government and Politics** 3 UNITS  
3.0 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 present day. Emphasis is on the dynamic nature of the American political experience and how that experience impacts the functioning of the U.S. political system. The course will also explore the larger cultural, economic, and sociological forces shaping the U.S. political system. In addition, 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. Finally, 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 current political events. (C-ID POLS 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### POSC-124

**Introduction to Comparative Government and Politics** 3 UNITS  
3.0 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. (C-ID POLS 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### POSC-130

**Introduction to International Relations** 3 UNITS  
3.0 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. (C-ID POLS 140) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### POSC-140

**Introduction to California Governments and Politics** 3 UNITS  
3.0 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)

### POSC-145

**Introduction to Latin American Government and Politics** 3 UNITS  
3.0 hours lecture

This course provides an analysis of the politics and governance of selected Latin American countries. The course examines political and economic development of Latin America from independence to the present, structure and organization of governments, political participation, the role of religion, and civil-military relations. In addition, major developments in the area of political modernization, democratization, economic growth and modernization, questions of race and identity, and U.S.-Latin American Relations will be explored. (AA/AS GE, CSU, UC)

### POSC-147

**Introduction to Middle East Government and Politics** 3 UNITS  
3.0 hours lecture

This course introduces students to the politics and governance of the Middle East and North Africa. The course will cover the political, social, and economic development of specific countries in the region, conflict, revolution, key individuals, armed conflicts, the role of Islam, Judaism, and Christians, and the role of foreign powers in shaping the politics of the region. The course begins with the origins of the Modern Middle East from the collapse of the Ottoman Empire and the First World War (1914-1918), the consequences of the Ottoman Empire's collapse, the rise of the modern nation-state, the role of oil in politics and economic development, Westernization and the Islamic resurgence, and nationalism. The curriculum proceeds to a study of armed conflicts in the region, including, but not limited to, the Arab-Israeli conflict, The War on Terror, and U.S. Foreign Policy in the Middle East. (AA/AS GE, CSU, UC)

### POSC-148

**American Foreign Policy** 3 UNITS  
3.0 hours lecture

This course offers an introduction to American Foreign Policy since World War II. The course provides a chronological assessment of the American decision-making process, key actors, and events in pursuit of American national security, economic, and moral interest from the Cold War to the present era. The course will explore American foreign policy in specific regions of the world including Europe, Asia, the Middle East, Latin America, and Africa while seeking greater understanding of the questions of war and peace, democracy promotion, human rights, economic development, the War on Terror, and the emergence of great power rivalry in the 21st century. (AA/AS GE, CSU, UC)

### POSC-150

**Introduction to Political Theory** 3 UNITS  
Recommended Preparation: A "C" grade or higher or "Pass" in POSC 120 or PHIL 110 or equivalent.

3.0 hours lecture  
A comparative and conceptual analysis of the principal ideological and philosophical approaches to government. This course surveys the important political ideas and alternatives which have been suggested from ancient to modern times. A major emphasis of the course will be to introduce and clarify for the student the basic aspects of nationalism, democracy, Orthodox Marxism, anarchism, philosophical conservatism, New Left thought and fascism. (C-ID POLS 120) (AA/AS GE, CSU, UC)

**POSC-165****Introduction to the Politics of Race and Gender 3 UNITS**

3.0 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. (C-ID POLS-170) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**POSC-166****Introduction to Native American Politics and Policy 3 UNITS**

3.0 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 KUMEY 166. Not open to students with credit in KUMEY 166. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**POSC-170****Introduction to Political Science Research Methods 3 UNITS**

3.0 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. (C-ID POLS 160) (AA/AS GE, CSU, CSU GE, IGETC, UC)

**POSC-180****Introduction to Public Policy 3 UNITS**

3.0 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, CSU GE, IGETC, UC)

# Psychology (PSY)

## PSY-120

### Introductory Psychology

3 UNITS

3.0 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. (C-ID PSY 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-125

### Cross-Cultural Psychology

3 UNITS

3.0 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)

## PSY-132

### Psychology of Health

3 UNITS

3.0 hours lecture

The goal of health psychology is to understand the psychological influences on health behavior, including promotion, maintenance, prevention and treatment. The course will focus on the etiology and correlates of health and illness, as well as analyze the health care system and the formulation of health and illness, as well as analyze the health care system and the formulation of health policies within the United States. Specific emphasis will be placed on exploring health disparities among historically underrepresented groups, including African Americans, Native Americans, Asian Americans, and Latino/a/x Americans. (AA/AS GE, CSU, CSU GE, UC)

## PSY-134

### Human Sexuality

3 UNITS

3.0 hours lecture

Review of the biological, psychological and social aspects of human sexuality including sexuality throughout the lifespan, gender identity, individual and cultural variations, sexual orientation, communication and relationships, sex therapy, sex roles, contraception, and sexually transmitted infections (STIs). (C-ID PSY 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-138

### Social Psychology

3 UNITS

3.0 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. (C-ID PSY 170) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-140

### Physiological Psychology

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent

3.0 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. (C-ID PSY 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-150

### Developmental Psychology

3 UNITS

Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent

3.0 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. (C-ID PSY 180) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-170

### Abnormal Psychology

3 UNITS

3.0 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. (C-ID PSY 120) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## PSY-201

### Academic and Career Opportunities in Psychology

1 UNITS

Prerequisite: "C" grade or higher in PSY 120 or equivalent

1.0 hours 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)

## PSY-205

### Research Methods in Psychology

4 UNITS

Prerequisite: "C" grade or higher or "Pass" in PSY 120, and 215 or MATH 160 or equivalent

3.5 hours lecture, 1.5 hours laboratory

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. The laboratory component of this course is designed to complement the lectures and allow each student to design and conduct a psychological research study. (C-ID PSY 200) (CSU, UC)

**PSY-211****Cognitive Psychology****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent

3.0 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)

**PSY-215****Statistics for the Behavioral Sciences****4 UNITS**

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. (C-ID SOCI 125) (AA/AS GE, CSU, CSU GE, IGETC, UC credit limit)

**PSY-220****Learning****3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in PSY 120 or equivalent

3.0 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)

### RE-190

#### Real Estate Principles **3 UNITS**

3.0 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)

### RE-191

#### Real Estate Practice **3 UNITS**

3.0 hours lecture

This course is designed to teach the day-to-day operations in real estate practices. Topics will cover listing, prospecting, advertising, financing, sales techniques, escrow, technology, and ethics. Students will have the opportunity to experience tasks typical in a Real Estate practice. RE 191 is SB1495 compliant. Cal. Bus. & Prof. Code §10151. (CSU)

### RE-192

#### Real Estate Finance **3 UNITS**

3.0 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)

### RE-193

#### Real Estate Legal Aspects **3 UNITS**

3.0 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)

### RE-194

#### Real Estate Appraisal **3 UNITS**

3.0 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)

### RE-197

#### Real Estate Economics **3 UNITS**

3.0 hours lecture

Study of the economic factors which determine the market and location of real property investments. (CSU)

### RE-201

#### Real Estate Property Management **3 UNITS**

3.0 hours lecture

Study of property management and problem areas associated with operating income-producing property. (CSU)

### RE-204

#### Real Estate Office Administration **3 UNITS**

Recommended Preparation: Completion of Real Estate Principles

3.0 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)

### RE-250

#### Real Estate Internship **1-4 UNITS**

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-4 units. (CSU)

## Religious Studies (RELG)

**RELG-120****World Religions****3 UNITS**

3.0 hours lecture

Introduction to the teachings, major figures, attitudes and practices of world religions. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**RELG-130****Scriptures of World Religions****3 UNITS**

3.0 hours lecture

The study of religions based on scriptures selected from Eastern and Western religions. (AA/AS GE, CSU, CSU GE, IGETC, UC)

**RELG-160****Introduction to the Hebrew Bible: The First Testament****3 UNITS**

3.0 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)

**RELG-170****Introduction to Christianity****3 UNITS**

3.0 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)

### SCI-100

#### Success in Science, Technology, Engineering and Mathematics (STEM)

**3 UNITS**

3.0 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, CSU GE)

## Social Work (SW)

### SW-110

#### Social Work Fields of Service

**3 UNITS**

3.0 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, homophobia 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)

### SW-120

#### Introduction to Social Work

**3 UNITS**

3.0 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)

### SW-170

#### Kumeyaay Conflict Resolution

**3 UNITS**

3.0 hours lecture

This course provides an overview of Kumeyaay conflict resolution techniques and strategies as well as the history and current context surrounding controversial topics and issues within the Kumeyaay community and other Native American groups, including but not limited to: tribal governance, interpersonal (family and friends), generational (youth/elders), on reservation/off reservation, urban/rural, casinos, blood quantum, education, land, and natural resources (water, etc.). Also listed as KUMEY 170. Not open to students with credit in KUMEY 170. (AA/AS GE, CSU, UC)

## Sociology (SOC)

### SOC-114

#### Introduction to Race & Ethnicity

3 UNITS

3.0 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. (C-ID SOCI 150) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-120

#### Introductory Sociology

3 UNITS

3.0 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. (C-ID SOCI 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-125

#### Marriage, Family and Alternative Lifestyles

3 UNITS

3.0 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. (C-ID SOCI 130) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-130

#### Contemporary Social Problems

3 UNITS

3.0 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. (C-ID SOCI 115) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-138

#### Social Psychology

3 UNITS

3.0 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. (C-ID PSY 170) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-140

#### Sex and Gender Across Cultures

3 UNITS

3.0 hours lecture

An introduction to the sociological analysis of sex, gender, and sexual orientation in a variety of socioeconomic 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. (C-ID SOCI 140) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SOC-150

#### Latinx Sociology

3 UNITS

3.0 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, IGETC, UC)



## Spanish (SPAN)

### SPAN-120

#### Spanish I

5 UNITS

5.0 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. (C-ID SPAN 100) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-121

#### Spanish II

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in SPAN 120 or two years of high school Spanish or equivalent

5.0 hours lecture

Continuation of SPAN 120. Continues to develop oral and written skills based on practical everyday needs. (C-ID SPAN 110) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-141

#### Spanish and Latin American Cultures

3 UNITS

3.0 hours lecture

Survey of the major characteristics of Spanish, Latin American and Chicano cultures as reflected in literature, the arts, philosophy, and folklore. Topics include the lived experiences; traditions; family structure and gender roles; racialization and discrimination; social stratification; social struggles that led to emigration; and contributions of Spanish, Latin American, and Chicano cultures in the United States. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-145

#### Hispanic Civilizations

3 UNITS

3.0 hours lecture

General overview of the characteristics and cultures of civilizations of Spanish speaking countries as reflected in literature, philosophy, architecture, and the arts of Spain and Latin American countries. This course will have an emphasis on a selected Spanish speaking country or countries. Topics include the lived experiences; traditions; family structure and gender roles; racialization and discrimination; social stratification; social movements; social struggles that led to emigration; and contributions of the selected country or countries in the United States. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-220

#### Spanish III

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in SPAN 121 or three years of high school Spanish or equivalent

5.0 hours lecture

Continuation of SPAN 121. Continues to develop oral, listening, reading and writing skills in order to acquire proficiency in Spanish. (C-ID SPAN 200) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-221

#### Spanish IV

5 UNITS

Prerequisite: "C" grade or higher or "Pass" in SPAN 220 or four years of high school Spanish or equivalent

5.0 hours lecture

Continuation of SPAN 220. Continues to develop oral, listening, reading and writing skills in order to improve proficiency in Spanish. (C-ID SPAN 210) (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-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

3.0 hours lecture

Develop oral, reading, writing and listening skills with an emphasis on oral proficiency. (AA/AS GE, CSU, CSU GE, IGETC, UC)

### SPAN-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

3.0 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)

## STEM (STEM)

### STEM-101

#### Introduction to College Success in STEM

**0.5-1 UNITS**

Corequisite: COUN 101

0.5 hours lecture

New to college? Interested in STEM? This low risk, fun, introductory class will get you connected with the resources to help you succeed at Cuyamaca College while providing a broad survey of what STEM has to offer through engaging, hands-on activities. Students will get to interact with like-minded peers, key STEM faculty, and STEM-specialized counselors. Students will learn about the college, its facilities, services, general education requirements, and certificate, degree, and transfer options in as well as receiving preliminary education planning in a supportive and caring environment. Pass/No Pass only. Non-degree applicable. 0.5 hour lecture (0.5 unit), 1 hour lecture (1 unit).

# Surveying (SURV)

## **SURV-127**

### **Survey Drafting Technology** **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in CADD 120 or equivalent

2.0 hours lecture, 4.0 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)

## **SURV-218**

### **Plane Surveying** **4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in MATH 170 or MATH 176, or equivalent or concurrent enrollment

2.0 hours lecture, 6.0 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)

## **SURV-220**

### **Boundary Control and Legal Principles** **3 UNITS**

Prerequisite: "C" grade or higher or "Pass" in SURV/ENGR 218 or equivalent

3.0 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)

## **SURV-240**

### **Advanced Surveying** **4 UNITS**

Prerequisite: "C" grade or higher or "Pass" in SURV/ENGR 218 or equivalent

3.0 hours lecture, 3.0 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)

THTR-110

**Introduction to the Theatre**

**3 UNITS**

3.0 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. (C-ID THTR 111) (AA/AS GE, CSU, CSU GE, IGETC, UC)

## Work Experience (WEX)

WEX-110

**General Cooperative Work Experience Education** **1-3 UNITS**

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. 75 hours paid or 60 hours non-paid work experience per unit, 1-3 units.



# Faculty, Administration and Classified Personnel

## Full-Time Faculty & Administration

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B.S., San Diego State University

**YOUSIF, ANGHAM**  
Assistant Professor, Business Office Technology  
A.S., Cuyamaca College

## Administrator Emeritus

Glyn Rowbotham, Ed.D.

## Faculty Emeriti

Therese Botz, Ph.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,  
Patricia Newman,  
Dave Raney,  
Jerry Riley,  
Mary Sessom, J.D.  
William Tester,  
Samuel S. Turner,  
Jose Villareal, Ph.D.  
Anthony Zambelli, J.D.  
Kristin Zink,

## President Emeriti

Samuel M. Ciccati, Ph.D.  
Wallace F. Cohen, Ed.D.\*

## Cuyamaca College Presidents

Sherrill L. Amador, Ph.D. .... 1995-2002  
Julianna M. Barnes, Ed.D. .... 2015-2022  
Samuel M. Ciccati, Ph.D. .... 1984-1994  
Wallace F. Cohen, Ed.D.\* .... 1978-1982  
Geraldine M. Perri, Ph.D. .... 2002-2008  
Jessica Robinson, Ed.D. .... 2023-Present  
Mark J. Zacovic, Ph.D. .... 2011-2015

\* Deceased.

## Classified & Supervisor Personnel

### A

**ABDULAHAD, HIAM**  
Student Services Assistant



ABDULLAH, FATIMA  
Computer Lab Technician III

ADAMS, ALYSHA  
Child Development Center Assistant, Senior

AL-SHAIKH, RABIE  
Assistant College Cashier

AL-SHAIKH, RANA  
Program Specialist - EOPS/CARE

ALANI, ASEEL  
Financial Aid Assistant

ALLEN, MICHAEL  
Financial Aid Advisor

ALLEN, SARA  
CalWORKs Program Specialist

ANDREWS, ADAM  
Network Specialist II

ATTAR, GEORGE  
Custodial Services Supervisor

AYALA, RAFAEL  
Research and Planning Analyst

AYALA, BELLE  
Student Services Specialist

AYALA, JORGE  
Custodian

AYERS, DEBRA  
Admissions & Records Specialist

## B

BENSON III, VERNON  
Athletic Facilities Technician

BERTRAM, DEREK  
Specialty Lab Technician III - Music

BROWN, ALEXIS  
Interim Financial Aid Advisor

BROWN, KEVIN  
Interim Career Services Supervisor

BROWN, MARCELLA  
Student Services Specialist - Assessment

BUDDE, BRITTNEY  
Administrative Assistant III

BURNETT, DAVID  
Science Lab Technician IV - Life Sciences & Biotechnology

## C

CABRAL, KATIE  
Research and Planning Analyst

CALLEROS, SILVESTRE  
Custodian

CASILLAS, VIOLETA  
Science Lab Technician III - Chemistry

CATHER CRUZ, ATHENA  
Science Lab Technical II - Microbiology

CENTANINO, ALEJANDRO  
Specialty Lab Technician II - English as a Second Language

CHAVEZ, JULIA  
Health Services Supervisor

CISNEROS, EDGAR  
Maintenance Supervisor

COFFEY, ERIN  
Administrative Assistant III

CONNOLLY, LYMAN  
Athletic Trainer

CORDOVA, OLGA  
Admissions and Records Assistant

CORRAL, VERONICA  
First Year Experience Coordinator

CORTEZ, WALTER  
Specialty Lab Technician IV - Automotive

CORVERA, EMMANUEL  
Athletic Eligibility Advisor

COSSANO, MARK  
Library Technician III

CRUME, MICHAEL  
Grounds Supervisor

CRUZ, TINA  
Child Development Center Coordinator

## D

DAVIS, RAMON  
Grounds Maintenance Worker, Sr.

DE LA TORRE, YESENIA  
Student Services Specialist - Counseling and Assessment

DELGADO, MICHAEL  
Graphic Designer

DELOS SANTOS, MAX  
General Maintenance Worker, Sr. HVACR

DELOS SANTOS, EPIFANIO  
Custodian

DIAZ, LACI  
Administrative Assistant IV

DIBELLA, LISA  
Evaluations Advisor

**E**

ELSAAD, RHONDA  
Administrative Assistant III

EMADIAN, REBECCA  
Admissions & Records Specialist

ENCISO, RAUL  
Program Specialist, EOPS

ERICKSON, MICHAEL  
Business Services Supervisor

EVELAND, JANET  
Specialty Lab Technician I - CADD

**F**

FIEHLER-ROOSE, TAYLOR  
Tutoring Center Specialist

FISCHER, SUSAN  
Science Lab Technician II - Biology

FLEMING, PAMELA  
Financial Aid Advisor

FLORES, WILLIAM  
General Maintenance Worker

FRITZ, CATHERINE  
Student Services Specialist - Counseling and Assessment

**G**

GAETA, CAINAAN  
Athletic Field Maintenance Worker

GALVAN, MARTHA  
Interim High School and Community Relations Coordinator

GEARHART, MARIA  
Library Technician II

GEOOLA, FARAMARZ  
Computer Lab Technician I

GOMEZ, VIRGINIA  
Specialty Lab Technician II

GOMEZ, FRANCISCO  
Custodian

GRECO, VICKI  
Child Development Center Training Specialist

**H**

HERNANDEZ-LUTU, CAMILLO  
Specialty Lab Technician - Theatre Production Design

HILL, ELIZABETH  
Science Lab Technician II - Chemistry

HUGHES, SHIRLEY  
Financial Aid Supervisor

**J**

JACOBS, DIANA  
Specialty Lab Technician I - Business Office Technologies

JAMES-CERVANTES, ALEXANDER  
Custodian

**K**

KAHLER, JULIE  
Instructional Operations Supervisor

KAKOS, ANMAR  
Clerical Assistant

KANNO, DALEA  
Administrative Assistant IV

KHAMMI, ALBINA  
Student Services Specialist - EOPS

**L**

LABARRE, JENNIE  
Computer Lab Technician II

LAVAN, BILLIE  
College Cashier

LINDSAY, PETER  
Grounds Maintenance Worker, Sr.

LOVEWELL, AIDEN  
Administrative Assistant I

**M**

MENDOZA, CYNTHIA  
Child Development Center Training Specialist

MINTS, DANA  
Evaluations Advisor

MOORE, JENNIFER  
Learning Assistance Center Specialist

MOSA, NICOLE  
Computer Lab Technician II

MURGUIA, JESSICA  
Student Success Coordinator

**N**

NEAL, JAMES  
Instructional Media Services Technician, Sr.

NERI, ALEXANDRA  
Science Lab Technician II - Physical & Natural Sciences

NIEVES-CORTEZ, VERONICA  
Tutoring Center Specialist

NILA, ROBERT  
Custodian

**O**

ODESH, AMAL  
Computer Lab Technician I

OLIVER, TAMMY  
Science Lab Technician III - Biology

OLSON, DONNA  
Science Lab Technician II - Physical and Natural Sciences

ORENA, ALDRIN  
Custodian, Sr.

OSBORNE, JOSEPH  
Custodian

OWEN, TAYLOR  
Master Class Scheduler

**P**

PALACIOS, PAUL  
Ornamental Horticulture Assistant, Sr.

PETERSEN, RUSSELL  
Specialty Lab Technician IV - Automotive

POLE, ARIAN  
Financial Aid Advisor

**R**

RIDULFO, DEBRA  
Administrative Assistant IV

RODRIGUEZ, STEPHANIE  
Administrative Assistant III

ROSE, RAYMOND  
Web Development Support Specialist

**S**

SAENZ, VANESSA  
Admissions & Records Specialist, Sr., International Students

SALAZAR, GELASIO  
Custodian

SANDOVAL, REGINA  
Financial Aid Assistant, Sr.

SAUCEDO, KENDRA  
Student Services Specialist

SHABA, LAYLA  
Specialty Lab Technician I - Business Office Technologies

SHINKAN, JUDY  
Printing Operations Assistant, Sr.

SIGLER, DENNIS  
Business Services Assistant

SMITH, MEGAN  
Science Lab Technician II – Biology/Chemistry

STREETER, MICHAEL  
Grounds Maintenance Worker

SUNDSTROM, FRANK  
Mail Processor

**T**

THOMAS, JOHN  
Ornamental Horticulture Coordinator

TOLAND PERRY, AMBER  
Instructional Design Technology Specialist

TOMA, ANDRE  
Business Services Assistant

TREVINO, CORINA  
Administrative Assistant III

**V**

VALVA, CHRISTOPHER  
Grounds Maintenance Worker

VANSTONE, VICKI  
Administrative Assistant III

VAZQUEZ RAMOS, MARIA  
Science Lab Technician II, Chemistry

VEJAR, LAILA  
Custodian, Sr.

VILLANUEVA, CARLA  
Administrative Assistant III

**W**

WILSON, VALERI  
Executive Assistant III

WYATT, MATT  
Network Specialist II

**Y**

YALDEKKO, LEKAA  
Student Services Specialist - DSPS

YALDO, AMELIA  
Child Development Center Aide

**Z**

ZAKARIA, EVA  
Computer Lab Technician I

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