SAN DIEGO MIRAMAR COLLEGE

2025–2026 CATALOG

Fall 2025, Spring 2026, Summer 2026

10440 Black Mountain Road
San Diego, California 92126
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www.sdmiramar.edu

P. Wesley Lundburg, Ph.D.
President

San Diego Miramar College is accredited by the Accrediting Commission for Community and Junior Colleges of the Western Association of Schools and Colleges, 331 J St., Suite 200, Sacramento, 95814, 415-506-0234, an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U.S. Department of Education. GED is a registered trademark of the American Council on Education and may not be used or reproduced without express written permission of the American Council on Education.

Welcome to Miramar College!

President's Message



Welcome to San Diego Miramar College!

We are a faculty, staff, and administration that are wholly focused on helping you on your journey toward your chosen goals. Whether those goals include a liberal arts transfer to a four-year university or entering the workforce as a well-trained, certified professional, we're here to help you develop and grow toward your future.

Established in 1969, Miramar College has been doing precisely that for generations of San Diegans as it has grown to more than 16,000 students pursuing more than 160 degrees and certificates. Our commitment to excellence in all we do has been recognized not only locally, but statewide and nationally, ranking us among the nation's top colleges and universities for return on investment. We are always mindful that the investment is primarily made by you—the student—and we pride ourselves on making sure we do our part in seeing your investment in us and yourself yield positive results. The wide variety of programs we offer provide ample opportunity for you to explore and build your future with the educational experience best suited to your unique interests and talents.

The talent of our faculty is at the core of your education. You will find at Miramar College instructors who are here specifically because they are passionate about their field and want to see you succeed in it. As you work your way through your courses, we urge you to think of the faculty as a primary resource for you. They can help you fine-tune your grasp of your chosen field as well as guide you along your path. Our classified professionals are uniquely qualified and attentive to making sure you have the resources and help you need. Along with the faculty, they complement your experience at Miramar. Their expertise can help you identify your strengths outside the classroom and find ways to build those, and they can help you find ways to work with any challenges you face as you progress toward your future.

In addition to academic study, Miramar College provides a robust student life through student activities and co-curricular experiences in a setting that promotes inclusivity and diversity. You can pursue your own interests by participating in student clubs, student government, men's and women's intercollegiate athletics, fine arts performance groups, and a host of other opportunities designed to enhance your social life while providing avenues for developing leadership skills that you can carry into your future career.

I encourage you to take your time looking through the college catalog. Here you will find information about all of our programs and activities, as well as information on counseling, tutoring services, financial aid, child care, health services, and services to assist those who are differently abled or affected by a disability. College procedures reflected in the catalog help provide clarity of expectations and an understanding of how our college community functions.

Again, welcome to San Diego Miramar College. You have found an exemplary college where you belong, no matter your background or your previous experience. We are here to welcome you into our midst and help you find your individual place in society – and what your role can contribute to the common good. The faculty, classified professionals, administration, and I hope you will take full advantage of what this unique community of dedicated and diligent higher education professionals is inviting you to participate in.

Sincerely,

P. Wesley Lundburg, Ph.D.
President

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President

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Vice President for Diversity, Equity, and Inclusion

Student Members 2025–2026
The Associated Student Government (ASG) elections are held at the end of the Spring semester. The Associated Student Presidents at City, Mesa, Miramar, and Continuing Education colleges will collectively serve as the Student Trustee and sit at the Board of Trustees meetings on a rotating basis. The Associated Student Presidents, who take on the role of Student Trustee, are voted by the student body to serve yearly terms commencing June 1 through May 31.

Chancellor and Secretary to the Board
Gregory Smith

District Administration

Gregory Smith
Chancellor

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Vice Chancellor, Marketing, Communications, and Public Affairs

Jared Burns, Ph.D., J.D.
Vice Chancellor, People, Culture, and Technology Services

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Vice Chancellor, Development and Entrepreneurship

Michelle Fischthal, DBA
Vice Chancellor, Institutional Innovation and Effectiveness

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Vice Chancellor, Operations, Enterprise Services, and Facilities

Susan Topham, Ed.D.
Vice Chancellor, Educational Services

Daniel Troy
Vice Chancellor, Finance and Business Services

Margaret Lamb
Director, Chancellor's Office Operations



The SDCCD Board of Trustees includes, from left, Craig Milgrim, Maria Nieto Senour, Geysil Arroyo, Mariah Jameson, and, Marichu Magaña

San Diego Miramar College Administrative and Supervisory Personnel

President	**Dr. P. Wesley Lundburg**
Vice President, Instruction	**Dr. Michael Odu**
Vice President, Student Services	**Adrian Gonzales**
Vice President, Administrative Services	**TBD**
Dean, Liberal Arts	**Dr. Lou Ascione**
Dean, Public Safety	**Dr. Jacqueline Hester**
Dean, Mathematics, Biological, Exercise & Physical Sciences	**Dr. Linda Woods**
Dean, Business, Technical Careers & Workforce Initiatives	**Dr. Claudia Estrada-Howell**
Acting Associate Dean, Career Education	**Jennifer Peña**
Dean, Planning, Research and Institutional Effectiveness (PRIE), Library & Technology	**Dr. Daniel Miramontez**
Dean, LEAD and Equity	**Dr. Nessa Julian**
Dean, Student Affairs	**Dr. Cheryl Barnard**
Dean, Student Development	**Dr. Allison Douglas-Chicoye**
Dean, Enrollment Services	**Truongson Nguyen**
Director, Administrative Services	**Denise Kapitzke**
Director, Admissions & Records	**Dana Stack**
Director, College Technology	**Kurt Hill**
Director, Development/ Entrepreneurship	**Lisa Cole-Jones**
Director, Financial Aid	**Vincent Ngo**
Director, College Facilities & Operations	**Dan Gutowski**
Clerical Supervisor, School of Public Safety	**Lisa Howard**
Coordinator, Academic Success Center	**Donnie Tran**
Coordinator, Career & Life Design Services	**Mona Patel**
Coordinator, Disability Support Programs & Services	**Kandice Brandt**
Coordinator, EOPS/NextUp & CalWORKs/ Care	**Monica Demcho**

Acting Coordinator, Outreach & School Relations	**Chantal Hernandez**
Digital Production Supervisor, Reprographics & Mailroom	**Stephen Um**
Coordinator, Transfer Center	**Emily Kawafuchi**
Financial Aid Officer	**Emmanuel "Manolis" Saltis**
Instructional Support Supervisor, ASC/Library	**Francine McCorkell**
Student Services Officer, Basic Needs	**Shelly Parks**
Public Information Officer	**Stephen Quis**
Regional Facilities Officer	**Darrell Rankin**
Student Services Officer, Student Life	**Joseph Hankinson**
Student Services Supervisor I, Admissions & Records	**Reginald Boyd**
Student Services Supervisor I, Counseling	**Alice Nelson**
Supervisor II, Custodial Services	**Louis Hernandez**
Supervisor, Bookstore	**Lily Cava**
Supervisor, Food Services	***Vacant***
Supervisor, Health Center	**Lezlie Allen**
Supervisor, Hourglass Park	**Anna Liza Manzo**
Supervisor, Stockroom	**Stanley Herivaux**
Support Supervisor, Business Office	**Janelle Castillejos**
Supervisor, Student Accounting	**Lynda Armenta**
Director, HSI program	**Ivan Valdovinos**
Director, MESA program	***Vacant***
Director, Native American Student Support & Success Program (NASSSP)	**Viki Eagle**

Accreditation

San Diego Miramar College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 331 J St., Suite 200, Sacramento, CA 95814, (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 on ACCJC's website under the Resources dropdown menu. Miramar College is also approved by the California State Department of Education. In addition, certain programs at Miramar College hold special accreditation:

Child Development—National Association for the Education of Young Children

Emergency Medical Technician—Emergency Medical Services Agency

Fire Protection Technology—National Fire Protection Association (NFPA) standards based CA State Fire Marshal's Office Regional Accredited Training Program (RATP); International Fire Service Accreditation Congress (IFSAC); National Professional Qualifications Board (PROBOARD) Accreditation

Medical Laboratory Technician Training—CA Department of Public Health Laboratory Field Services; National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)

Individuals interested in the institution's accreditation and program approvals may gain an opportunity to review documents describing these activities from the President's Office. These documents will be available for such review at any mutually convenient time during regular business hours, and an appropriate interpretation of their contents will be provided if requested.

Specific programs at Miramar College may also be certified or approved for specialized training as follows:

Administration of Justice— California Standards and Training for Corrections (STC); Commission on Peace Officer Standards and Training (POST)

Automotive— National Institute for Automotive Service Excellence Education Foundation (ASEEF); Bureau of Automotive Repair (BAR) Smog Inspection and Repair Certification; American Honda Motors Certification; NC3 Certification; Toyota Motors Sales Certification

Aviation Operations—Federal Aviation Administration (FAA) Part 141

Aviation Maintenance—Federal Aviation Administration (FAA) Part 147

Basic Skills/ELAC Lab Instructional Assistant Program—National Association of Developmental Education (NADE) Advanced Certification

Business Program - Accreditation Council for Business Schools and Programs (ACBSP)

Emergency Medical Technician—American Heart Association (AHA); Federal Emergency Management Agency (FEMA); National Registry of Emergency Medical Technicians (NREMT)

Fire Protection Technology—Cal Fire San Diego Unit; California Incident Command Certification System (CICCS); Federal Emergency Management Agency (FEMA); National Wildfire Coordinating Group (NWCG); Fire and Emergency Services Higher Education (FESHE)

Liberal Arts—Military Installation Voluntary Education Revise (MIVER) for Marine Corps Air Station (MCAS) Miramar

Paralegal—American Bar Association (ABA) approved

Miramar College is approved by the office of Private Postsecondary Education for the training of veterans as well as by the U.S. Department of State and the U.S. Immigration Service for international student education. Courses paralleling university-level work are accepted by the University of California, the California State Universities, and by other universities and colleges.

Disclaimer

The San Diego Community College District is governed by its Board of Trustees. No oral or written representation by any employee of the college is binding on the San Diego Community College District without the express approval of the Board of Trustees.

Academic Freedom & Freedom of Expression

(Board of Trustees Policy - BP 4030)

The San Diego Community College District is committed to an academic environment that embraces the principles of academic freedom and freedom of expression. This commitment is based upon the value that free expression is essential to excellence in teaching, learning, critical inquiry and service to the community.

You may view a full copy of the policy by accessing the Board Policy website.

1. Academic Freedom

a. Academic freedom affords the faculty the right to speak and write freely, without unreasonable restrictions or prejudices.
b. In accordance with the doctrine of academic freedom, faculty have the following fundamental rights:

    1. Faculty primacy as a collective body in designing and approving curriculum and instructional methods regardless of delivery modality;
    2. Individual faculty member determination of instructional materials, course content, and presentation, and student evaluation methods, in concert with colleagues, so as to assure consistency of instruction; and academic standards;
    3. Individual faculty member freedom to discuss subject matter of the course, as appropriate to the standards of the discipline and academic community, even when that material is controversial;
    4. Individual faculty member authority to evaluate enrolled students on the basis of the academic merit of the students' performance;
    5. Individual faculty member freedom to choose of professional research topics and methods of investigation—subject to professional and peer-determined standards—as well as unconditional freedom to publish their work; and
    6. Individual faculty member right to participate in curriculum review, accreditation processes, and other forms of participatory governance.

2. Freedom of Expression

a. Freedom of expression affords the faculty, staff, and students the right to speak and write freely in accordance with the constitutional protections of free speech-without fear of retaliation. In particular:

    1. The District shall protect the rights of faculty to express their views in the classroom that pertain to class content. While it is understood that controversy is often at the core of inquiry, such controversy should be addressed in a mutually respectful manner;
    2. The District shall protect the rights of faculty, staff, and students to speak freely on matters of public concern;
    3. Faculty, staff, and students are free to explore a wide range of views and judge the merits of competing ideas;
    4. As outlined in board policies and administrative procedures, faculty, staff, and students have responsibilities which are based upon principles of fairness, integrity, confidentiality, safety, professionalism, and respect for others;
    5. Faculty, staff, and students have the right to join or form organizations in accordance with District policy and procedures; and
    6. Faculty, staff, and students have the right to participate in governance in accordance to District policy and procedures.

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Academic Calendar 2025-2026

Fall Semester 2025	
16-WEEK SEMESTER: Fall Classes	August 25, 2025 – December 20, 2025
April 11, 2025	Deadline to file an application for admission and receive a registration date and time for the Fall semester. Students who file an application after the deadline will register during open registration.
August 25, 2025	Residence Determination Date (Applies to All Sessions)
September 1, 2025	Holiday – Labor Day*
September 17, 2025	Constitution Day and Citizenship Day (Classes are in session)
November 11, 2025	Holiday – Veterans Day*
November 15, 2025	Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for Fall 2025 completion.
November 24 – 26, 2025	Classes not in session
November 27 – 28, 2025	Holiday – Thanksgiving*
December 22, 2025 – January 3, 2026	Winter Recess

Intersession 2026	
4-WEEK INTERSESSION:	January 5 – 30, 2026

Spring Semester 2026	
16-WEEK SEMESTER: Spring Classes	February 2, 2026 – June 1, 2026
October 17, 2025	Deadline to file an application for admission and receive a registration date and time for the Spring semester and Intersession. Students who file an application after the deadline will register during open registration.
January 19, 2026	Holiday – Martin Luther King Day*
February 1, 2026	Residence Determination Date (Applies to all sessions including intersession)
February 13, 2026	Holiday – Lincoln Day*
February 16, 2026	Holiday – Washington Day*
March 30 – April 2, 2026	Spring Recess – Classes not in session.
April 3, 2026	Holiday – Cesar Chavez Day*
April 30, 2026	Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for Spring 2026 completion.
May 25, 2026	Holiday – Memorial Day*

Summer Semester 2026	
Summer Classes	June 2, 2026 – August 8, 2026
Primary 8 Week	June 15, 2026 – August 8, 2026
April 10, 2026	Deadline to file an application for admission and receive a registration date and time for Summer semester. Students who file an application after the deadline will register during open registration.
June 1, 2026	Residence Determination Date (Applies to all sessions)
June 19, 2026	Holiday – Juneteenth*
July 3, 2026	Holiday – Independence Day* (July 4 Holiday Observed – Independence Day)
July 31, 2026	Last day to file a petition for graduation for an Associate Degree or Certificate of Achievement for Summer 2025 completion.

* No Saturday or Sunday classes after a Friday holiday. No Sunday classes before a Monday holiday. Note: Holidays apply to all sessions.

General Information

History

San Diego City College, San Diego Mesa College and San Diego Miramar College are public, two-year community colleges administered by the San Diego Community College District. Also under the auspices of this district are the Continuing Education division with six major centers throughout San Diego, and the Educational Cultural Complex which offers both college and continuing education courses. These educational programs carry out the charge made by the voters of San Diego in 1972, that the San Diego Community College District provide education for all high school graduates and adults 18 years of age and older in the District. This charge includes providing adult basic education through sophomore-level college degree programs, with both academic and vocational curricula.

Community college education in San Diego can be traced to 1914 when the Board of Education of the San Diego City Schools authorized post-secondary classes for the youth of San Diego. Classes opened that Fall at San Diego High School with four faculty members and 35 students.

This was the beginning of City College which has now passed its 100th year. For twenty-five years the Junior College program was located at San Diego State University. In 1938, the San Diego Vocational Junior College was established to offer training in technical-vocational skills to post-high school students. The following year the San Diego Evening Junior College was set up to provide college classes in the evening for adults unable to attend day classes.

In 1964, San Diego Mesa College was opened to 1,800 students. Five years later, in 1969, San Diego Miramar College opened on 140 acres in what was then undeveloped land north of the Miramar Naval Air Station, now known as Mira Mesa. Unlike City and Mesa colleges which offered a range of general education classes, San Diego Miramar College began by concentrating on law enforcement and fire science training. It has since broadened its curriculum to include the general education college courses needed by students in the rapidly growing northern area of the city.

In November 1972, the voters approved separating the San Diego Community College District from the San Diego Unified School District. The first election of community college district trustees was held in November 1973. Nineteen seventy-six brought the opening of a unique district campus, the Educational Cultural Complex, dedicated to offering both college and continuing education classes to the multicultural population surrounding its Ocean View Boulevard site. In 1979–80 the administration of the Evening College program was merged with those of the day college programs at San Diego City, San Diego Mesa and San Diego Miramar Colleges.

With both college and continuing education programs, the San Diego district is the second largest community college district in California and offers a choice of educational programs unparalleled in the region.

Statement of Philosophy

The general education program at the colleges in the San Diego Community College District is designed to broaden students' knowledge and their understanding of methods of gaining knowledge in a variety of disciplines and to develop students' abilities in critical thinking, in oral and written communication, and in mathematics.

The awarding of an Associate Degree symbolizes an attempt on the part of the college to lead students through patterns of learning experiences designed to develop an awareness of other cultures and times; to achieve insights gained through experience in thinking about ethical problems; and to develop the capacity for self-understanding. In addition to these accomplishments, students should possess sufficient depth in some field of knowledge to contribute to lifetime interest.

Institutional Student Learning Outcomes (ISLOs)

Knowledge of Human Cultures and the Physical and Natural World Study in sciences, math, social sciences, humanities, histories, language and the arts; or a specialized field of study
Intellectual and Practical Skills Communication Critical Thinking Problem Solving Quantitative Literacy Information Literacy
Personal and Social Responsibility Local and global civic knowledge and engagement Intercultural knowledge and competence Ethical reasoning and action Foundations and skills for lifelong learning Pursuit of high quality, collegiate educational and extracurricular experiences Successful navigation of the postsecondary education system to achieve educational goal(s)
Integrative and Applied Learning Synthesis and advanced accomplishment across general and specialized studies Demonstration of applied skills required for the student' s chosen career field

Mission Statement

San Diego Miramar College's mission is to prepare students to succeed by providing quality instruction and services in an environment that supports and promotes success, diversity, inclusion, and equity with innovative programs and partnerships to facilitate student completion for degrees/certificates, transfer, workforce training, and/or career advancement.

Vision Statement

San Diego Miramar College will be the center of education innovation, and services to support our diverse students and community.

San Diego Miramar College, in keeping with this vision, supports and emphasizes the following guiding values:

- Access to learning and support services, for all students to successfully achieve their educational and career goals
- A culture that embraces and promotes equity, inclusion, civility, responsibility, sustainability, from a global perspective

- Diversity, equity, inclusion and success of our students, classified professionals, faculty, administrators, and programs that reflect our community
- Creativity, innovation, flexibility, and excellence in teaching, learning, and services
- The ability to recognize and respond to opportunities and challenges emerging from a complex and dynamic world • Strategic resource and partnership development to support curriculum and program innovation
- Collaboration and partnerships
- Effective participation in governance with respect and professionalism, through intentional, purposeful and effective communication embraced by the college community
- Transformative processes that include a culture of evidence, collaborative inquiry, and action for promoting student success

Strategic Goals and Directions

1. Pathways – Provide student-centered pathways that are responsive to change and focus on student learning, equity, and success
    a. Strategic Direction 1 – Build and implement coherent guided pathways for students through focusing on onboarding, course, and program redesign.
    b. Strategic Direction 2 – Ensure that guided pathways lead to student completion that fit real-world demand.
    c. Strategic Direction 3 – Strengthen the connection between student learning and performance both inside and outside the classroom.
2. Engagement – Enhance the college experience by providing student-centered programs, curriculum, services, and activities that close achievement gaps, engage students, and remove barriers to their success
    a. Strategic Direction 1 – Identify resources for appropriate venues, programs, and services to support student engagement.
    b. Strategic Direction 2 – Build and strengthen instructional and noninstructional programs, services, and activities that focus on intentionally supporting disproportionately impacted populations.
3. Organizational Health – Strengthen Institutional Effectiveness through planning, outcomes assessment, and program review processes in efforts to enhance data-informed decision making
    a. Strategic Direction 1 – Systematically engage in the program review process across the college that lead to plans of action and meaningful clear outcomes.
    b. Strategic Direction 2 – Strengthen the link between program review and strategic planning by focusing on student learning and performance.
    c. Strategic Direction 3 – Ensure tighter alignment between program resource allocation and needs assessment in supporting student equity and success.
4. Relationship Cultivation – Build and sustain a college culture that strengthens participatory governance, equity efforts, and community partnerships
    a. Strategic Direction 1 – Redesign a transparent, well-understood decision-making structure, process and pathway, with clear mechanisms for reviewing information, making timely decisions, and communicating information back to all college constituencies.
    b. Strategic Direction 2 – Ensure that the college's equity efforts are in alignment with the diversity and inclusion needs of the college.
    c. Strategic Direction 3 – Identify current and prospective partnerships with educational institutions, business and industry, and the community at large.
5. Diversity, Equity, and Inclusion (DEI) – Build an environment that embraces diversity, equity, inclusion, anti-racism, and social justice for the benefit of the college community.
    a. Strategic Direction 1 – Systematically update college processes, programs, and practices within a comprehensive equity framework for equity-minded practices in the workplace, the classroom, and support programs/services.
    b. Strategic Direction 2 – Establish comprehensive professional development for the campus community to increase capacity around and engage in equity, diversity, inclusion, social justice, and anti-racism.

c. Strategic Direction 3 – Systematically review, develop and incorporate equity-minded practices in: 1) culturally responsive instructional pedagogy, 2) student-centered services, and 3) recruitment, screening, and retention of employees.

Disclaimer

While every reasonable effort has been made to ensure that statements in this catalog are accurate, it must be understood that the information contained herein is subject to change or elimination without notice by the administration of the San Diego Community College District. Students should consult the appropriate campus or department for current information, as well as for any special rules or requirements imposed.

Admissions and Registration

Student Success and Support Program

The goals of the Student Success and Support Program (SSSP) are to ensure that all students complete their college courses, persist to the next academic term, and achieve their educational objectives through admissions, orientation, assessment, educational planning with a counselor, and student follow-up.

Steps to Student Success

Step 1 – Admission Application

Step 2 – Apply for Financial Aid

Step 3 – Orientation

Step 4 – Placement

Step 5 – Educational Plan

Step 6 – Register and Pay

Step 7 – Follow up with a counselor

These services have been designed especially for students who intend to earn a certificate or degree at the college or to transfer to a four-year college or university. However, the services are available to all students admitted to the college, and all students are encouraged to participate in the various services of the program.

Step 1-Admission Application

Admission is open to anyone who meets one of the following criteria:

- Persons who possess a high school diploma or California high school proficiency exam certification or a high school equivalency certificate.
- Persons 18 years of age or older or emancipated minors who do not possess a high school diploma or equivalent may be admitted by the college under provisional admission status.
- High school students requesting concurrent enrollment may be admitted as "special part-time" students subject to the following criteria:
    a. Students may enroll in fewer than 12 units and have their enrollment fees waived.
    b. Students will be assessed ALL enrollment fees if enrolled in 12 or more units for classes taught on college campus.
    c. All holds must be cleared prior to registration.
    d. High school students must satisfy course prerequisites and eligibility requirements.
    e. Enrollment in Physical Education classes will not be permitted.
    f. The course is advanced scholastic or technical (college degree applicable).
    g. The course is not available at the school of attendance.
    h. Students will be given college credit for all courses. Grades will be part of the student's permanent college record.
    i. Students must maintain a 2.0 grade point average each semester in all college work.
    j. If the number of units of W, I and NP reaches 50%, in any semester or session, the student will be academically dismissed. Students whose grade point average falls below a 2.0, or who do not complete more than 50% of all units attempted, will not be permitted to re-enroll without approval from a college counselor.
- Persons who are under 18 years of age who do not have a high school diploma and are not enrolled in a high school may be admitted as a special full-time student pursuant to Education Code §48800.5 subject to

approval of the high school governing board and the college President where the student is planning to attend. Special full-time students will be admitted under provisional admission status.
- Persons who do not meet one of the admission criteria stated above will not be admitted under any circumstances.

In accordance with §76038 of the California Education Code, students seeking admission who have been previously expelled from a California community college within the past five years, or who are currently in the process of a formal expulsion hearing for any offense listed in *AP 5010, Student Admission Status, 2.a.1-7*, are required to inform the District. Admission eligibility shall be determined in accordance with *AP 5010, Student Admission Status*.

Important Note: All new students must file an application for admission. Students who have previously attended, but have not been in continuous attendance for one year must file a new application for admission.

Apply Online

Applications for admission to San Diego City, Mesa, and Miramar Colleges are available online. Students access the online application.

Social Security Number

If you have been issued a social security number (SSN) or individual tax identification number (ITIN), your academic record must be updated to include this information. SSNs and ITINs are required for federal and state reporting, and they are used for financial aid processing. Your SSN is maintained in a secure manner and will not be visible or released to third parties for identification purposes. However, the Financial Aid Office may use your SSN to verify your identity and to retrieve your records.

Section 483 and 484 of the Higher Education Act of 1965, as amended, also gives the Financial Aid Office the authority to collect your SSN. The U.S. Department of Education uses your Social Security Number to verify your identity and retrieve your records. Providing incorrect information may result in penalties from the IRS.

All students will be assigned a unique 10-digit Student Identification number upon successful submission of their application that will be required to conduct all college business.

Step 2-Apply for Financial Aid

To apply for financial aid applicants must complete the Free Application for Federal Student Aid (FAFSA), or a California Dream Act application for all financial aid, including the California College Promise Grant – CCPG. To complete your FAFSA, visit the FAFSA website. To complete a California Dream Act application, visit the California Student Aid website.

Step 3-Orientation

The orientation provides important information to students about the programs and services available at the college as well as strategies for student success. Orientation includes program planning. Non-Exempt students who have been admitted to the college are expected to complete an orientation session before registering for classes. Get started with the New Student Orientation.

Step 4-Placement

Placement is a process that is designed to assist students in determining which English or English Language Acquisition (ELAC) and math courses they should start with, specifically identifying milestones in each of these areas. Placement also helps students in meeting course prerequisites. Students may also meet course prerequisites based on other factors such as English or ELAC and math course completion or other standardized tests.

Placement via College Application

Students who have graduated from a U.S. high school will receive the placement levels based upon high school performance information that is provided on the application for admission. The college application (CCCApply) will

identify English and math courses that students can enroll in using prior high school history. Students will report cumulative, unweighted high school GPA, courses completed, and grades received in English and math courses.

Placement via Placement Assistant

Students who have graduated from a U.S. high school more than 10 years ago, completed the GED, or HiSet exam are eligible for this assessment. The Placement Assistant will identify courses that students can enroll in using prior academic history. Students will report cumulative, unweighted high school GPA, courses completed, and grades received in English and math courses. Based on the information reported, students will receive an English and math placement milestone. Students who graduated from a foreign high school should contact the Assessment Center for guidance.

English Language Acquisition (ELAC) Assessment

The ELAC guided self-placement process is designed for students primarily educated outside of the United States in a language other than English. All students will receive a placement milestone that allows them to register for a college-level English class. Students who feel they may benefit from taking an English Language Acquisition class (ELAC) before a college-level English class (ENGL) are asked to use the ELAC guided self-placement tool. Students will receive an ELAC placement milestone of L19, 20, 30, or 40, to help determine which ELAC class students should enroll in.

Please contact your Admissions Office for guidance.

San Diego College of Continuing Education (SDCCE) students should use the "SDCCE to College Bridge" as a guide to which ELAC and English courses they may be eligible to enroll in. They should then take the ELAC guided self-placement tool to receive an ELAC placement milestone.

Challenge Process

Students who believe they have sufficient grounds may challenge a prerequisite, corequisite, or limitation on enrollment. A student may obtain a Petition to Challenge form.

SDCCE to College Bridge

CE Course/Course Completion Certificate	Enroll in College Course/ Level Recommendation
ESLA 431 Beginning Literacy 1	
ESLA 432 Beginning Low 2	
ESLA 433 Beginning High 3	ELAC 15 or ELAC 23 and ELAC 25
ESLA 434 Intermediate Low 4	ELAC 23 and ELAC 25 or ELAC 33 and ELAC 35
ESLA 435 Intermediate High 5	ELAC 35 or ELAC 145

CE Course/Course Completion Certificate	Enroll in College Course/ Level Recommendation
ESLA 436 Advanced Low 6	ELAC 145
ESLA 437 Advanced High 7	ENGL C1000X (ENGL 101/31) or ENGL 105X (ENGL 105/31)

Approved High School Senior Year-Long Courses

English:

- Expository Reading & Writing Course (ERWC)
- IB English
- AP Language and Composition
- AP Literature and Composition
- Weighted Honors English

Math:

- Trigonometry
- Math Analysis
- Pre-Calculus or Calculus
- AP Calculus AB or BC
- AP Statistics
- AP Physics

A qualifying score from the College Board Advanced Placement English or Math Exam may be taken directly to the college Counseling office for consideration. Please refer to the College Catalog for AP exam score requirements.

Step 5-Educational Plan

An education plan is an important tool to assist students in successfully attaining their goals without wasted time and effort. Counseling and career planning services are available to help students make informed choices concerning the programs and courses available.

The education plan is an agreement which contains the official requirements for graduation and/or transfer. Important Note: All official transcripts of prior college work must be on file and evaluated before an official education plan can be prepared. Transcripts from foreign institutions are not required. See the Graduation section for graduation filing requirements.

Education plans outline a suggested pathway for a student to take based on their major, transfer plans, or other pertinent objectives. These plans allow students to determine how long it will take to complete a program of study and to be sure that all program requirements can be met within a particular period of time. The student should review their education plan periodically with a counselor as goals or objectives change.

Career, interest, and aptitudes assessments are available for students who wish to explore other options or who are undecided on their educational goal.

Step 6-Register and Pay

Students who submit an application before the application deadline will be able to register on or after their assigned enrollment date and time. Enrollment appointments are emailed and posted in the mySDCCD portal. Students who submit an application after the deadline may register during open enrollment. Online Registration

Steps and Tips can be found online. Students are responsible for ensuring that all fees, including the Health Fee (which is not covered by the California College Promise Grant – CCPG waiver) are paid in full by the deadline or they may be dropped for nonpayment. Pay online or in person at the Accounting Office.

Step 7-Follow up with a counselor

Follow-up services are available to all students as part of the college's commitment to student success. These services include a periodic review of student progress and education plans to assist students in reaching their educational goal. Students who need additional support services will be referred to those services.

Exemptions

Students who meet the following criteria are exempt from components of the matriculation process:

1. **Admission Application**
    - No exemptions
2. **Apply for Financial Aid**
    - No exemptions
3. **Orientation**
    - Students with the following educational goals:
        - Maintenance of a certificate or license, educational development, or completion of credits for high school diploma
        - Students who have an associate degree or higher
        - Students concurrently enrolled at a four-year college or university
        - Students concurrently enrolled in high school
4. **Assessment**
    - Students with the following educational goals:
        - Maintenance of a certificate or license, educational development, or completion of credits for high school diploma
        - Students who have an associate degree or higher
        - Students concurrently enrolled at a four-year college
        - Students concurrently enrolled in high school
5. **Educational Plan**
    - Students with the following educational goals:
        - Maintenance of a certificate or license, educational development, or completion of credits for high school diploma
        - Students who have an associate degree or higher
        - Students concurrently enrolled at a four-year college
        - Students concurrently enrolled in high school
6. **Register and Pay**
    - No exemptions
7. **Follow up with a counselor**
    - No exemptions

Registration

With the exception of Special-Admit High School students, all students receive a registration appointment. Students can enroll in classes on or after this date and time within the San Diego Community College District's

online registration system, mySDCCD. Special Part-Time High School students must complete the Supplemental Application for High School Students.

By using the online class schedule and the online registration system (my.sdccd.edu), a student can enroll in any available course offered at ECC, City, Mesa, or Miramar Colleges. Instructions for the class schedule and online registration are available on campus and online.

The online services offered in my.sdccd.edu include:

- Enrollment – add, drop & withdraw from classes
- Student's current class schedule and waitlisted classes
- Pay fees and view payment records
- Enroll in a Payment Plan
- Purchase a parking permit or Bus Pass
- Purchase an Associated Students Membership
- Wait List activities–adding, dropping and view
- Wait List status
- Pass/No Pass grading options
- View Financial Aid
- View attendance hours for tracking classes
- View Milestones
- Academic deadlines and calendar

Important Note: You may only access one semester at a time.

The portal also grants access to:

- Grade information
- Academic history
- Petitions to graduate
- Ordering transcripts
- View 1098-T tax information

My Planner

Students now have access to My Planner, a tool to help you select classes from your education plan (academic requirements) and assign them to a specific term(s)/semester(s). Log into the mySDCCD Student Portal, under the My Classes banner, click on the **My Planner** link to get started.

Audit Policy

Auditing courses is not permitted under any circumstances. Students must be officially enrolled in all classes which they attend.

Online Class Restrictions

In accordance with federal regulations City, Mesa, and Miramar colleges may not permit students residing outside of California to enroll in online classes without approval of the state where the student resides. Students residing in a non-approved state/territory are not permitted to enroll in online classes and will be dropped. The following is an up-to-date list of restricted states and territories.

Responsibility for Maintaining Accurate Registration

It is the student's obligation to add, drop, or withdraw from classes before the deadlines stated in the class schedule. This applies even if the student has never attended class. Any student who anticipates difficulty in paying fees should check with the Financial Aid Office about eligibility and sources of assistance. Registration may be canceled for nonpayment of fees.

Time/Schedule Conflicts

- Students may not register for classes with times that overlap (includes 10 minute passing period).

- Students may not enroll in two classes of the same subject and course number if the start and/or end date of one class, overlaps with the other class.

Online Class Schedule

Up-to-date class schedule information and course descriptions for each college and CE campus are available online. A search engine allows students to search for classes by many factors including: academic subject, time and day, Instructor or a keyword.

Adding Classes

Students may add classes online until the deadline date published in the schedule of classes. Students will not be allowed to add classes beyond the published deadline.

To add a class once the semester has begun, students must obtain a permission number from the instructor, then must process and pay for the added class online or in person at the Accounting Office, K1-205.

Students are not officially enrolled until the permission number is processed through the online registration system and fees are paid in full. Permission number for Special Admit part-time high school and Joint Diploma students must submit an online form: Supplemental Application for High School Students and will be registered by the college Admissions Office prior to the add deadline.

If an instructor finds that a student has given his or her permission number to another student, the instructor should administratively drop the student who was not issued the permission number.

Class Attendance

Students who do not attend the first class meeting may be dropped by the instructor. Students who cannot attend because of illness, religious observation, or a serious problem should notify the instructor. Students who miss the first class meeting and do not plan to attend must log-in online and drop the class to avoid receiving an "F" grade.

Important Note: It is the student's responsibility to drop by the published deadlines.

Drop/Withdrawal from Classes

Students may drop or withdraw from classes online until the published deadline dates. Deadline dates are available in mySDCCD under "My Classes", click the 'Class Nbr' and select 'Deadline Dates', or find your class in the class schedule and select the class 'Dates'.

- It is the student's responsibility to drop all classes in which he/she is no longer participating.
- Students who remain enrolled in a class beyond the published withdrawal deadline, as stated in the online class schedule, will receive an evaluative letter grade.
- Final grades may be affected by attendance as described in the class syllabus.

Drop—ending enrollment in a class prior to about the 20% point of class meetings. A drop is not recorded on the student's academic record.

Withdrawal—ending enrollment in a class between about the 20% point and up to about the 60% point of class meetings. A withdrawal is a permanent symbol on the student's academic record and is included in progress probation and dismissal determination.

Administrative Drop

Registration may be administratively canceled for the following reasons:

1. Failure to pay all mandatory fees in accordance with the fee payment schedule;
2. Using a permission number issued to another student;
3. Failure to meet the terms and conditions of a fee deferment or payment plan;
4. Failure to meet academic or progress standards;
5. Denial of a "Petition to Challenge a Prerequisite";

6. Failure to meet a prerequisite or co-requisite Requirement;
7. Enrolling in an online course while residing in a state not approved by the department of education;
8. Students who do not show proof of immunizations before beginning lab hours at the Child Development Center.

Exclusion from Classes

A student may be excluded from class or the college whenever the student:

1. Exhibits behavior which interferes with the educational process. An instructor may remove a student from two class sessions for disruptive behavior. (Refer to BP 5500: Student Rights, Responsibilities, Campus Safety and Administrative Due Process); or
2. Is found to have a communicable disease which requires isolation pursuant to a directive from the County Department of Public Health.

Study Load Limit

The maximum study load for a semester is 20 academic units including Exercise Science activity units.

Students are reminded that each unit of credit is calculated to involve a total of at least three hours of classroom and outside time per week. Thus, a 20-unit study load represents a minimum 60-hour work load each week. Students working full-time are advised NOT to attempt a full-time college program.

Twelve units of credit is considered a minimum full-time program during a semester; nine units is three-quarters time, and six units, half-time.

The maximum study load for summer session is 12 academic units including Exercise Science activity units.

Six units of credit is considered a minimum full-time during the summer session; four units is three-quarters time, and three units, half time.

Important Note: Study load requirements may vary at each college for financial aid purposes. Inquire at your college Financial Aid Office for detailed information.

Basic Skills Unit Limit

Title 5, 55035 states: "...no student shall receive more than 30 semester units of credit for basic skills coursework." Registration will be blocked prior to students reaching this limit so that students can meet with a counselor to ensure that they are successful when this unit limit is met. Students with a verified learning disability are exempt from this limitation (contact the DSPS office for more information).

Priority Enrollment System

Consistent with state law and the goal of providing a fair and equitable registration system for all students, the San Diego Community College District has established the following priority system for assigning registration appointments.

Priority Groups

Group 1

- Active Military & Veterans who meet the eligibility criteria*, Current and Former Foster or Homeless Youth**, CalWorks, EOPS and DSPS students, Intercollegiate Athletes***, Rising Scholars, Apprenticeship Students****, Parents of children under the age of 18. Students who have not completed all three services: orientation, and have an Education Plan (Academic Advisement Report) are placed at the end of this group.

Group 2

- Continuing Students who have completed orientation, assessment, and have an education plan (Abbreviated education plans only grant a student priority for 2 semesters.)
- Continuing CE Advantage Students

Group 3

- New & Returning Students who have completed orientation, assessment, and have an education plan (Abbreviated education plans only grant a student priority for 2 semesters.)

Group 4

- Continuing, New & Returning Students who have not completed all three services: orientation, assessment, and have an education plan.

Group 5

- Students with 100+ Units (Does not include Basic Skills units.)†

Group 6

- Students with a Baccalaureate Degree†

Group 7

- Students who are academically dismissed or dismissed for lack of progress or who have not yet returned to good academic standing†.

Group 8

- Students concurrently enrolled in High School

Within each priority group above, students are prioritized according to cumulative units, including transfer units.

Range

50.0 – 72.0 units

30.0 – 49.9 units

15.0 – 29.9 units

00.0 – 14.9 units

72.1 – 89.9 units

90.0+ units

* Students who are Active Duty Military or Veterans, discharged within the past fifteen (15) years, may be eligible for up to 4 years of priority registration. Students should contact the Admissions Office for additional information. A military ID card or DD214 will be required for verification.

** Current and Former Foster or Homeless Youth under 25 years of age may be eligible for priority registration. For information, contact the College Admissions Office or Financial Aid offices.

*** Intercollegiate Athletes participating and registered on a team roster may be eligible for priority registration. For information, contact the College Athletic Department.

**** Students enrolled in a restricted apprenticeship program may be eligible for priority Registration. Contact the College Admissions Office or the department of the Apprenticeship Program.

† Active Military & Veterans, Current and Former Foster or Homeless Youth, Intercollegiate Athletes, Apprenticeship, Rising Scholars, Parents, CalWorks, DSPS & EOPS students will receive first priority within this group.

Change of Name, Mailing or Email Address

All students must report immediately any change of address to the college Admissions Office or through the mySDCCD portal. Failure to provide this information will result in delays in registration, and other important information sent by the college. Name changes must be supported with legal documentation and a picture ID and reported in person at the Admissions Office.

Prerequisites, Corequisites, Limitations on Enrollment and Advisories

Plan ahead! All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this catalog will be strictly enforced at the time of registration. Students who do not meet the prerequisite requirements according to college records will not be permitted to register for the course. Students who believe they have met the prerequisite at another institution are strongly advised to have all transcripts of prior college work evaluated and on file well in advance of registration to minimize registration delays.

Important Note: Unofficial transcripts are accepted for prerequisite clearance.

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

Prerequisites

Prerequisites are courses that must be completed with a "C" or better prior to registration in a specific course.

Corequisites

Corequisites are courses that are required to be taken the same semester as another course.

Limitations on Enrollment

Limitations on Enrollment are other restrictions that are stated in the course description such as "not open to students with credit in..."

Advisories

Advisories are departmental recommendations to be completed prior to enrolling in the course. Advisories do not prevent a student from enrolling, but are strongly encouraged by the department for a student's academic success.

Challenge Procedures

Students who believe they have sufficient grounds may challenge a prerequisite, corequisite, or limitation on enrollment in a specific course (the student does not get units for a challenged class).
A student may obtain a petition to Challenge online via the mySDCCD Support Desk and then selecting the Petition to Challenge form. The completed petition with supporting documentation must be filed in the Admissions Office at least 10 working days prior to the start of the primary term/semester. Contact the Admissions Office for additional information. For credit by examination, please refer to applicable section.

Residency

Residency is determined when a student applies for admission to the College. The following paragraphs summarize the rules and regulations related to student residency for tuition purposes. Details are found in the CA Education Code Section 68000, Title 5, sections 54000-54072.

Residency Status

Every person who is married or is age 18 or older and under no legal restriction may establish residence. Certain minors may also establish residence.

- A California "resident" is a person who has resided in the state for more than one year prior to the residence determination date and shows "intent" to make the state of California their permanent residence.
- An undocumented student is precluded from establishing residency. Restrictions also apply to some visas; please see the Admissions Office.
- The residence determination date is the day immediately preceding the first day of classes for each semester.

Factors Considered to Determine Residency

No one factor determines residency. The following factors are called "indices of intent." They, along with a person's presence in California, are among the factors considered in determining California residency:

- Filing California state and federal tax returns with W-2 form (required)
- Possessing a California driver's license and a vehicle registered in California
- Voting in California
- Owning residential property in California for personal use
- Being licensed to practice a profession in California
- Having an active checking and/or savings account in a California bank
- Showing California on military records (Leave and Earnings Statement)
- Possessing a marriage license or a divorce decree issued in California
- Having paid nonresident tuition in another state

Exceptions to Residency Requirements

Several exceptions to the residency rules apply. They include, but are not limited, to the following:

- Active duty military personnel and their dependents stationed in California
- Active military and dependents previously stationed in California, who are currently enrolled, and subsequently receive orders to change their duty station to out-of-state
- A Veteran or dependent using or intending to use their GI Bill® benefits while currently living in California and has enrolled at San Diego City, Mesa or Miramar College. "GI Bill®'' is a registered trademark of the U.S. Department of Veterans Affairs (VA). Information on the clause is located on the GI Bill Trademark form included in the application.

Nonresident Students

A student's residency status is determined at the time of application. Nonresident students must pay nonresident tuition in addition to the enrollment fee and other fees for credit classes. Tuition must be paid in full at the time of registration.

Assembly Bill (AB) 540

Assembly Bill 540 exempts nonresident students who meet the following criteria, from paying nonresident tuition:

- have attended a California school full-time for three or more years.
- have received a high school diploma or equivalent, or an Associate Degree or fulfillment of transfer requirements for CSU/UC Institutions.
- have registered as an entering student at, or concurrent enrollment at an accredited institution of higher education in California.

Students who meet the criteria must file an affidavit with the college stating that he or she has filed an application to legalize his or her immigration status.

Assembly Bill (AB) 91

AB-91 Community Colleges: Exemption from Nonresident Tuition Fee: Residence Near the California-Mexico border was passed in 2023, which exempts a nonresident, low-income student who is a resident of Mexico. This bill seeks to exempt nonresident students living near the California-Mexico border from these fees.

For students to be eligible for a nonresident fee exemption, students must meet all the following requirements:

- Be a resident of Mexico for at least one year, residing within a 45-mile radius of the California border.
- Be low-income based on the income and household standards provided by the California Community Colleges Chancellors Office.
- F/J/M students are eligible to apply. Students wanting to take classes in person must follow the college's F/J/M SEVIS requirements (including any English proficiency requirements) and clearance as a border commuter student.

- Students who have completed the equivalent of a high school diploma, or the age of 18 or over.

Students who meet the criteria must file an AB 91 affidavit with the college they wish to attend. Each college is allowed to enroll up to 150 FTES AB 91 students each academic year. Students are admitted on a first-come, first-served basis.

Incorrect Classification

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

Reclassification

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

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

Appeals

To appeal a residency determination decision, a student may file a Residency Determination Appeal form with the college Admissions and Records Supervisor.

Limitation of Residency Rules

Students are cautioned that this summary of rules regarding residency determination is by no means a complete explanation of their meaning or content.

For further information, contact the residency clerk in the Admissions Office. Changes may have been made in the statutes and in the regulations since this catalog was published.

False Information

Providing false information necessary for establishing residency will result in disciplinary action up to and including dismissal from the college. Contact the Admissions Office for more details.

International Students

(F-1 Visa Students)

San Diego Miramar College welcomes applications from nonimmigrant F-1 visa students. Acceptance into a program at the college is necessary before U.S. Citizenship and Immigration Services (formerly INS) Form I-20 (certificate of eligibility) is issued by the International Student Admissions Office. The decision to grant an acceptance will be based on all evidence received prior to the deadlines. Students may contact the International Student Admissions Office at the following address to request forms or information:

International Student Admissions Office

San Diego Miramar College

10440 Black Mountain Road

San Diego, CA 92126-2999

www.sdmiramar.edu

General Information

1. An international student must register for and maintain a minimum of 12 units each semester while at Miramar College. Part-time F-1 status will not be approved. The registration status and academic performance of all international students will be monitored by the college.
2. A recent photograph must be submitted with an application (passport size is acceptable).
3. Prospective international students are advised that they must comply with all requirements of the U.S. Citizenship and Immigration Services and of San Diego Miramar College to be admitted as international students.
4. Restriction on Aviation Program. The Federal government prohibits all F-visa (F-1 and F-2) students from enrolling in any Aviation Maintenance Technology (AVIM) and/or Aviation Operations (AVIA) classes and programs. No exceptions will be made. Student enrollment is monitored and students will be administratively dropped. The Transportation Security Administration (TSA) requires all students that are enrolled in AVIA 101L, 195L, or 196L to either provide documentation of their US citizenship OR complete a background check. For more information refer to the Flight Training Security Program website.
5. A transfer student from another accredited United States college or university must:
    a. Follow set transfer procedures of the U.S. Citizenship and Immigration Services; and
    b. Have pursued a full-time course of study with a minimum GPA of 2.0 ("C") at the college the student was last authorized to attend (an official transcript must be filed).

Admission Requirements

Admission for Fall Semester

Students must complete all admissions requirements no later than May 15 to be admitted for the fall semester. The processing of an application normally requires a minimum of three to five months. Students who meet the May 15 deadline will be notified as soon as possible of their admission status.

Admission for Spring Semester

Students must complete all admissions requirements no later than October 15 to be admitted for the Spring semester. Students who meet the October 15 deadline will be notified as soon as possible of their admission status.

Academic Achievement

1. An international student must have graduated from high school (or its equivalent) with a GPA of 2.0 ("C") or better, or have obtained a GED® certificate (General Education Development).
2. Official transcripts of all previous secondary and college/university education must be submitted, including an English translation of the transcript, before an application will be considered.

English Proficiency Requirements

To be considered for admission, an international student whose native language is not English must take an International Test of English as a Foreign Language (TOEFL) and score a minimum of 500 on the paper-based test, 173 on the computerized version, or 61 on the internet-based test. For questions regarding the TOEFL test, please visit the Educational Testing Service website at: www.ets.org/toefl/. Institutional reports or photocopies will not be accepted. Students may petition to waive the TOEFL requirement under one of the following conditions:

1. Completion of a transfer level college English composition course at an accredited United States institution with a grade of "C" or higher;
2. Completion of ELAC guided self-placement at L40 (ELAC 145); in addition, the student must take the prescribed course work at the level of assessment; or
3. A minimum SAT verbal score of 450.

Advanced Degrees

An international student in possession of an associate degree or its equivalent, or higher (completion of about 60 semester units) may be determined to be beyond the course offerings of Miramar College and is encouraged to apply to a four-year college or university.

Financial Resources

1. Each international student must submit verification of sufficient financial resources. The verification must indicate the ability of the student to finance each year's education and living expenses. Minimum of $47,000 required for one school year (two semesters).
2. An international student attending the college must pay all mandatory fees, including nonresident tuition, enrollment fees and health services fees.
3. Financial aid is not available to international students.
4. An international student may not accept off-campus employment while attending college unless approval is granted by the U.S. Citizenship and Immigration Services and the International Student Advisor.

Health Clearance

Report of Health Examination

Students must be in good health and free of communicable diseases. The "Report of Health Examination" form or a medical examination report by a physician must be submitted prior to admission. The medical examination must certify immunization against polio, diphtheria, measles, rubella, and tetanus, and must provide tuberculosis clearance.

Mandatory Health Insurance

Each student is required to provide a notarized letter (in English) certifying that he/she has secured a health insurance coverage in the United States for the duration of their studies.

Housing

The college is located near public transportation and housing. There are no housing facilities on campus and the college does not assist with housing. However, there is housing within walking distance of the college.

Visa Students (other than F-1)

All other visa categories or immigrant classifications must see the Admissions Office.

Students who are residing in the United States on other than F-1 student visas must comply with all restrictions on total units enrolled as specified by the U.S. Citizenship and Immigration Services.

Fees

Community College Enrollment Fee

The enrollment fee is assessed of all students, including nonresidents. The fee is currently $46.00 per unit. Enrollment fees subject to change.

- Waiver of the enrollment fee is available to students who petition and qualify as recipients of benefits under the Temporary Assistance to Needy Families (TANF) program, the Supplemental Security Income/State Supplementary (SSI) program, or the General Assistance program.
- Indentured apprentices are exempt from enrollment fees for Apprenticeship Program classes only.
- Financial Aid may be available to students who qualify for assistance.

Health Services Fee

All students are assessed a mandatory fee for health services and accident insurance, whether or not they choose to use the health services available to them. The health services fee is currently $23.00 per semester for Fall and Spring semesters, and $17.00 for the Summer session. The following students are exempt from the health fee:

- Students who meet the income standards for the California College Promise Grant – **CCPG-A Only**. Contact the Financial Aid Office for eligibility determination.
- Students attending under an approved apprenticeship program, enrolled only in apprenticeship courses.
- Students who depend on prayer for healing, in accordance with the teachings of a bona fide religious sect, denomination, or organization, may petition to have the fees waived. To apply for an exemption contact the Admissions Office.

For more information, contact the Admissions Office.

Nonresident Tuition

In addition to the enrollment fee and health fee, tuition is charged to students who are not residents of California for tuition purposes. The 2025–2026 nonresident tuition fee is $369.00 per unit.

Library

Overdue fines and fees apply to late and lost library materials.

Baccalaureate Degree Program Fee

A baccalaureate degree program fee will be charged for all upper division coursework. The fee is $84.00 per unit and will be assessed in addition to the $46.00 per unit enrollment fee. Nonresident students in upper division coursework will be charged the $84.00 per unit in addition to the $46.00 per unit enrollment fee, and the nonresident tuition fee of $369.00 per unit.

Additional Fees

Automobile permits per semester (Fall and Spring)	$40.00
Automobile permits per semester (Summer)	$29.00
Carpool permits per semester	$30.00
Motorcycle permits per semester	$17.50
Transcript of Record (after two have been issued free of charge)	$5.00
Loss or damage of equipment and books	Cost
A.S. College Membership (per academic year)	$8.00
Student Representation Fee	$2.00

Important Note: Students receiving public assistance, or who are determined eligible for financial aid, may purchase a single car permit for $25.00.

Important Note: All fees are subject to change.

Students are expected to buy all books and supplies needed for their courses. Certain occupational programs may require additional expenditures for tools, uniforms.

Student Representation Fee

All students attending classes are required to pay a $2.00 student representation fee per semester. This fee is expended equally to support the: (1) Student Senate of California Community Colleges (SSCCC) and (2) colleges for the purpose of student advocacy efforts to Federal, State and Local governments. Students have the right to refuse to pay the fee for religious, moral, political, or financial reasons.

Returned Check Fee

A $25.00 fee will be assessed for any returned checks

Debt Owed to the College

In alignment with Assembly bill 1313 (Chaptered October, 2019) and California Education Code 66022 and 76225, diplomas, and registration privileges, or any combination thereof, may be withheld from any student or former student who has been provided with written notice that he or she has failed to pay a proper financial obligation. Any item(s) withheld shall be released when the student satisfactorily meets the financial obligation. A service fee may be charged for all delinquent loans; any service fee would be determined by the total cost required to collect the delinquent loans.

Refunds

1. Fees will be refunded to students who reduce their program in accordance with the following schedule:
    - Refunds for Fall and Spring Primary (16 Week Session) is Friday of the second week
    - Refund deadlines for all other classes are located in the class search under the calendar icon ("refund deadlines")
    - Refund deadlines are also located for a specific term on the SDCCD website under "Dates and Deadlines"
    - No refund is given for classes dropped after the published deadline.
2. Students who are administratively dropped when a Petition to Challenge is denied will receive a full refund of the class(es) petitioned.
3. Students who are academically dismissed and administratively dropped will receive a full refund.

Important Note: No refund is given for classes dropped after the deadline.

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4. In order to receive a refund, parking permits must be returned to College Police or the Accounting Office within the refund deadlines described in #1.

Students with a valid address on file and who do not have an outstanding financial obligation to the district will receive a refund in the mail or credit to their credit card. Refunds will be sent to students after the add/drop deadline. For payments by check, there is a five week waiting period for checks to clear the bank before refunds will be processed. For more information contact the Accounting Office on campus.

Important Note: Students who drop all classes and wish to receive a refund must also submit their parking permit before the refund will be granted. If the permit is not returned within the two-week refund period, the student will not receive a refund for the permit.

Academic Information and Regulations



Disclaimer: SDCCD continuously reviews and updates policies and procedures to ensure compliance with state and federal regulations and changes in business practices. Please refer to the SDCCD website for the most up-to-date information.

Academic Information

Statement of Open Courses

It is the policy of the San Diego Community College District that, unless specifically exempted by statute, every course, section, or class offered by the District and reported for state aid shall be fully open to enrollment and participation by any person who has been admitted to the college and who meets course prerequisites.

Honest Academic Conduct

Honesty and integrity are integral components of the academic process. Students are expected to be honest and ethical at all times in their pursuit of academic goals in accordance with Policy 5500, Student Rights, Responsibilities, Campus Safety and Administrative Due Process.

Academic dishonesty occurs when a student attempts to show possession of a level of knowledge or skill which he or she does not possess. The two most common kinds of academic dishonesty are cheating and plagiarism. Cheating is defined as the act of obtaining or attempting to obtain credit for academic work by the use of any dishonest, deceptive, or fraudulent means. Plagiarism is defined as the act of incorporating ideas, words, or

specific substance of another, whether purchased, borrowed or otherwise obtained, and submitting the same as one's own work to fulfill academic requirements without giving credit to the appropriate source.

Students who engage in practices of cheating or plagiarism may warrant two separate and distinct courses of disciplinary action which may be applied concurrently in response to a violation of this policy. Students are responsible for knowing what constitutes academic dishonesty and for consulting with instructors about questions or concerns. Procedure 3100.3 describes the Academic and Administrative Sanctions for Students who are found to be cheating or Plagiarizing. Copies of the procedures can be obtained in the Office of the Vice President of Student Services and online.

Responsibility for Meeting Requirements

Each student must assume responsibility for compliance with the regulations of the college set forth in this catalog, for satisfying prerequisites for any course, and for selecting courses which will facilitate attainment of educational objectives. The college does not assume responsibility for misinterpretation of policies and procedures as presented in this catalog. Counselors and advisors are available to assist in planning students' programs. Any questions or doubts concerning this catalog material should be referred to the Office of the Vice President, Student Services.

Dean's List

A Dean's Honor List is compiled after each spring term for the academic year (fall to spring). To be eligible for the Dean's Honor List, a student must complete 12 units or more during the academic year and have earned a grade point average of 3.5 or better.

Honors Program

The Honors Program is open to all highly motivated students who seek an enriched learning experience. We offer both Honors core classes and individual Honors contracts for students in non-honors sections. Honors Program benefits include an emphasis on equity and social justice, access to scholarships and priority consideration transfer agreements. Activities may include opportunities for individual research projects, more interactive classrooms, and participation in community and cultural events. The Honors Program can be found in all disciplines (vocational, liberal arts, fine arts, sciences, business, etc.). For specific criteria and other information, please consult the schedule of classes or contact one of your campus Honors Coordinators Dr. Carmen Carrasquillo Jay, at cjay@sdccd.edu.

Students enrolled in an honors section (including an honors contract), may not transfer to a regular section after the deadline to make a schedule adjustment for the class. Petition for honors credit after the course has been completed will not be permitted.

Phi Theta Kappa International Honor Society

Beta Iota Lambda Chapter of Phi Theta Kappa

Beta Iota Lambda is the Miramar College chapter of the international honor society, Phi Theta Kappa, the largest and one of the most prestigious honor societies in higher education. PTK focuses on the four Hallmarks of Scholarship, Leadership, Service, and Fellowship.

Membership requirements: To be eligible, you must have completed 12 units of coursework leading to an associate degree program and you must have a grade point average of at least 3.25. Provisional membership is available for part-time students and for recent high school graduates.

Applications and further information are available by email at cjay@sdccd.edu.

SDCCD Online Learning Pathways

San Diego City, Mesa, and Miramar Colleges

QUALITY ONLINE LEARNING

Learn anytime, anywhere with our convenient, flexible online courses that fit your busy schedule. Enjoy interactive communication with your classmates and instructor as you complete your coursework in an engaging, supportive learning environment. Our quality online courses are developed and taught by experienced instructors from our three colleges—City College, Mesa College, and Miramar College.

Want to get started? Visit the SDCCD website to find out if online learning is for you.

Get ready for online learning success! Visit the online learning success website for more information.

Online students receive 24/7 Technical Support by accessing the Canvas support webpage or by calling toll free 844-612-7421. For login instructions go online.

Distance Education

The San Diego Community College District offers students the opportunity to take online credit courses at San Diego City College, San Diego Mesa College, and San Diego Miramar College. Online courses offer the same curriculum as traditional courses except that lectures and course materials are accessed via the district's web-based learning management system. Students engage in classroom discussions and online collaborations with other students and the instructor. Online registration, counseling, tutoring, and library services are available. SDCCD offers a variety of courses including general education and transfer requirements online. Courses offered meet the Americans with Disabilities Act (42 U.S.C. §12100 et seq.) and section 508 of the Rehabilitation Act of 1973, as amended, (29 U.S.C. §794d).

To ensure student authentication and academic integrity, students have secure logins and are required to perform activities that demonstrate meaningful participation on a weekly basis. Students must logon the first day of class.

In accordance with federal regulations there are restrictions on enrollment in online classes for students residing outside of California. For more information access the list of restricted states and territories.

Academic Regulations

Course Repetition Policy

- No course in which a "C" or better grade has been earned may be repeated, unless students meet the following exception criteria:
    - Legally Mandated Training Requirement
    - Disabled Student as part of a Disability-Related Accommodation
    - Extenuating Circumstances beyond the control of the student (documentation required)
    - Significant Lapse of Time
- Students will not be allowed more than four enrollments in similar active participatory courses in Exercise Science and Visual and Performing Arts, regardless of grade or symbol earned.
- Academic renewal is not allowed for work experience courses.
- Each course in which an unsatisfactory grade ("D," "F," or "NP") has been earned may be repeated twice without a petition. The course being repeated must be the same as the original course, not its equivalent. Only the newly-earned units and grades will be used in computing the grade point average.
- Students will not be allowed more than three enrollments in any course, regardless of grade or symbol earned.

Course Repetition—Limitations on Active Participatory Courses

Due to changes in the regulations that govern community colleges, enrollment limits have been placed on certain types of active participatory courses that are related in content. Active participatory courses include courses in exercise science, visual arts, and performing arts (e.g., music, art, photography, theatre arts). These courses have been put into groups of courses related in content. A student may enroll in active participatory courses in exercise science, visual arts, or performing arts that are in a group of related content for no more than four (4) courses in each content area (group). All grades, including "W's," will count toward the four course enrollment maximum for each group of courses. See the current listing of groups of courses related in content in the Documents section under "Course Repetition - Limitations on Active Participatory Courses" online. For further information regarding course groupings, please consult with a counselor.

Academic Renewal Without Course Repetition

A student with substandard academic performance (GPA below 2.0) that is not reflective of present demonstrated ability may petition to have a maximum of 30 units of substandard performance disregarded in computation of grade point average.

The following conditions apply:

1. To be eligible for academic renewal without course repetition a student must:
    a. have transcripts from all institutions attended officially on file.
    b. successfully complete, in an accredited college or university, 15 units with a grade point average of at least 2.0 subsequent to the work to be disregarded. All courses taken during the semester/session in which the student reaches or exceeds the 15-unit minimum will be used in computing the 2.0 grade point average.
    c. have one year elapsed since the coursework to be disregarded was completed.
2. A maximum of 30 units may be disregarded.
3. If grade alleviation has already been applied two times for a course, the course will not be eligible for academic renewal without repetition and will remain on the academic record.
4. If previous action for academic renewal has been applied to coursework included in the semester to be disregarded, the course will not be eligible for academic renewal without repetition and will remain on the academic record.
5. Academic renewal without course repetition may be applied to substandard course(s)/semester(s) from another accredited institution.
6. The permanent academic record will be annotated in such a manner that the record of all work remains legible, ensuring a true and complete academic record.
7. Recalculation of the grade point average will be used toward qualification for graduation with honors.
8. Academic standing for the semester/session(s) will not be adjusted.
9. Once the petition is approved, the action is not reversible.
10. Once an associate degree has been posted to the student's academic record, academic renewal without course repetition may only be applied to classes with an evaluative symbol of "F". For more information see AP 4240 - Academic Renewal Without Course Repetition.

Course Repetition—Lapse of Time

Academic departments may require that courses for the major be completed within a specified number of years prior to the granting of the Associate Degree, Certificate of Achievement, or Certificate of Performance. Students may be required to repeat a course in which a satisfactory (A, B, C, or P) grade has already been earned. Students with questions about the applicability of previous coursework are advised to consult the department as early as possible.

Disability Support Programs and Services (DSPS) Repeat

Additional repetitions of a DSPS course to accommodate a student's disability-related needs may be permitted. For students with disabilities, course repetition is determined on an individual student basis. Contact the DSPS Office on campus for more information.

Mandated Training

Students who are required to meet a legally mandated training requirement as a condition of continued paid or volunteer employment may repeat a credit course any number of times. Students should complete the Mandated Training Course Repetition form.

For more information on course repetition, consult the Counseling Office at your college.

Academic Transcripts

Transcripts of Record

A student may order an official transcript of record online, in person, by mail or via fax. To order an official transcript online, visit the transcripts website. Transcripts ordered online will be mailed within 1–2 business days.

To order a transcript in person, a student may complete a request at the Accounting Office at the college, or in person at the District Office of the Registrar, San Diego Community College District, Administrative Office, 3375 Camino del Rio South, San Diego, CA 92108.

Payment of fees must be made prior to processing a request for transcripts.

The following policy has been adopted by the San Diego Community College District Board of Trustees regarding the issuance of transcripts of record:

1. The first two transcripts will be issued without charge.
2. There will be a charge of $5.00 for each additional transcript.
3. A $10.00 special handling fee will be charged for all "RUSH" order transcript requests, including hand carried transcript requests ordered at the District Office. Rushed transcripts are processed immediately upon receipt. The special handling fee will be charged per request.

Requests will not be processed if students have outstanding holds preventing the release of the official transcript.

All official copies of the student's permanent record are in the Office of the Registrar. The Office of the Registrar will certify only to the accuracy of the records prepared by and issued directly from that office to another institution.

More information on ordering transcripts is available on the website.

Grading System

Unit of Credit

A unit of credit represents one hour of lecture or recitation and two hours of preparation per week, or three hours of laboratory per week for one semester.

Academic Grades

Grades	Standing	Grade Points per Unit
A	Excellent	4
B	Good	3
C	Satisfactory	2
D	Passing - Less than satisfactory	1
F	Fail	0
P	Pass	Units earned not counted in GPA
NP	No Pass	Units not counted in GPA

The grade point average (GPA) is determined by dividing the total grade points earned by the total grade point units completed as listed in the chart above.

Administrative symbols

P/NP—Pass/No Pass; I—Incomplete; W—Withdrawal; IP—In Progress; EW—Excused Withdrawal; RD—Report Delayed. Administrative symbols are not used in the computation of GPA. See below for further explanation.

Pass/No Pass (P/NP)

P/NP is a non-punitive grading system where such units earned will be counted in satisfaction of curricular requirements but will be disregarded in determining a student's grade point average. For more specific information, refer to the discussion of the Pass/No Pass Grading Policy.

Incomplete

A symbol of "I," Incomplete, may be assigned by an instructor when a student has been unable to complete academic work for unforeseeable emergency and/or justifiable reason at the end of term. A copy of the "Assignment of Incomplete" form will be mailed to the student and the original retained in the District Records Office. A final grade will be assigned when the work stipulated has been completed and evaluated by the instructor or when the time limit for completion of the work has passed. An "I" must be made up no later than one year following the end of the term in which it was assigned. In the event of unusual, verifiable circumstances beyond the student's control, a petition may be filed in the Office of the Vice President, Student Services for extension of the one-year time limit. Important Note: Course repetition is not permitted to remove an Incomplete.

Withdrawal

An official withdrawal from classes may be requested by the student or initiated on his/her behalf by the instructor or Vice President, Student Services.

The following conditions apply to official withdrawal:

1. No record of the class will be entered on the student's permanent record if the official withdrawal is made by the deadline to drop without a "W" being recorded as published in the schedule of classes.
2. If the withdrawal is made after the deadline for withdrawing without a "W" and prior to the deadline for withdrawal published in the class schedule for that session, a "W" will be recorded on the student's permanent record. No exceptions to this policy will be made. Petitions will not be accepted for exception to policy.
3. A student attending a session after the deadline for withdrawal will not be eligible to receive a "W" and must be assigned an academic grade or other administrative symbol by the instructor. Exceptions to this policy will be made only upon verification of extreme circumstances beyond the control of the student. Petitions requesting exception must be filed in the Admissions Office.
4. Withdrawal (W) symbols will be used in the calculation of lack of progress probation and dismissal status.
5. Students on active duty or reserve duty may petition for a "military" withdrawal. This withdrawal is not calculated in the determination of academic progress and is noted on the student's academic record.
6. Students will be allowed a maximum of three withdrawals in any course.

In Progress

A symbol of "IP," In Progress, will be assigned when a class extends beyond the normal end of a semester or summer session, that is, when the class "carries over" from one term to the next. The "IP" will appear on a student's record for the term during which the course is completed until the appropriate grade is assigned by the instructor. The "IP" shall not be used in the calculation of a student's grade point average.

Excused Withdrawal

A symbol of "EW", Excused Withdrawal, may be assigned when a student is permitted to withdraw from a course(s) due to specific circumstances beyond the control of the student affecting his or her ability to complete a course(s).

- Excused withdrawal will not be counted in progress probation and dismissal calculations.
- Excused withdrawal will not be counted as an enrollment attempt.

Students requesting an Excused Withdrawal can obtain a Petition for Excused Withdrawal (EW).

- Excused withdrawal (EW) petitions will be accepted up to one year after the completion of the semester in which the student is requesting an EW.
- All petitions must be accompanied by supporting documentation substantiating the student's extenuating circumstances, including pertinent dates and times.
- It is recommended that students visit with a counselor to discuss alternative options to an Excused Withdrawal to be sure that this choice is the best course of action for the student's academic career.
- Students receiving financial aid should contact the Financial Aid Office to understand the possible implications to financial awards.

Grade Challenge

Final grades will be issued at the end of each semester. In the absence of mistake, fraud, incompetence, or bad faith, the determination of the student's grade by the instructor shall be final once it has been recorded by the Registrar's Office. A student may challenge a grade or request a change to his/her academic record within two years from the date of issuance. Requests beyond two years will not be accepted. Students wishing to challenge a grade should first attempt to resolve the challenge informally with the instructor. Grade challenges must be processed under Administrative Procedure 5040, Student Records, Directory Information and Privacy .

Copies of Administrative Procedure 5040 are available in the Office of the Vice President, Instruction.

Pass/No Pass Grading Policy

There are courses in which Pass/No Pass grades are used exclusively; these are designated in the catalog course description by the statement "Pass/No Pass Only." In addition, there are courses which cannot be taken on a Pass/

No Pass basis; these are designated in the course description by the statement "Letter Grade Only." Some courses may be taken for either "Pass/No Pass" or "Letter Grade.

Consistent with District policy, a student in good standing may elect to be graded on a Pass/No Pass basis in courses where there is an option. A grade of "Pass" (P) shall be awarded only for work which otherwise would have received a grade of "C" or better. Work that would have received a "D" or "F" will be graded "No Pass" (NP). The units earned will be counted in satisfaction of program requirements, but will be disregarded in determining a student's grade point average.

Students who plan to transfer to a four-year institution should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.

Conditions

1. Students may change from a 'Letter Grade' option to a 'Pass/No Pass' option during registration or up until the published deadline. To select a Pass/No Pass option for the course go to the 'EDIT Class Enrollment Options' page on the mySDCCD portal. The deadline is listed in the class search details page when you click the calendar icon ("Deadlines"). After the Pass/No Pass Deadline, the 'Letter Grade' or 'Pass/No Pass' option may not be changed for that class.
2. No exceptions to this condition will be made. Petitions will not be accepted for exception to policy.

Standards of Academic Progress

Students are in good academic standing when they have a 2.0 grade point average or higher and have completed more than 50% of units they have attempted. There are two kinds of probation and dismissal, one based upon GPA (Academic Performance) and the other based upon the number of units completed (Progress Performance).

Certain programs may have more stringent standards for academic progress. Consult the program director for more information.

Students enrolled in the core curriculum of medically-related programs will be governed by the probation and dismissal policies as outlined in the program policy manuals that reflect the tenets of safe medical practice and respond to program accreditation guidelines.

Academic Probation

A student whose cumulative grade point average falls below a 2.0. A student on academic probation will return to good standing once his/her cumulative grade point average reaches or exceeds 2.0.

Academic Dismissal

A student on academic probation status for three consecutive primary semesters shall be dismissed. An enrollment hold will be placed on the student's record.

Lack of Progress Probation

A student shall be placed on lack of progress probation when the percentage of all (cumulative) units for which entries of "W," "I," and "NP" are recorded reaches or exceeds 50%.

Lack of Progress Dismissal

A student who has been placed on lack of progress probation for three consecutive primary semesters shall be dismissed and an enrollment hold placed on the student's record when the percentage of units for which entries of "W," "I," and "NP" are recorded in a subsequent semester (non-cumulative), reaches or exceeds 50%.

Exceptions

Provisional, Joint Diploma and Special Admit High School students who receive a substandard grade (D, F, NP) or lack of progress (W, I, NP) in any class will be automatically dismissed. Important Note: Probationary Status will not apply.

If dismissed:

- Special Admit High School students will not be permitted to re-enroll without approval from a high school counselor.
- Special Admit High School students who attempt/earn 12 units or more-must meet with a college counselor and complete a student academic contract.
- Joint Diploma students must see a JD counselor for readmission.

Readmission after Dismissal

Important Note: Dismissal status is determined based upon Progress Performance, Academic Performance, or a combination of both.

1st Dismissal

- Student must meet with a counselor and complete a Student Academic Contract.
- Readmission will be based upon meeting contract conditions.
- Student will lose registration priority until they return to 'Good' Standing.
- Student will lose eligibility for the California College Promise Grant (CCPG) until they return to 'Good' Standing or sit out one full academic year.

Transfer of Credits

Transcripts of Prior Academic Credit

Students with credit from other colleges and universities must have official transcripts on file with the college.

- Official transcripts are those sent directly from one institution to another.
- Transcripts will only be accepted for one year after issuance.
- Transcripts brought in by students not in an official, sealed envelope will be considered unofficial.
- Transcripts are required even if prior credits do not appear relevant or if units were taken years ago.
- Students receiving veterans benefits must have transcripts on file within one semester.
- Certain programs require transcripts before admission to the program.
- Official transcripts from other institutions become the property of the college and will not be duplicated or returned.
- Official transcripts should be sent to the following address:

  San Diego Community College District

  3375 Camino del Rio South, Rm. 100

  San Diego, CA 92108-3883

Upper Division Coursework

The San Diego Community College District (SDCCD) accepts all lower division courses taken at U.S. regionally accredited colleges. All lower division courses will be counted toward the Associate degree. Petitions to use upper division courses from U.S. regionally accredited colleges will only be accepted if needed to meet minimum Associate degree requirements for the major or district requirements. All petitions must be approved by the faculty in the discipline, or an appropriate designee, and/or college committee.

International Transfer Credits

Students who elect to submit transcripts from international colleges and universities must submit their transcripts to an approved credential evaluation service, and request a comprehensive evaluation be sent to San Diego City, Mesa, or Miramar College. Credit for transfer courses taken at an institution outside the United States are evaluated dependent upon course equivalency and student learning outcomes on a course by course basis. Coursework from foreign institutions will not made equivalent to SDCCD courses, and cannot be used to meet

transfer major (ADT) or transfer general education requirements. International transcripts are not required. For more information contact the College Evaluations Office.

Credits from Other Regionally Accredited Institutions

Credits from other regionally accredited institutions may be accepted for transfer credit after evaluation by District evaluators. San Diego Miramar College will not accept the transfer credits from another institution if the evaluation by the District evaluators determines that the credits received from another accredited institution do not meet the equivalent standards for a similar course taken at San Diego Miramar College.

Credit for Prior Learning

Credit for Prior Learning

Credit for Prior Learning (CPL) is college credit awarded for validated college-level skills and knowledge gained outside of a college classroom. Credit for prior learning may be earned for eligible courses approved by the faculty 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. Students should meet with a Counselor for specific information regarding CPL and the petition process. Details may be found in Administrative Procedure 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 higher-level International Baccalaureate (IB) examination
- Achievement of a satisfactory score on the College Level Examination Program (CLEP)
- Achievement of a satisfactory score on DANTES Subject Standardization Test (DANTES/DSST)
- 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
- Evaluation of Military Transcripts
- Evaluation of industry recognized credential documentation
- Evaluation of student-created portfolios

Determination of Eligibility for Credit for Prior Learning

- The course is on the approved credit for prior learning list at the college
- The student must have previous academic history (previously earned credit or noncredit from the District) or be currently enrolled in a college at the San Diego Community College District and in good standing
- All student holds must be cleared prior to verification of eligibility
- Official transcripts from all prior colleges are on file
- Official test scores must be submitted for the processing of AP, IB, CLEP, and/or DANTES
- A student education plan is on file
- The student is not currently enrolled in the course
- The student has not received credit on their academic record(s) for an equivalent course

High school students enrolled in CTE transitions should refer to the High School Courses for College Credit Chart (Credit by Examination)

Limitations on Credit for Prior Learning

- Credits acquired by Credit for Prior Learning are not applicable to meeting of such unit load requirements as Selective Service deferment, Veterans, or Social Security benefits.
- Credits acquired by Credit for Prior Learning shall not be counted in determining the 12 semester hours of credit in residence required for an Associate degree.

Important Note: CPL may be used to fulfill the District requirement for six units in the major.

- Credit awarded through credit for prior learning may not be used for grade alleviation.
- Credit awarded through credit for prior learning may not be used in determining financial aid eligibility as required by law.

- Any credits awarded through credit for prior learning will be counted toward the maximum unit count under the Financial Aid Satisfactory Academic Progress Policy; and
- Credit granted by SDCCD does not necessarily transfer to other institutions. Final determination regarding transfer of credit rests with the receiving institution. Students intending to transfer to a four-year institution should consult a counselor or the individual university regarding their credit for prior learning policy.

For more information on Credit for Prior Learning, visit Forms and Documents.

Credit by Examination

(Administrative Procedure AP 4235)

Students interested in Credit for Prior Learning using credit by examination shall receive credit as recommended by the appropriate department chair or faculty designee. For this purpose "examination" refers to any written, oral or performance assessments established by the individual departments. All students must meet specific credit for prior learning criteria. An approved list of eligible courses is available on the Credit for Prior Learning Course List.

Students may petition for credit for prior learning, by accessing the Forms and Documents.

You may view a full copy of the policy by accessing the following Board Policies & Administrative Procedures.

See eligibility requirements and limitations on credit for prior learning.

High School and Noncredit Courses for College Credit (Credit by Examination)

(Administrative Procedure AP 4235)

As part of an early college program called Career Technical Education (CTE) Transitions (formerly known as Tech Prep), high school and noncredit students may earn college credit equivalent to the courses in the table below. To receive credit, students must be enrolled in a high school or noncredit CTE course tied to an active agreement, meet overall course and final assessment grade requirements, and complete related paperwork including the submission of a SDCCD online college application. Full eligibility and process requirements are available online.

For questions and more information, contact the CTE Transitions Program at 619-388-6572.

For the most up-to-date listing of active agreements and student requirements, please go to CTE Transitions Credit by Exam.

See Limitations on credit for prior learning listed.

CTE (Career Technical Education) Transitions High School Credit by Examination Active Agreements

High School to San Diego Miramar College

For the most up-to-date listing of active agreements and student requirements, please go online.

San Diego Miramar College Program Area	San Diego Miramar College Course	San Diego Miramar College Units	High School Course (District)
Biotechnology	BIOL 131	4	Biomedical Technology 1, 2 or Medical Interventions 1, 2 (Poway Unified School District) Biotechnology 1, 2 or Honors Biotechnology 1, 2 or Medical Interventions or PLTW Medical Interventions Honors 1,2 (SDUSD) Biotechnology 1C, 2C (Helix Charter High School) Biotechnology 1, 2 or Biotechnology Honors 1, 2 (Sweetwater Union High School District) Medical Interventions (Escondido Union High School District) PLTW Medical Interventions (Torah High School of San Diego) PLTW Medical Interventions (Vista Unified School District) PLTW Medical Interventions (School for Entrepreneurship & Technology) PLTW Medical Interventions (Carlsbad Unified School District)
Business	BUSE 100	3	Business 100 1,2 (SDUSD)
Business	BUSE 129	3	Empowering Entrepreneurs 1,2 or Empowering Entrepreneurs 1,2 Honors (SDUSD)
Fire Protection Technology	FIPT 101	3	Fire Protection Technology 3, 4
Paralegal	PARA 100	3	Intro to Law or Foundations of Legal Practices 1,2 (SDUSD)
Systems Diagnostics, Service and Repair	AUTO 153G	3	Intro to Auto Body 1,2 or Auto Body Repair/ Finishing 1,2 or Understanding my Ride-STEM Automotive 1,2 or STEM Automotive Technology

San Diego College of Continuing Education to San Diego Miramar College CTE Transitions Credit by Examination

For the most up-to-date listing of active agreements and student requirements, please go online.

San Diego Miramar College Program Area	San Diego Miramar College Course	San Diego Miramar College Units	San Diego College of Continuing Education Course
Computer Business Technology	CBTE 120 CBTE 122 CBTE 127 CBTE 140 CBTE 152	2 3 2 2 2	OFSY 596 OFSY 599 COMM 614 OFSY 575 OFSY 510 and OFSY 511

Industry Recognized Credentials

Students interested in Credit for Prior Learning using industry recognized credential(s) shall receive credit as recommended by the appropriate department chair or faculty designee. Approved list of courses are available in the College Evaluations Office.

Students may petition for credit for prior learning, by accessing Forms & Documents.

See eligibility requirements and limitations on credit for prior learning.

Acceptance and Application of Military Credit

(Administrative Procedure AP 4235)

San Diego City, Mesa, and Miramar Colleges apply credit for educational experience completed during military service toward the associate degree in accordance with the associate/baccalaureate credit recommendations contained in "A Guide to the Evaluation of Educational Experiences in the Armed Services" published by the American Council on Education (ACE). Students must submit documentation of educational experiences during military service. Acceptable documents include:

- Joint Services Transcript
- AARTS or SMART Transcript
- DD-214
- DD-295
- NAV/PERS 1070/604
- DD-2586
- National Guard Bureau (NGB) Form 22E
- Coast Guard Institute
- Community College of the Air Force (CCAF)

Military service credit may be granted upon verification of at least six (6) months of continuous active duty, or completion of basic training for National Guard/Reservists. Four (4) units of credit may be awarded to meet the district graduation requirements in Health and Exercise Science. Three (3) of those units may also be used to satisfy Area E of the CSU General Education Breadth pattern if applicable.

Other educational experiences during military service may also fulfill additional major, general education, or elective degree requirements. More specific information is available on the district Credit for Prior Learning website.

You may view a full copy of the policy by accessing the following Board Policies & Administrative Procedures.

U.S. Air Force and U.S. Army ROTC Programs

Under the provisions of a special agreement, students may participate in the Army or Air Force Reserve Officers Training Program (ROTC) at SDSU. San Diego City, Mesa and Miramar College students may enroll and attend ROTC classes at SDSU by contacting the SDSU Military Science Department 619-594-5545. Financial assistance may also be available. The credits earned in these classes may be transferred as electives to meet the degree requirements of City, Mesa and Miramar Colleges.

See eligibility requirements and limitations on credit for prior learning.

Academic Credit for AP, IB, CLEP, and DANTES/DSST (Standardized Exams)

(Administrative Procedure AP 4235)

The linked tables below indicate the score necessary, the credit allowed, and the area(s) satisfied for each of the examinations accepted for credit.

You may view a full copy of the policy by accessing the following Board Policies & Administrative Procedures.

Limitations on AP, IB, CLEP, and DANTES/DSST include:

- Grades are not assigned, nor is the credit used in calculating grade point average.

- Credit awarded through credit for prior learning may not be used for grade alleviation.

Advanced Placement Test (AP)

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Art 2-D Design 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 8 quarter/5.3 semester units[6]	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: ARTF 150A
Art 3-D Design 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 8 quarter/5.3 semester units [6]	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: N/A
Art Drawing 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 8 quarter/5.3 semester units[6]	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: ARTF 155A
Art History 3, 4, or 5 Exam taken Fall 2009 or later	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3A or 3B	SDCCD: ARTF 110 or ARTF 111
Biology 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 4 semester units towards Area 5 Cal-GETC: 4 semester units towards Area 5B & 5C	SDCCD: N/A
Calculus AB[1] 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Calculus BC/AB subscore[1] 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2	SDCCD: N/A
Calculus BC[1] 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2	SDCCD: N/A
Chemistry 3 *Exam taken Fall 2009 or later*	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 4 semester units towards Area 5 Cal-GTEC: 4 semester units towards Area 5A & 5C	SDCCD: CHEM 200
Chemistry 4 or 5 *Exam taken Fall 2009 or later*	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 4 semester units towards Area 5 Cal-GETC: 4 semester units towards Area 5A & 5C	SDCCD: CHEM 200 & CHEM 201
Chinese Language & Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A
Comparative Government & Politics 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: POLI 103
Computer Science A[1] 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: N/A
Computer Science Principles[1] 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Exam taken Fall 2022 or later	quarter/5.3 semester units	Cal-GETC: N/A	
English Language and Composition 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units[2]	SDCCD GE: 3 semester units towards Area 1A Cal-GETC: 3 semester units towards Area 1A	SDCCD: ENGL C1000
English Literature and Composition 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units[2]	SDCCD GE: 6 semester units towards Area 1A & 3 Cal-GETC: 3 semester units towards Area 1A or 3B	SDCCD: ENGL C1000
Environmental Science 3 *Exam taken Fall 2009 or later*	SDCCD: 4 semester units CSU: 4 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 5[8] Cal-GETC: 3 semester units towards Area 5A & 5C[8]	SDCCD: N/A
Environmental Science 4 or 5 *Exam taken Fall 2009 or later*	SDCCD: 4 semester units CSU: 4 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 5[8] Cal-GETC: 3 semester units towards Area 5A & 5C[8]	SDCCD: BIOL 120
European History 3, 4, or 5 *Exam taken after Spring 2009*	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 or 4 Cal-GETC: 3 semester units towards Area 3B or 4	SDCCD: N/A
French Language and Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD.: N/A
German Language and Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
	UC: 8 quarter/5.3 semester units		
Human Geography 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area	SDCCD: GEOG 102
Italian Language and Culture 3	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: ITAL 101
Italian Language and Culture 4 or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: ITAL 102
Japanese Language and Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A
Latin 3, 4 or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area	SDCCD: N/A
Macroeconomics 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: ECON 120
Microeconomics 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: ECON 121

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
	UC: 4 quarter/2.6 semester units		
Physics 1: Algebra Based 3, 4, or 5	SDCCD: 4 semester units[3] CSU: 4 semester units[3] UC: 8 quarter/5.3 semester units[3]	SDCCD GE: 4 semester units towards Area 5[5] Cal-GETC: 4 semester units towards Area 5A & 5C[5]	SDCCD: N/A
Physics 2: Algebra Based 3, 4, or 5	SDCCD: 4 semester units[3] CSU: 4 semester units[3] UC: 8 quarter/5.3 semester units[3]	SDCCD GE: 4 semester units towards Area 5[5] Cal-GETC: 4 semester units towards Area 5A & 5[5]	SDCCD: N/A
Physics C (electricity / magnetism) 3, 4, or 5	SDCCD: 4 semester units[3] CSU: 4 semester units[3] UC: 4 quarter/2.6 semester units[3]	SDCCD GE: 3 semester units towards Area 5[4] Cal-GETC: 3 semester units towards Areas 5A & 5C[4]	SDCCD: N/A
Physics C (mechanics) 3, 4, or 5	SDCCD: 4 semester units[3] CSU: 4 semester units[3] UC: 4 quarter/2.6 semester units[3]	SDCCD GE: 3 semester units towards Area 5[3] Cal-GETC: 3 semester units towards Areas 5A & 5C[4]	SDCCD: N/A
Precalculus 3, 4 or 5	SDCCD: 6 semester units CSU: 3 semester units UC: N/A	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: N/A	SDCCD: N/A
Psychology 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: PSYC C1000
Seminar 3, 4, 5	SDCCD: 3 semester units CSU: 3 semester units UC: N/A	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Spanish Language and Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A
Spanish Literature and Culture 3, 4, or 5	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A
Statistics 3, 4, or 5	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2	SDCCD: STAT C1000
U.S. Government & Politics 3, 4, or 5 *Exam taken after Spring 2025*	SDCCD: 3 semester units CSU: 3 semester units UC: 4 quarter/2.6 semester units	SDCCD GE: 3 semester units towards Area 4 & US-2[7] Cal-GETC: 3 semester units towards Area 4	SDCCD: POLS C1000
U.S. History 3, 4, or 5 *Exam taken after Fall 2009*	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 & US-1[7] or Area 4 & US-1[7] Cal-GETC: semester units towards Area 3B or 4	SDCCD: HIST 109
World History 3, 4, or 5 *Exam taken after Spring 2022*	SDCCD: 3 semester units CSU: 3 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 or 4 Cal-GETC: 3 semester units towards Area 3B or 4	SDCCD: HIST 101

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

Exams may meet multiple general education requirements. However, one exam may only be used to fulfill one general education area, even if it's approved for more than one.

1. If a student passes more than one exam in calculus, only one exam may be applied to UC/CSU baccalaureate or SDCCD associate degree/certificate requirements. If a student passes more than

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED

one computer science exam, only one exam may be applied to UC/CSU baccalaureate or SDCCD associate degree / certificate requirements

2. Students passing both English AP exams will receive a maximum of 8 quarter units / 5.3 semester units toward UC baccalaureate degree requirements.
3. Students passing more than one AP exam in Physics will receive a maximum of 6 semester units of credit toward SDCCD associate degree/certificate and CSU baccalaureate requirements. A maximum of 8 quarter units (5.3 semester units) may be awarded toward UC baccalaureate degree requirements.
4. Students passing either of the Physics C exams will receive 3 semester units(4 quarter units) towards Cal-GETC Area 5A and 5C.
5. Students passing the Physics 1 or Physics 2 exam will receive 4 semester (5 quarter units) toward Cal-GETC Area 5A and 5C.
6. Students passing more than one AP exam in studio art will receive a maximum of 8 quarter units/ 5.3 semester units of credit toward UC baccalaureate degree requirements.
7. Students who have completed the American Institutions requirement except for the California government portion must complete one course approved in Area US-3.
8. Students who pass AP Environmental Science will receive 3 semester units (4 quarter units) towards Cal-GETC Area 5A and 5C.

SDCCD Credit is granted *only* for the specific AP exams listed in this catalog.

To request an official transcript, write to PSAT/NMSQT Office, P.O. Box 6720, Princeton, NJ, 08541-6720 or order online from the AP website.

Historical Advanced Placement Chart

This chart provides a historical reference for AP exam credit policies in prior academic years. It reflects how credit was granted for AP exams based on institutional policies in effect at that time. Students should refer to the current AP credit chart for the most up-to-date information regarding AP exam applicability to general education and degree requirements.

International Baccalaureate (IB) Credit

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Biology 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 5 Cal-GETC: 3 semester units towards Area 5B	SDCCD: N/A
Chemistry 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 5 Cal-GETC: 3 semester units towards Area 5A	SDCCD: N/A
Economics 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: ECON 120 & ECON 121
Geography 5-7 Higher Level	Geography 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD: N/A
History (any region) 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 or 4 Cal-GETC: 3 semester units towards Area 3B or 4	SDCCD: N/A
Language A Literature 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3	SDCCD: N/A
Language A Language and Literature 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3B	SDCCD: N/A
Language B (any language) 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: N/A Cal-GETC: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Mathematics 5-7 Higher Level: Analysis and Approaches	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2	SDCCD: N/A
Mathematics 5-7 Higher Level: Applications and Interpretation	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 2 Cal-GETC: 3 semester units towards Area 2A2	SDCCD: N/A
Physics 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 5 Cal-GETC: 3 semester units towards Area 5A	SDCCD: N/A
Psychology 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 4 Cal-GETC: 3 semester units towards Area 4	SDCCD: N/A
Theatre 5-7 Higher Level	SDCCD: 6 semester units CSU: 6 semester units UC: 8 quarter/5.3 semester units	SDCCD GE: 3 semester units towards Area 3 Cal-GETC: 3 semester units towards Area 3A	SDCCD: N/A

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

If a student passes more than one test in the same language other than English (e.g., two exams in French) then only one examination may be applied.

SDCCD Credit is granted *only* for the specific IB exams listed in this catalog.

International Baccalaureate (IB) transcripts may be requested directly from your high school or ordered online through the International Baccalaureate website to order transcripts online.

Historical International Baccalaureate Credit Chart

This chart provides a historical reference for IB credit policies in prior academic years. It reflects how credit was granted for IB exams based on institutional policies in effect at that time. Students should refer to the current AP credit chart for the most up-to-date information regarding AP exam applicability to general education and degree requirements.

College Level Examination Program (CLEP)

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
American Government 50 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
American Literature 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Analyzing and Interpreting Literature 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Biology 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 5	SDCCD: N/A
Calculus 50 or higher *Exams taken after Spring 2010*	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
Chemistry 50 or higher *Exams taken after Spring 2010*	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 5	SDCCD: N/A
College Algebra 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
College Algebra - Trigonometry 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
Financial Accounting 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
French – Level I 50 or higher	SDCCD: 6 semester units[1] CSU: 6 semester units[1]	SDCCD GE: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
French – Level II 59 or higher	SDCCD: 9 semester units[1] CSU: 9 semester units[1]	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
German – Level I 50 or higher	SDCCD: 6 semester units[1] CSU: 6 semester units[1]	SDCCD GE: N/A	SDCCD: N/A
German – Level II 60 or higher	SDCCD: 9 semester units[1] CSU: 9 semester units[1]	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
History of the United States I 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4 & US-1[2]	SDCCD: N/A
History of the United States II 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4 & US-1[2]	SDCCD: N/A
Human Growth and Development 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Humanities 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Information Systems and Computer Applications 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Introduction to Educational Psychology 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Introductory Business Law 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Introductory Psychology 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Introductory Sociology 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Natural Sciences 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 5	SDCCD: N/A
Pre-Calculus 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
Principles of Accounting 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Principles of Macroeconomics 50 or higher	SDCCD: 3 semester units CSU: 3 semester unit	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Principles of Management 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Principles of Marketing 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Principles of Microeconomics 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Spanish – Level I 50 or higher	SDCCD: 6 semester units[1] CSU: 6 semester units[1]	SDCCD GE: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Spanish – Level II 63 or higher	SDCCD: 9 semester units[1] CSU: 9 semester units[1]	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Spanish with Writing I 50 or higher	SDCCD: 6 semester units[1] CSU: 6 semester units[1]	SDCCD GE: N/A	SDCCD: N/A
Spanish with Writing II 63 or higher	SDCCD: 9 semester units[1] CSU: 9 semester units[1]	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Western Civilization I 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 3 or 4	SDCCD: N/A
Western Civilization II 50 or higher	SDCCD: 3 semester units CSU: 3 semester units	SDCCD GE: 3 semester units towards Area 4	

College Level Examination Program (CLEP): CLEP examinations are *not applicable* to the Cal-GETC pattern and are *not accepted for transfer credit* by the University of California (UC) system. Credit is granted *only* for the specific CLEP exams listed in this catalog.

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

1. If a student passes more than one exam in the same language other than English (e.g. two exams in French), then only one examination may be applied toward SDCCD Associate Degree/Certificate and CSU baccalaureate degree requirements.
2. Students who have completed the American Institutions US-1 requirement must complete the American Institutions US-2 and US-3 requirements.

SDCCD Credit is granted *only* for the specific CLEP exams listed in this catalog.

To request an official CLEP transcript login to your CLEP Portal or send a written request to: Educational Testing Service, P.O. Box 6600, Princeton, NJ 08541-6600.

Historical College Level Examination Program (CLEP) Chart

This chart provides a historical reference for CLEP credit policies in prior academic years. It reflects how credit was granted for CLEP exams based on institutional policies in effect at that time. Students should refer to the current AP credit chart for the most up-to-date information regarding AP exam applicability to general education and degree requirements.

DANTES Subject Standardized Test (DANTES/DSST)

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
A History of the Vietnam War 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Art of the Western World 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Astronomy 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 5	SDCCD: N/A
Business Ethics & Society 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Business Mathematics 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Criminal Justice 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Environment and Humanity 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Ethics in America 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Foundations of Education 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Fundamentals College Algebra 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
Fundamentals of Counseling 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Fundamentals of	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Cybersecurity 400 or higher			
Here's to Your Health 400 or higher	SDCCD: 3 semester units	SDCCD GE: Health Education District Requirement	SDCCD: N/A
Human Cultural Geography 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Human Resources Management 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Introduction to Business 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Introduction to Computing 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Introduction to Law Enforcement 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 4	SDCCD: N/A
Introduction to World Religions 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 3	SDCCD: N/A
Lifespan Developmental Psychology 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Management Information Systems 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Organizational Behavior 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Personal Finance 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Principles of Finance 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Principles of Physical Science 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 5	SDCCD: N/A
Principles of Public Speaking 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 1B	SDCCD: N/A
Principles of Statistics 400 or higher	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 2	SDCCD: N/A
Principles of Supervision 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Substance Abuse (formerly Drug & Alcohol Abuse) 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
Technical Writing 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A
The Civil War and Reconstruction 400 or higher	SDCCD: 3 semester units	SDCCD GE: N/A	SDCCD: N/A

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

Dantes Subject Standardized Exams (DANTES/DSST): Dantes/DSST examinations are *not applicable* to the Cal-GETC pattern and are *not accepted for transfer credit* by the University of California (UC) and the California State University (CSU) Systems.

SDCCD credit is granted *only* for the specific CLEP exams listed in this catalog.

To request an official DANTES transcript contact:

PROMETRIC ATTN: DSST Program
1260 Energy Lane
St. Paul, MN 55108,

Phone: 877-471-9860 (toll free) or 651-603-3011

Transcripts may also be requested online through the Dantes website.

Historical DANTES Subject Standardized Test (DANTES/DSST) Chart

This chart provides a historical reference for DANTES exam credit policies in prior academic years. It reflects how credit was granted for DANTES exams based on institutional policies in effect at that time. Students should refer to the current AP credit chart for the most up-to-date information regarding AP exam applicability to general education and degree requirements.

Student-Created Portfolio Assessment

Students interested in Credit for Prior Learning using a student-created portfolio shall receive credit as recommended by the appropriate department chair or faculty designee. Approved list of courses are available in the College Evaluations Office.

Students may petition for credit for prior learning: student-created portfolio assessment by accessing Forms & Documents.

See eligibility requirements and limitations on credit for prior learning.

Student Rights, Responsibilities and Campus Policies



Disclaimer: SDCCD continuously reviews and updates policies and procedures to ensure compliance with state and federal regulations and changes in business practices. Please refer to the SDCCD website for the most up-to-date information.

Support Services, Programs and Disability Discrimination Procedures for Students with Disabilities

(Board of Trustees Policy - BP 5140)

The District is committed to educational opportunity for students with disabilities and will comply with all provisions of Section 504 of the Rehabilitation Act of 1973, the Americans with Disability Act, as amended, and Section 508 of the Rehabilitation Act of 1973. Students with disabilities will be reasonably accommodated in compliance with federal and state requirements in all applicable programs of the District. Disability Support Programs and Services (DSPS) shall be primarily responsible for authorizing academic adjustments, auxiliary aids, services, or instruction that facilitate equal educational opportunities for disabled students who can benefit from instruction as required by federal and state laws. The fundamental principles of nondiscrimination and accommodation in academic programs provide that:

1. DSPS services will be available to students with verified disabilities, including but not limited to, reasonable accommodations, academic adjustments, disability management, vocational and academic counseling, technology accessibility, accessible facilities, equipment, instructional programs;

2. No student with a qualified disability will, because of the disability, be excluded from participation in, be denied the benefit of, or otherwise be subjected to discrimination under any post-secondary education activity or program; and
3. The institution will create an educational environment where disabled students have equal access to instruction, including those taking place in work preparation and clinical settings, without compromising the essential components of the course, educational program, or degree.

The District will respond in a timely manner to academic accommodation requests. See Administrative Procedure, AP 5140, Support Services and Disability Discrimination Procedures for Students with Disabilities, for implementation of this policy, which provides for an interactive and individualized review of each request.

The District identifies DSPS, or the 504 Officer, as the office or individual to determine academic accommodations under Section 504 of the 1973 Rehabilitation Act. DSPS will notify the appropriate administrator when unable to resolve a student complaint about the provision of a requested accommodation.

The Site Compliance Officer (SCO) is identified as the campus individual to handle all discrimination grievances under the Americans with Disabilities Act and can also be found through the District's Equal Employment Opportunity and Diversity Office.

All programs and services of the District, including the DSPS program, shall conform to all requirements established by the relevant law and regulations.

You may view a full copy of the Student Services policy and administrative procedure by accessing the following website.

Students with verified disabilities who may require academic accommodations or auxiliary aids are strongly recommended to contact the Disability Support Programs and Services (DSPS) Department, Room K1-204, 619-388-7312 or online. Complete the orientation procedures well before classes begin to ensure timely provision of services. Students are encouraged to identify themselves to the appropriate instructors to discuss the details and time lines necessary to provide appropriate accommodations. Students enrolled in online courses are encouraged to contact the college DSPS department where the courses are being offered to request academic accommodation. Questions regarding academic accommodations and disability discrimination, including how to file a complaint or a formal grievance with regards to academic accommodations should be directed to the college 504 Officer, Allison Douglas-Chicoye, Dean of Student Development, 619-388-7270, Room K1-303.

Students may file a complaint with the Chancellor of the California Community Colleges within thirty calendar days of the event or following the completion of the college Accommodation Grievance process.

Students may file a complaint with the Federal Office of Civil Rights in San Francisco, California, if he or she believes that the college or one of its representatives is violating his or her rights, by accessing the U.S. Department of Education website.

Exclusion from Classes

A student may be excluded from class or the college whenever the student:

1. Exhibits behavior which interferes with the educational process. An instructor may remove a student from two class sessions for disruptive behavior. (Refer to BP 5500: Student Rights, Responsibilities, Campus Safety and Administrative Due Process). You may view a full copy of the policy by accessing the following website; or
2. Is found to have a communicable disease which requires isolation pursuant to a directive from the County Department of Public Health.

Minor Children on Campus

Minor children who are not enrolled are not permitted in any classroom at any time.

Minor children who are not enrolled are not to be left unattended at any time while on the campus.

Consumer Information

The Student Consumer Information Regulations of the United States Department of Education require all colleges and universities to provide their students access to certain information to which they are entitled to as consumers. Under these regulations, San Diego City, Mesa, and Miramar College and Continuing Education annually distributes to all students a notice of the availability of consumer information. Please visit our webpage to review the information outlined for consumer disclosure by the Higher Education Opportunity Act (HEOA).

This information is available in a hard-copy form upon request.

Student Right to Know

In compliance with the federal Student-Right-to-Know and Campus Security Act of 1990, it is the policy of the college district to make available completion and transfer rates for all certificate, degree and transfer seeking first-time, full-time students who began in Fall 2017, a three year tracking period.

The completion and transfer rates are listed below:

	Completion Rates	Transfer-Out Rates
City	22.72%	10.15%
Mesa	28.71%	14.36%
Miramar	41.78%	14.02%

These rates do not represent the success rates of the entire student population at the college. Our statewide completion indicators for student success include a six-year tracking period for all first-time students. Current information can be found, by accessing the California Community Colleges website.

Athlete Graduation Rate for Fall 2018 Cohort

	Initial Cohort	Completion Rate	Transfer Rate
City College/ ECC	27	11%	15%
Mesa College	19	16%	11%
Miramar College	17	18%	12%

Source: SDCCD Information System and National Student Clearinghouse

The cohort includes first-time athletes who are enrolled full-time. Athletes are identified in a fall term based on enrollment in intercollegiate athletic courses. Student athletes are tracked for three years to measure their outcomes. Two measures are provided. The first measure, completion rate, is the total number of students who earn a degree, certificate, or reach transfer prepared status (60 transferable units with a GPA greater than or equal to 2.0). The second measure is transfer rate, which includes all non-completers who transferred to a four-year institution. These definitions match the methodology used for the Student Right-To-Know (SRTK) graduation rates, which are also consistent with how the NCAA reports Athlete graduation rates.

Nondiscrimination Policy

(Board of Trustees Policy – BP 3410)

San Diego Community College District Board of Trustees Policy BP 3410 prohibits discrimination in accordance with state and federal laws. The San Diego Community College District is committed to equal opportunity in educational programs, employment, and all access to institutional programs and activities.

The District, and each individual who represents the District, shall provide access to its services, classes, and programs without regard to national origin, religion, age, gender, gender identity, gender expression, race or ethnicity, color, medical condition, genetic information, ancestry, sexual orientation, marital status, physical or mental disability, pregnancy, military or veteran status, or because he/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. No qualified student with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs or activities of the district or be subjected to discrimination by it. Lack of English speaking skills and/or visual/hearing impairment will not be a barrier to admission or participation in Career Technical Education programs.

Students wishing to file complaints based upon discrimination should contact the campus Site Compliance Officer (SCO), Francois Bereaud at 619-388-7503, Room M-211I. Appeals may be made to the District EEO Compliance Manager at the District Administrative Office, 3375 Camino del Rio South, San Diego, CA 92108.

Students with disabilities who want to file a grievance under Section 504 of the 1973 Federal Rehabilitation Act should contact the campus 504 Officer, Adrian Gonzales, Vice President of Student Services at 619-388-7810, Room N-203, Disability Support Programs and Services in Room K1-204, or call 619-388-7312. Students who want to file a disability discrimination grievance under the Americans with Disabilities Act (ADA) should contact the campus Site Compliance Officer (SCO) Francois Bereaud at 619-388-7503, Room M-211I.

You may view a full copy of the policy by accessing the following website.

Free Speech

Free speech areas have been designated on the college campuses to maximize the opportunity for free discussion and expression, while minimizing the potential for disruption of classroom and college activities.

Information concerning free speech areas is available in the office of the Vice President of Student Services, or the Dean of Student Affairs office on campus.

Gender Equity

The Gender Equity Coordinator facilitates the development or updating of the campus Gender Equity Plans in cooperation with committees that are responsible for equity concerns. The Title IX Coordinator can be reached at 619-388-6660.

Title IX. Prohibiting Gender Discrimination and Sexual Harassment

San Diego City, Mesa, and Miramar College are committed to support all regulations under Title IX. Title IX states: "No person in the United States shall, on the basis of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance." – 20 USC 1681

San Diego City, Mesa, and Miramar Colleges do not discriminate on the basis of sex, gender, or sexual orientation in its education programs or activities. Title IX of the Education Amendments of 1972, and certain other federal and state laws, prohibit discrimination on the basis of gender, gender identity, or sexual orientation in employment, as well as all education programs and activities, and protect all people regardless of their gender or gender identity from sex discrimination, which includes sexual harassment and sexual violence. These procedures are used when a complaint concerns discrimination on the basis of gender, including sexual harassment.

The sexual harassment of students, including sexual coercion, sexual assault, domestic violence, dating violence and stalking, is a form of sex discrimination and interferes with students' right to receive an education free from discrimination and harassment.

Sexual assault, as that term is used in this section, encompasses several physical sexual acts perpetrated against a person's will or where a person is incapable of giving consent. A person may be unable to give consent due to their use of drugs or alcohol or because of an intellectual or other disability.

A number of different conduct falls into the category of sexual assault, including rape, sodomy, fondling, and sexual assault with an object. All such acts of sexual assault are forms of sexual harassment covered under Title IX.

Further information and procedures for filing a formal complaint of discrimination on the basis of sex, gender, or sexual harassment are found online.

Title IX Officer

College	Name/Title	Location	Email/Phone
District Office	Amber Eckert Title IX Coordinator	San Diego Community College District 3375 Camino Del Rio South, San Diego, CA 92108	titleix@sdccd.edu 619-388-6660
District Office	Poppy Fitch Deputy Title IX Coordinator	San Diego Community College District 3375 Camino Del Rio South, San Diego, CA 92108	pfitch001@sdccd.edu 619-388-6983
San Diego City College	Marciano Perez Vice President, Student Services	San Diego City College, A-222 1313 Park Blvd., San Diego, CA 92101	mperez@sdccd.edu 619-388-3981
San Diego Mesa College	Victoria Kerby Miller Dean of Student Affairs	San Diego Mesa College, I4-408 7250 Mesa College Dr., San Diego, CA 92111	vmiller@sdccd.edu 619-388-2699
San Diego Miramar College	Cheryl Barnard Dean of Student Affairs	San Diego Miramar College, K1-210 10440 Black Mountain Rd., San Diego, CA 92126	cbarnard@sdccd.edu 619-388-7313
San Diego College of Continuing Education	Michele Madrid Novak Dean of Student Affairs	Educational Cultural Complex (ECC),104 4343 Oceanview Blvd., San Diego, CA 92113	mnovak@sdccd.edu 619-388-4850

Drug Abuse and Alcohol Prevention Program (DAAPP)

The Drug-Free Schools and Communities Act and Drug and Alcohol Abuse Prevention Regulations (Education Department General Administrative Regulations [EDGAR]), specifies that no institution of higher education shall be

eligible to receive funds or any other form of financial assistance under any Federal program, including participation in any federally funded or guaranteed student loan program, unless the institution certifies to the Secretary that the institution has adopted and has implemented a program to prevent the use of illicit drugs and the abuse of alcohol by students and employees. In response, the San Diego Community College District (SDCCD) has adopted and implemented program and policies to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol by students and employees.

The San Diego Community College District (San Diego City College, San Diego Mesa College, San Diego Miramar College and Continuing Education) is committed to providing a drug free environment. The institutions also prohibit the use of tobacco products and electronic delivery devices on campus or at college/district sponsored events. Any type of drug use, including alcohol, is dangerous and potentially life threatening. Drugs and alcohol adversely affect the body, mind and behavior. The effects vary from person to person and from usage to usage. Even low doses of drugs and alcohol can impair judgment and coordination. If you use drugs or alcohol, you risk overdose, accidents, dependence, ill health, as well as legal, financial and personal problems. The federal laws against drugs are divided into two categories: possession and distribution. The penalties are severe depending upon the type of drug, quantity of the drug, and any prior offenses. Possession will earn up to one year in prison and a $5,000 fine. Distribution will earn up to life in prison and an $8 million fine. State laws vary and may be more severe.

For more information, please visit the Drug Abuse and Alcohol Prevention Program (DAAPP).

Smoking Regulation

(Board of Trustees Policy – BP 0505)

MIRAMAR COLLEGE IS A SMOKE AND TOBACCO-FREE CAMPUS

All campuses and facilities of the San Diego Community College District, City College, Mesa College, Miramar College, and Continuing Education operate in compliance with the provisions of Government Code 7597 and San Diego Municipal Code section 43.1003(a) regulating smoking in a public place or place of employment. In accordance with Board Policy (BP 0505) Smoke and Tobacco Free District Property smoking and the use of any tobacco product are prohibited on all properties owned or controlled by the District.

Miramar College is committed to creating a clean, healthy working and learning environment for students, faculty, staff and visitors. All students, employees and visitors on the Miramar College property are subject to BP 0505 regulations, which will be strictly enforced at all times. Student Health Services at Miramar College offers Cessation Program Referrals to educate the college community about the risks of tobacco and the availability of Smoking Control Programs. Visit or call the Student Health Services on campus for additional information at 619-388-7881.

Additional information is available in the Campus Police Office. For complete SDCCD Policy 0505 and Procedure 0505.2 information, please visit the website.

Crime Awareness and Campus Security

Jeanne Clery Act Crime Statistics

The Jeanne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act is the landmark federal law, originally known as the Campus Security Act, which requires colleges and universities across the United States to disclose information about crime on and around their campuses.

The San Diego Community College District Annual Security Report, titled "Safe and Sound, a guide to safety and security in the San Diego Community College District", includes statistics for the previous three years concerning reported crimes that occurred on campus; in certain off-campus buildings or property owned or controlled by the San Diego Community College District; and on public property within, or immediately adjacent to and accessible from, the campus. The report also includes institutional policies concerning campus security, such as policies on drug use, crime prevention, the reporting of crimes, sexual assault and other matters. You can obtain a copy of this

report by contacting any campus admissions office, Vice President of Student Services (I-422) office or college police business office. At any time you may view a full copy by accessing the following website.

Pursuant to State and Federal Law information concerning registered sex offenders enrolled or employed by the college may be obtained through the College Police Office.

Elder and Dependent Adult Abuse

An elder is defined as a resident of the State of California who is 65 years of age or older; or a dependent adult, defined as a resident of the State of California between the ages of 18 and 64 years, who has a physical or mental limitation that restricts his or her ability to carry out normal activities or to protect his/her rights.

Post-secondary educational institutions serving dependent adults are designated as mandated reporters with an individual, personal responsibility to comply with the reporting requirements.

Any mandated reporter, who, in his or her professional capacity, or within the scope of his or her employment, has observed or had knowledge of an incident that reasonably appears to be physical abuse, abandonment, isolation, financial abuse, or neglect, or is told by an elder or dependent adult that he or she has experienced behavior constituting physical abuse, abandonment, isolation, financial abuse, or neglect, or reasonably suspects abuse shall report the known or suspected instance of abuse immediately to Adult Protective Services at 1-800-510-2020.

Copyright Responsibility

Any duplication request of copyrighted materials for use in the college's instructional programs must be accompanied by written permission from the copyright owner. Any duplication of copyrighted materials by student, staff, or faculty is to be for the sole purpose of private scholarly study. Since the liability for infringement of statutory or common-law copyright occurs during misuse of duplicated materials, the duplicated copies cannot be sold or distributed. A designated portion of the duplicated copy cannot be included in another's work without the written permission of the copyright owner. All copyright responsibility is assumed by the individual requesting the duplication. San Diego Miramar College, its agents, representatives, and employees are held harmless against all claims, suits, damage costs, and expenses of charges of statutory or common-law infringement resulting from the college's efforts to provide services, materials, and equipment to the requester.

Student Rights, Responsibilities, Campus Safety and Administrative Due Process

(Board of Trustees Policy – BP 5500)

This policy specifies that students are subject to adhering to the policies and procedures of the San Diego Community College District, as well as all federal, state, and local laws. Students are subject to charges of misconduct concerning acts committed on District-owned or controlled property or the District-sponsored activities as specified in the policy.

You may view a full copy of the policy by accessing the following website.

Student Grievance Procedures

The purpose of this procedure is to provide a prompt and equitable means for resolving student grievances. The procedures enumerated in Student Grievance Procedures Administrative Procedure 5530 shall be available to any student who believes a district decision or action has adversely affected his/her rights as a student as specified in Student Rights and Responsibilities, Board Policy 5500, Section a through j. Note that grades are not grievable under this policy. Refer to the Grade Challenge section of this catalog.

You may view a full copy of the policy by accessing the following website.

Volunteer/Visitor Conduct Expectations

In accordance with Administrative Procedure 3100.4, all visitors and volunteers are expected to adhere to the policies and procedures of the San Diego Community College District, as well as all federal, state and local laws. Visitors and volunteers will be subject to removal from classrooms, service areas, and activities of the campus for any of the following acts (but not limited to) while on campus. Any violation may be subject to permanent removal from campus. Violations of state, federal, or local laws or ordinances, while on district premises, will be addressed by college police in accordance with the California Penal Code.

- Act or threat of damage to or theft of property belonging to or located on District-controlled property or facilities.
- The 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 a District employee's work performance, or of creating an intimidating, hostile, or offensive educational or work environment.
- Physical or verbal disruption that is incompatible with 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 campus when such a disruption occurs inside of any classroom or facility or in such proximity as to appear reasonably likely to interfere with activities inside of the classroom or facility, or the substantial and material disruption of any other regular campus activity which occurs in any other portion of District-controlled property.
- Disorderly, lewd, indecent or obscene conduct or expression or habitual profanity or vulgarity; any expression which is obscene, libelous or slanderous according to current legal standards or which so incites students as to create a clear and present danger of the commission of unlawful acts, or the substantial disruption of the orderly operation of the community college. (Ed. Code 76120)
- Assault or battery upon a student or district personnel on district premises or at any time or place while under the authority of District personnel.
- Possession of weapons, explosives, unlicensed dangerous chemicals or objects which may be used as weapons or to threaten bodily harm, as specified in District Policy, the California Penal Code, or other applicable laws.

Failure to comply with the reasonable directions of staff members of the district who are acting within the scope of their employment. Continued and willful disobedience or open and persistent defiance of the authority of district personnel, provided such authority is related to district activities or college/center attendance.

You may view a full copy of the policy by accessing the following website.

Student Records, Release, Correction and Challenge

(Administrative Procedure AP-5040)

San Diego Community College District strictly adheres to the Family Education Rights and Privacy (FERPA). This procedure specifies limitations on Federal and State law, and ensures that appropriate record maintenance and destruction systems are in place.

Pursuant to the "Family Rights and Privacy Act of 1974" (Public Law 93-380) and the California Education Code, a student may request to inspect all his/her official school records, files, and related data that are classified as Student Records. The records will be available for review at a mutually convenient time during regular working hours. Contact the Vice President, Student Services. If information in the file is inaccurate, misleading, or inappropriate, a student may request removal of the information or include a statement disputing the material that is challenged.

The law provides that no individual, agency or organization shall have access to a student's records without the written consent of the student, except under very specific conditions:

You may view a full copy of the policy by accessing the following website.

Complaint Processes

San Diego City, Mesa, and Miramar Colleges are committed to an educational environment that is free from interference and disruption and that fosters equity and mutual respect.

Students may file a complaint when they believe that a College faculty or staff member has violated the following Board Policies and Administrative Procedures:

1. Student Rights, Responsibilities, Campus Safety and Administrative Due Process: Board Policy 5500
2. Student Grievance: Administrative Procedure 5530
3. Student Disciplinary Procedures: Administrative Procedure 5520
4. Honest Academic Conduct: Administrative Procedure 3100.3
5. Support Services, Programs and Disability Discrimination Procedures for Students with Disabilities: Administrative Procedure 5140
6. Prohibition of Harassment: Board Policy 3430
7. Prohibition of Sexual Harassment under Title IX: Board Policy 3433
8. Nondiscrimination: Board Policy 3410
9. Fraud Policy and Whistleblower Protection: Board Policy 6125
10. Student Records, Release, Correction and Challenge: Administrative Procedure 5040

Board Policies and Administrative Procedures are available to Individuals online.

Most complaints, grievances or disciplinary matters should be resolved at the campus level. Individuals are strongly encouraged to make every attempt to resolve matters through the appropriate administrative processes.

More information on the complaint processes can be found online.

Academic Complaint

An academic complaint may be filed with the department chair or instructional dean when a student feels that a faculty member has violated state law, federal law, or College policies and procedures relative to grading or other academic matters*. Students may directly contact the department chair or instructional dean or submit their complaint online.

*Important note: All grades awarded by the instructor of record shall be final. The California Code of Regulations, Title 5 §55025, states "the determination of the student's grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency."

Academic Accommodation Due to Disability Complaint (Section 504/ADA)

Students who have a complaint regarding access to, or quality of, their academic accommodations may contact the DSPS counselor.

Students may submit a complaint online or contact the campus 504 Officer.

Students with disabilities who want to file a complaint regarding access to or quality of their academic accommodation under Section 504 and/or the American Disabilities Act (ADA) may go through the informal process with the DSPS counselor, if no agreement is reached with the informal process, students may submit a complaint online or contact the campus 504 Officer:

Campus 504 Officer
San Diego City College (District Office Rm 275)

Campus 504 Officer
Poppy Fitch pfitch001@sdccd.edu (619) 388-6983
San Diego Mesa College (I4-408)
Claudia Perkins cperkins@sdccd.edu (619) 388-2699
San Diego Miramar College (Room K1-303)
Allison Douglas-Chicoye adouglaschicoye@sdccd.edu (619) 388-7270
San Diego Continuing Education (Room 104, Educational Cultural Complex (ECC))
Michele Madrid-Novak mnovak@sdccd.edu (619) 388-1257

General Complaint

A general student complaint may be filed by a student who feels an action of a College staff member, office, or group violates existing College rules, policy, or procedures or other local, state, and federal laws. A complaint of gender discrimination or sexual assault or harassment is not included in this category; please see Title IX complaint below.

The complaint procedures are formalized procedures to ensure timely resolution at the lowest possible level. The first step is the informal resolution stage, which involves the student who has a complaint and the faculty/staff member or specific group with whom the student has a complaint. The student must notify the faculty/staff person or representative of a group that he or she wishes to make an appointment for an informal meeting to review an action. In the absence of the instructor or staff person and after a good faith effort to make contact, the student may directly contact the instructional dean or appropriate administrator or submit their complaint online.

Unlawful Harassment or Discrimination Complaint not Based on Sex or Gender

San Diego City, Mesa and Miramar Colleges are committed to providing an academic environment free of unlawful harassment and unlawful discrimination. Board Policy 5500 defines verbal, physical, visual or written, environmental and harassment and other forms of harassment on campus, and sets forth a procedure for the investigation and resolution of complaints of harassment by or against any staff, or faculty member, or student within the District.

You may view a full copy of the policy by accessing the following website.

These procedures are used when a complaint concerns matters of discrimination or failure to comply with College policy or procedures or federal and/or state regulations including the Civil Rights Act; Executive Orders 11246 and 11375; the Vietnam Era Veterans Readjustment Act of 1974; the Age Discrimination and Employment Act of 1967; Section 504 of the 1973 Federal Rehabilitation Act and Americans with Disabilities Act (ADA); and the nondiscrimination laws of the State of California.

Students who wish to file a complaint may do so online or contact your college Site Compliance Officer (SCO):

Campus Site Compliance Officer
San Diego City College (District Office Rm 275)
Poppy Fitch pfitch001@sdccd.edu (619) 388-6983
San Diego Mesa College (I4-408)
Claudia Perkins cperkins@sdccd.edu (619) 388-2699
San Diego Miramar College (Room M-211E)
Francois Bereaud fbereaud@sdccd.edu (619) 388-7503
San Diego Continuing Education (Room 115F, North City Campus)
Lynda Reeves lreeves@sdccd.edu (619) 388-1827

Students wishing to pursue a civil rights complaint beyond the college/district level should direct their inquiries to the Office of Civil Rights, United States Department of Education, 50 Beale Street, Suite 7200, San Francisco, CA 94105-1813.

Other Complaint Process

If your complaint is associated with the institution's compliance with academic program quality and accrediting standards, you may contact the Accrediting Commission for Community and Junior Colleges (ACCJC). ACCJC is the agency that accredits the academic programs of the California Community Colleges.

If your complaint does not concern the California Community College's compliance with academic program quality and accrediting standards, you may contact the California Community College Chancellor's Office by completing the web form.

Services for Students

The college maintains a comprehensive program to assist students in achieving their goals. The services provided are detailed on the following pages.

Student Services faculty and staff have identified Student Learning Outcomes for the various services available within the Student Services Division and may be found on the following website.

Office	Room	Telephone
Accounting	K1-205	619-388-7326
Admissions		
(General Inquiries, Applications/Enrollment)	K1-207	619-388-7844
Adds/Drops/Student Petitions	K1-207	619-388-7844
Help Line		619-388-7300
Enrollment Verifications	K1-207	619-388-7844
mySDCCD		
Residency	K1-207	619-388-7844
Special Programs	K1-207	619-388-7848
Student Records	K1-207	619-388-7844
Assessment	K2-108	619-388-7379
Associated Students	K1-208	619-388-7877
Basic Needs	K1-211	619-388-7154
Bookstore	K1-105	619-388-7866
CalWORKS	K1-305	619-388-7378
Career Services	K1-308	619-388-7335
Child Development	F-200	619-388-7851
College Police	T-100	619-388-7353
Counseling Department	K1-203	619-388-7840
Disability Support Services	K1-204 tty#	619-388-7312 619-388-7301

Office	Room	Telephone
Dreamer Support Services	K1-304	619-388-7869
Enrollment Services	K2-101	619-388-7505
EOPS	K1-305	619-388-7869
Evaluations	K1-207	619-388-7371
Financial Aid	K1-312	619-388-7864
Health Services	K2-102	619-388-7881
High Tech Center	LLRC	619-388-7303
Independent Learning Center	LLRC	619-388-7365
International Student Information	K1-207	619-388-7844
Library	L-200	619-388-7310
Mental Health Counseling	K2-102	619-388-7881
Next Up	K1-305	619-388-7869
Outreach	K2-101	619-388-7357
Rising Scholars	K1-304	619-388-7222
Records Office	K1-207	619-388-7844
Student Affairs	K1-210	619-388-7313
Student Development	K1-303	619-388-7270
Transfer Center	K1-306	619-388-7380
Tutoring – Academic	LLRC	619-388-7852
Veterans Affairs	K1-207	619-388-7862
V. P., Student Services	N-203	619-388-7810

Basic Needs

Location: K1-211, Telephone 619-388-7154

Basic needs are the essential resources that are necessary for our students' survival and success. Our mission of the Jet Fuel Resource Center is to ensure that every student has access to equitable basic needs, such as healthy food, stable housing, and financial wellness, so that they are better able to persist at Miramar College and meet their educational goals. We are committed to providing an educational environment that fosters compassion and respect, welcomes diversity and supports students in various circumstances, including students experiencing basic needs insecurities. The Basic Needs Coordinator can provide access to shower facilities on-campus during designated times, referrals to outside agencies that can assist with housing insecurity and homelessness, and other resources to assist you in pursuing your educational goals. Stop by the Jet Fuel Resource Center in K1-211.

CalWORKs Training, Education and Service Program

Location: K1-305, Telephone: 619-388-7378, CalWorks webpage

California Work Opportunity and Responsibility to Kids (CalWORKs) program is the State's implementation of the Federal Temporary Assistance to Needy Families (TANF) program. The program serves all 58 counties in the state and is operated locally by the Health and Human Services Agency. CalWORKs has provided cash assistance and Welfare-to-work services to families whose income is inadequate to meet their basic needs since 1998.

When attending college to meet a Welfare-to-work requirement, the San Diego Miramar College CalWORKs program offers supportive student services to CalWORKs recipients and coordinates benefits provided by the San Diego County Welfare-to-Work agencies. When enrolled in classes that lead to an employable degree or certificate program, these agencies will pay for textbooks, childcare, and transportation.

In addition to the benefits provided by the Welfare-to-Work agencies, students receive additional services from the San Diego Miramar College CalWORKs program including: priority registration, academic and career advising, Work Study opportunities, school supplies, a learning community, and a student-parent support group.

For additional information, contact the Miramar College CalWORKs Program Office in K1-305 by calling 619-388-7378 or 858-536-7378 or email MiramarCalworks@sdccd.edu.

Campus Bookstore

Location: K1-105, Telephone 619-388-7866

San Diego Miramar College Bookstore stocks textbooks and supplies required for classes. The Bookstore provides study aids, snacks, school supplies, clothing, backpacks, gift items, greeting cards, emblematic items and general books. The bookstore also buys back textbooks for cash.

Extended hours are offered at the beginning of each semester. Textbooks can also be purchased San Diego Miramar College Bookstore. For additional information or special Bookstore hours, please contact the bookstore or visit San Diego Miramar College Bookstore.

Campus Life

Office of Student Affairs
Location: K1-210, Telephone: 619-388-7313

ASG Office
Location: K1-208, Telephone: 619-388-7313

Student Activities

The student activities program is designed to be an integral part of the total college experience. It provides an avenue for student involvement and offers an opportunity for students to develop and contribute to the College and the community, as well as, to develop leadership experiences and connect with other students.

Office of Student Affairs

The Office of Student Affairs can provide guidance in certifying a club or organization and information on leadership development. It serves as a focal point for service and leadership resources and Basic Needs. For more information contact the Office of Student Affairs at 619-388-7313 or 858-536-4313.

Associated Student Government

The principles of active student government are well established at San Diego Miramar College. The Associated Student Government (ASG) is the college recognized student government organization established for the purpose of promoting and representing the best interests of the students at the College. Through involvement in the ASG, the opportunity exists for involvement in student government, development of leadership skills, and the planning and development of special programs and services. Student representatives on the ASG reflect the diverse constituencies of the student body and have the opportunity to serve on College and District committees which recommend policies and procedures in matters of student services, instruction, and fiscal planning.

Officers of the Associated Student Government are elected at large by the general student body. However, student government is not a closed governing body; ASG meetings are open to ALL interested students.

Current district policy allows the elected Associated Student President to share the responsibility of the Student Trustee. The Student Trustee is a non-voting member of the Board of Trustees of the San Diego Community College District and represents the student voice on the Board.

Any student who participates in student government may not have any Board Policy 5500 violations of suspension or greater, as stated on their official student record.

You may view a full copy of the policy by accessing Board Policies & Administrative Procedures.

For more information contact Student Affairs at 619-388-7313 and visit K1-208, the ASG Office.

Associated Student Government

Membership Support your AS by purchasing an AS membership. The revenues go to support various campus events and activities. Among the benefits:

- AS Scholarship opportunities
- An ASG Goody Bag
- Advocacy at the local and state level

Student Clubs and Organizations

Miramar College supports the idea that student clubs and organizations can enrich student campus life. It is a great way to meet others who are interested in similar types of co-curricular activities. You can join any of the many student clubs or start a new one to meet your needs. The following is a partial list of clubs and organizations that have been active at Miramar College:

- Business Club
- Chemistry Affiliate
- Club SPECTRUM
- Miramar Girls Who Code
- Political Science Association
- Student Veterans Organization

Phi Theta Kappa (ΦθΚ)

International Honor Society Beta Iota Lambda is the Miramar College chapter of Phi Theta Kappa International Honor Society. It is established for the purpose of recognizing outstanding scholarship and promoting campus activities, community service and academic ethics among two-year college students.

Membership requirements

Interested students must have completed 12 semester units and have a cumulative grade point average of 3.25 or better. Faculty Advisor: Dr. Carmen Carrasquillo Jay, Room H-110J.

Athletics

The exercise science facilities at Miramar College are available to students for informal activities. Full-time Miramar students may also participate on District athletic teams offered throughout San Diego Community College District. Contact the Office of the Vice President of Instruction, if you're interested in learning more about the district teams. Eligibility will be governed by District policy at the time of enrollment.

Exercise Science Classes/ Intercollegiate Sports Disclaimer

Participation in all sports and exercise science activities involves certain inherent risks. Risks may include, but are not limited to, neck and spinal injuries that may result in paralysis or brain injury, injury to bones, joints, ligaments, muscles, tendons and other aspects of the muscular skeleton system; and serious injury, or impairment, to other aspects of the body and general health, including death. The San Diego Community College District, its officers, agents and employees are not responsible for the inherent risks associated with participation in exercise science classes/intercollegiate sports.

Students are strongly advised to consult a physician prior to participating in any exercise science activity.

Career & Life Design Services

Location: L-104, Telephone: 619-388-7335

The Career & Life Design Services assists students and alumni in developing career and college major goals. Comprehensive career resources and counseling services offered at the Career & Life Design Services include: career/major assessments and exploration, job and internship search, resume and cover letter review, and interview preparation. Additional resources through Career & Life Design include individual work-based learning opportunities and personalized job placement services connecting students directly to local employers.

Contact the Career & Life Design Services for more information at 619-388-7335.

Child Development Center

Location: F-200, Telephone: 619-388-7851

The Child Development Center is the college Instructional Laboratory School providing students with the opportunity to observe and study growth and development patterns in young children. The Center offers an educational program for children eighteen months old to five years of age. It provides a rich variety of early educational activities which encourage a sense of self-worth and creative expression.

Enrollment in this center is limited to the children of parents attending classes at Miramar College or any college within the San Diego Community College District. The Center provides state-funded child-care services demonstrating high quality interactions, a developmentally appropriate curriculum, and nurturing environments to meet the needs of the whole child. A new feature to our program is an outdoor classroom environment where children have at least 2 hours of uninterrupted play outdoors. Due to limited space, priority is given based on eligibility as defined by the Child Development Division, California State Department of Education.

Parents may be required to enroll in a child development lab course each semester their child attends the Center. Specific information will be provided by the Child Development Center faculty.

The Center is accredited by NAEYC (National Association for the Education of Young Children) and is also licensed by the State of California.

The Center is located in F-200. For additional information call 858-536-7851 or 619-388-7851.

Counseling Services

Location: K1-203, Telephone: 619-388-7840, Counseling webpage

It is the mission of the San Diego Miramar College Counseling Department to provide extensive counseling, instructional and student success programs that meet our students' needs. The department assists and supports all students from connection through completion, focusing on student success in an environment that supports and promotes diversity, equity, respect and inclusion.

Academic, career, and personal counseling are provided in the Counseling Department in K1-203. Services include academic skills assessment and development of a Student Educational Plan (SEP), which outlines what courses are needed for graduation and provides a checklist for requirements completed and remaining. Students should have official transcripts from other colleges attended on file and evaluated before seeking to obtain an official SEP. Students are advised to review the catalog and schedule of classes for program and general information prior to meeting with a counselor. The Counseling Department offers college success and career planning courses through Personal Growth courses listed in the schedule of classes.

For more information, please stop by K1-203 or call 619-388-7840 or 858-536-7840 or visit our website.

Dreamers Support Services for Undocumented and Immigrant Students

Location: K1-304, Telephone: 619-388-7869, Dreamers Support Services webpage

The Dreamers Support Services Office provides programs and services to help empower undocumented and immigrant students to achieve their academic and personal pursuits and become active members of our community. We serve as a resource for individuals without legal immigration status, with pending immigration status, and with legal status from immigrant families and/or mixed-status households on topics like access to higher education, advocacy and educational materials, campus-based and community services, current events, engagement activities, legal aid referrals, legislative updates, and more.

You are a Dreamer Student if you...

- Are undocumented e.g., out-of-status, with pending status, or never had any lawful immigration status, or
- Are a Legal Permanent Resident (LPR; you have a Green Card), or
- Have been granted Refugee or Asylee status, or
- Have Special Immigrant Juvenile (SIJ) classification, or
- Have DACA, TPS, or VAWA protection, or
- Hold a T Visa, U Visa, or any other expired visa, or
- Are a bi-national resident (regularly moves between the U.S. and Mexico for school, work, or to care for a family member), or
- Are a U.S. citizen but NOT a CA resident (AB 540 student), or
- Any of the above applies to you, including being a U.S. citizen, and one or more person you live with or who is in your immediate family has a different immigration status from you (mixed-status household).

The Dreamers Support Office is located on the third floor of the K1 Student Services Building in K-304.

To learn more call 619-388-7970, email miradreamers@sdccd.edu, or visit our website.

Disability Support Programs and Services (DSPS)

Location: K1-204, Telephone: 619-388-7312, DSPS webpage

Miramar College provides academic accommodations and services for students with disabilities in compliance with State and Federal legislation including Section 504 and 508 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act Amendments Act (ADAAA).

Eligible students who have a verified disability qualify for academic accommodations and services through the Disability Support Programs and Services (DSPS) department. Student participation in the DSPS program is voluntary. Academic accommodations and services are designed to support students enrolled in on-campus, online, and clinical setting courses in the achievement of their academic and vocational goals.

Educational Assistance classes for students with disabilities may be available to support the college academic and vocational programs through DSPS and the High Tech Center. Academic accommodations provided may include, but are not limited to: priority enrollment, assistive technology and alternate media, interpreters and captioning for students who are deaf or hard of hearing, note taking materials, test taking accommodations, audio recorders, use of specialized equipment and adaptive devices, and disability related counseling and referral.

Liaison with community agencies is also an important component of the program. The campus is physically accessible. Students are encouraged to apply early for timely services.

Anyone interested in applying for services or obtaining further information may contact the Disability Support Programs and Services Department in K1-204 by calling 619-388-7312, or email miradsps@sdccd.edu. For more information, visit the DSPS webpage.

Service Animals

The San Diego Community College District will permit qualified students with disabilities to use service animals in district facilities and on district campuses (Administrative Procedure 3440) in compliance with state and federal law.

Animals are not permitted on campus with the exception of service animals for persons with disabilities. Refer to Administrative Procedure (AP 3400) *Service Animals*.

English Language Acquisition (ELAC)

The English Language Acquisition (ELAC) program is committed to supporting non-native speakers of English in developing their academic English language skills to enable them to succeed in college courses. We offer a range of courses designed to engage students from low-intermediate to advanced levels of English. Core courses consist of integrated academic reading, writing, and grammar as well as academic listening and speaking. Specialized courses in areas such as pronunciation and focused grammar are also offered to support the individual needs of each student.

The ELAC program consists of four levels. Students are placed at a level based on an assessment test.

For more information on the English Language Acquisition Program, students should contact the college Counseling Office.

Extended Opportunity Programs and Services (EOPS)

Location: K1-305, Telephone: 619-388-7869

What is EOPS?

EOPS is a state-funded program. The purpose of the program is to increase the access, academic achievement, retention and overall personal success for economically and educationally disadvantaged students by providing a supportive, student-centered environment. Our program is committed to enhancing the students' educational experience by empowering them to define and pursue their academic, career, and personal goals. The services

offered are "over and above" those offered by the college's Student Services division. The primary services include assistance in the following areas: priority enrollment, counseling, and preparation for transition to four-year universities or the workplace. Services may also include book grants and other financial assistance, depending on the funding. For detailed information on all services offered and application procedures, please visit our **website** or contact the EOPS office in K1-305.

Cooperative Agencies Resources for Education (CARE)

EOPS students who are single head of household and receiving CalWORKs for themselves and/ or their children are encouraged to apply for the program's Cooperative Agencies Resources for Education (CARE) program. CARE provides additional counseling support services including specialized workshops, meal cards, gas cards, emergency bus passes, and supplies to address those needs that are unique to single parents.

NextUp

NextUp is a supplemental component of EOPS. It provides resources and services to students who have experienced foster care. Services may include counseling, books and supplies, grants, childcare and transportation assistance, financial literacy and independent living skills support, and housing assistance. NextUp is a supplemental component of EOPS. It provides resources and services to students who have experienced foster care. Services may include counseling, books, supplies, grants, transportation assistance, financial literacy, independent living skills support, and housing assistance. Students must be under the age of 26, and in foster care on or after their 13th birthday.

Eligibility

Students may be eligible to receive EOPS services if they meet all of the following criteria:

1. Must be a California resident or AB540
2. Must be enrolled in 12 units or more
3. Must be eligible to receive the California College Promise Grant A or B at Miramar College
4. Have less than 70 degree applicable units

Additionally, students must meet one of the following criteria:

- Currently or previously enrolled in a developmental level course
- No high school Diploma/GED or are a high school graduate with overall GPA below 2.5
- Are the first one in their family to attend college
- Are an emancipated foster youth
- English is/was not the primary Language spoken at home
- Belong to a group that is part of Miramar College's student equity goals

How to Apply

Students interested in applying for the EOPS program must complete an EOPS application and the Free Application for Federal Student Aid (FAFSA) or the California College Promise Grant. Students may apply online through the EOPS **website,** by calling (619) 388-7869 or by visiting the EOPS Office located in K1-305. Students should apply early to ensure that they receive consideration for all services. It is recommended that students complete the FAFSA by the priority filing date published by the Financial Aid Office.

Evaluations

Location: K1-207, Telephone: 619-388-7371

The Miramar College Evaluations office provides services, including information and technical support, to help students achieve their certificate, degree, and transfer goals. Working closely with students, Miramar Evaluations supports in processing the following requests:

- Academic Renewal with Course Repetition
- Academic Renewal without Course Repetition

- Application for Graduation
- Certificate of Performance
- Credit for Prior Learning
- Modification of Graduation Requirements
- Petition for Exception to Course Repetition Policy
- Petition for Approval of Major-Area Electives
- Request for General Education Certifications
- Request to Reissue Diploma

We have transitioned to a new online submission process. Forms can be submitted electronically, by accessing the website.

Financial Aid

The Financial Aid Office is committed to assisting students who might otherwise be unable to continue their education because of financial disadvantage.

Financial aid funds are administered in accordance with a nationally established policy of financial assistance for education. The basis of this policy is the belief that students and their parents have the primary responsibility for meeting educational costs. The amount of the contribution expected from students and their family is determined by careful analysis of family financial strength, taking into consideration taxable and non-taxable income, household size, allowable expenses, indebtedness, and assets. The U.S. Department of Education, in cooperation with Congress educational agencies, has established procedures which are used in making an evaluation of the amount families can be expected to contribute.

Eligibility

In order to be eligible to apply for financial aid, a student must be a citizen or permanent resident of the United States or be in the country for other than a temporary purpose with the intention of becoming a permanent resident.

Eligible non-citizens may be required to provide proof of permanent residency for Federal Aid. F-1, M5, R1, or R2 Visa students are not eligible for financial aid at San Diego Miramar College. For further information regarding other eligible immigration statuses, contact the Financial Aid Office.

Students must have a high school diploma, GED or equivalent in order to apply and qualify for Financial Aid. Contact the Financial Aid office for additional information.

Awards

Awards take the form of a "package" of financial aid, usually consisting of grant money and work-study, depending on the financial need of the applicant and the availability of funds. Awards may be adjusted at any time upon notice of receipt of resources not previously reported. Revisions to awards are always possible because personal financial circumstances can be very unpredictable. If funding is available, aid for valid educational expenses not already covered in the student's budget may be offered.

Financial aid checks are usually ready for disbursement approximately four or five weeks after the start of classes. Pell Grant and Cal Grant disbursements are based on enrollment levels at the time of payment and will not be adjusted. However, SEOG and loan payments will be adjusted according to enrollment status. If you withdraw from classes after aid has been disbursed to you, you may be required to repay all or part of this aid (see "Return of Title IV Funds").

An automated system is available in the college bookstores to allow California Resident students, who are enrolled in at least six units, to use a portion of their estimated Pell Grant to purchase books and supplies one week prior, and two weeks after the start of the semester. Funds will be set aside from each eligible student's Pell Grant or Cal Grant C, and placed in a special account in the bookstore. This account may be used for the purchase of books and supplies until the funds are exhausted or by the end of the bookstore window, whichever comes first. The

account is valid at the City, Mesa, and Miramar College, and ECC bookstores, regardless of where students are taking classes.

The student will be responsible for paying back the Bookstore the Pell Grant used if the student does not attend classes or, if the student loses eligibility at any time after being offered the award.

Students who elect not to purchase books from the college bookstore, or have any funds remaining on account, will receive the funds in the mail or by direct deposit with the remainder of their Pell Grant award according to the Pell Grant payment schedule for the semester.

Students must be making satisfactory academic progress as determined by the Standards of Satisfactory Academic Progress for Financial Aid recipients. Copies are available in the Financial Aid Office.

Return of Title IV Funds

Federal law requires that if a student receives a Federal grant and then drops/withdraws from all of his/her classes, he/she may owe money back to the Federal Government.

Note that the earlier a student drops/withdraws, the more money he/she may have to pay back.

- If a student receives LOAN money and withdraws, he/she must pay back the money according to the normal rules of the loan program.
- If a student receives WORK STUDY money and withdraws, he/she does not owe anything back and may keep the salary earned; but must stop working immediately.

For more information about the timeframe to repay, the consequences of not paying and a sample Return of Funds calculation, visit our financial aid webpage.

Financial Aid Programs Available

The following is a basic description of the programs available. Contact the Financial Aid Office for detailed descriptions and eligibility requirements.

Enrollment Fee Assistance: California College Promise Grant – CCPG

State law requires that students attending the college pay an enrollment fee. Students enrolled in credit classes are currently required to pay $46.00 per unit.

The college offers the California College Promise Grant (CCPG), a state-funded program which will waive the enrollment fee for all eligible applicants.

Important Note: Students who are eligible for a California College Promise Grant (CCPG) will be required to pay the health fee.

The health fee will no longer be waived for students who are eligible for a CCPG other than students who are eligible for a CCPGA (TANF/CalWorks, SSI/SSP, or General Assistance).

Students may apply for the CCPG one of two ways:

- Submit a FAFSA or a California Dream Act Application, or
- Apply for the CCPG online; please visit the financial aid website for more information. Apply via the CCPG website.

If you are a California resident or have been designated an AB-540 student, you may qualify for a CCPG if any one of the following statements applies to your current status:

- You have already qualified for financial aid, such as a Federal Pell Grant or a Cal Grant, which demonstrates that you have need as determined by Federal Methodology or California DREAM Act application. You must have at least $1,104 on "unmet" need to qualify.

- You, or your parents in the case of a dependent student, are receiving TANF (Temporary Aid for Needy Families), SSI (Supplemental Security Income), or General Assistance/General Relief as main source of income at the time of enrollment.
- You have a letter from the Department of Veterans Affairs certifying that you meet the eligibility requirements of "certain disabled veterans, dependents of certain deceased or disabled veterans."
- You are a dependent of a deceased or disabled veteran of the California National Guard. You must submit a letter of certification from the California National Guard Adjutant General's Office.
- You are a recipient of the Congressional Medal of Honor or a child of a recipient. You must submit documentation from the Department of Veterans Affairs.
- You are a dependent of a victim of the September 11, 2001, terrorist attack. Must submit documentation from the CA Victim Compensation and Government Claims Board.
- You are dependent of a deceased law enforcement/fire suppression personnel killed in the line of duty. You must submit documentation from the public agency employer of record.
- You have been exonerated of a crime by writ of habeas corpus or pardon. You must submit documentation from the Department of Corrections and Rehabilitation.
- You meet the following income standards:

Number In Household (including yourself)	**Total Family Income for 2022** (adjusted gross income and/or untaxed income)
1	$22,590.00 or less
2	$30,660.00 or less
3	$38,37000 or less
4	$46,800.00 or less
5	$54,870.00 or less
6	$62,940.00 or less
7	$71,010.00 or less
8	$79,080.00 or less
Each Additional Family Member $8,070	

To determine your eligibility for the California College Promise Grant – CCPG based on the above income standards, you will be considered independent if:

- You do not live with your parents or your parent's registered domestic partner.
- You were not claimed as an exemption on any federal income tax filed by your parents or your parent's registered domestic partner in 2023.

New State regulations have changed eligibility requirements for the California College Promise Grant. Starting Fall 2016, in addition to income and residency requirements, students must maintain academic and progress standards to maintain California College Promise Grant (CCPG) eligibility.

These income standards are for the 2025–2026 academic year and are used to determine California Promise Grant Part B eligibility.

Appeal Process for Loss of CCPG

Students will maintain their CCPG eligibility as long as they are in good academic standing. Students who believe their recent academic performance is based on circumstances outside their control, or believe they have made substantial academic improvement, may appeal the loss of CCPG eligibility by submitting a Loss of CCPG /Enrollment Priority Petition to the Dean of Student Development five (5) business days prior to the Application and Registration Deadline posted on the Academic Calendar. Petitions will be reviewed in the order they are received by the Dean of Student Matriculation.

Federal Pell Grant

The Federal Pell Grant is the largest federal grant program and is the foundation of a student's total "aid package." Eligibility is determined by the federal government using a standard formula for all applicants.

Effective July 1st, 2012, all financial aid applicants are subject to 6 years maximum of Pell Grant lifetime eligibility or 600%.

Enrollment status will be frozen at the time of disbursement after the add/drop period and will be the basis for Pell award. Once the Pell Grant award has been processed it will not be adjusted for additional units added during the semester. If you have a bachelor's degree, you are not eligible for a Pell Grant.

Federal Supplemental Educational Opportunity Grant (FSEOG)

FSEOG is a federal grant program designed to assist students who have the greatest demonstrated financial need. Awarding of FSEOG funds is determined by the Financial Aid Office based on available resources. If you have a bachelor's degree, you are not eligible for FSEOG.

Cal Grants

The Cal Grant program is administered by the California Student Aid Commission to help low-income students attend college. Students at the college may receive Cal Grant A (SWD), B, or C.

- To be eligible for Cal Grant B a student must be a California resident, or an eligible AB540 designated student and pursuing an undergraduate academic program of not less than one academic year.
- Cal Grant C is designed for students enrolled in a vocational program who are California residents or eligible AB-540 designated students from a low- or middle-income family.
- Additional Cal Grant Access Funds for Students With Dependents (SWD), Independent Students with dependent children under 18 years of age by July 1st of the award year (start of the financial aid award year), and for whom the student will provide more than half of their support between July 1st and June 30th of the award year may be eligible for the following: Cal Grant Access awards up to $6,000 for qualifying Cal Grant A and B recipients and up to $4,000 for eligible Cal Grant C recipients. Actual award will be based on remaining unmet need.
- See the Financial Aid Bulletin for important dates and deadlines.
- Cal Grant Program is not available for students accepted into the Comprehensive Transitional Program (CTP).
- If you have a bachelor's degree, you are not eligible for a Cal Grant.

Chafee Grant Program

The Chafee Grant is a federal program that is administered by the California Student Aid Commission to provide financial assistance to prior Foster Youth. The applicant must be certified by the State Department of Social Services of their Foster Youth status prior to reaching age 16. The grant has no citizenship requirement; however, non-citizens without a valid Social Security Number must call the CSAC for additional steps and information. The program awards a maximum of $5,000 per academic year. Renewal applicants must maintain satisfactory academic progress as defined by the school.

Student Success Completion Grant

Prerequisite: Be a full time Cal Grant recipient – The SSCG is a California Community Colleges financial aid program designated for Cal Grant B and Cal Grant C recipients who are carrying an academic load of at least full time (12 units or more) by the semester financial aid enrollment freeze/census date. The purpose of the SSCG

grant is to provide eligible students with additional financial aid to help offset the total cost of community college attendance, to encourage full-time attendance, and assist in the successful on-time completion of the student's degree objective. Due to limited funding, the awards are made on a first-come-first-served basis. In order to be eligible for this grant, the student must be registered in ALL planned units for the semester by the published census/freeze date. The grant pays up to $4000 annually based on the number of units: if the student's enrollment is between 12 – 14.99 units, the award is $1,298 for the semester; if the student's enrollment is 15 units or more, the award $4,000 for the semester. Eligibility is determined every semester after the financial aid census/freeze date and based on available funds.

Federal Work Study

Federal Work Study (FWS) allows students the opportunity to earn part of their financial aid by working in assigned jobs, both on and off campus. The salary received is at least equal to the current minimum wage, but many Federal Work Study jobs pay more than minimum wage. Federal Work Study differs from the other financial aid programs in that a student is allocated a certain amount of money to earn. As work on the job is completed, a time card is submitted for the hours worked just as at a regular job. Once a month the student receives a paycheck for the hours worked. Once the amount allocated in the financial aid package is earned, the job ends.

Learning-Aligned Employment Program (LEAP) - State Work Study Program

The Learning-Aligned Employment Program (LAEP) offers eligible students at public colleges and universities the opportunity to earn money to help defray their educational costs while gaining education-aligned, career-related employment.

LAEP allows a participating student placement in an educationally beneficial position that relates to the student's area of study, career objective, or the exploration of career objectives. The program includes and emphasizes positions for students with employers that are capable of providing them with full-time employment opportunities after graduation, or opportunities to connect with other employers that are capable of providing them with full-time employment opportunities after graduation, within their areas of study.

Eligible students are from an underrepresented background and meet all the following criteria:

- At least half-time enrollment
- California resident classification
- Satisfactory academic progress in a program leading to a degree or certificate
- Demonstrated financial need
- Eligibility to work in the United States

Priority will be given to eligible students who are first-generation college students, current/former foster youth, homeless, or at risk of being homeless. Further priority will be given to eligible students majoring in a science, technology, engineering, or mathematics (STEM) discipline.

For more information about participating in the LAEP program, please visit our website or contact us at miraaid@sdccd.edu.

Student Loans

Applicants for student loans will be subject to college policy requirements regarding enrollment status, length of attendance, the number of units completed, and the total amount of previous loans.

Student Loans are not available for students accepted into the comprehensive Transitional Program C2C. Student Loans are not available for students accepted into the comprehensive Transitional Program C2C. Student Loans are not auto-awarded to any student.

Contact the Financial Aid Office for other requirements.

William D. Ford Federal Direct Loan Program

The Federal Direct Loan is a federal loan program where you borrow directly from the Federal Government. The interest rate for new loans is a fixed rate which is currently 6.53% for loans disbursed from July 1, 2024 to June 30, 2025. You are required to pay the Department of Education loan processing fees that are currently 1.057%. The

fees are deducted from the proceeds of your loan. The origination fee will change for any loan disbursed after October 1, 2025.

New Federal regulations require schools to disburse loans only after the signed Promissory Note has been accepted.

For first-time student borrowers, the funds will not disburse until at least 30 days after the start of the student's active enrollment in 6 (six) units

1. **Direct Subsidized loan**

To qualify, a student must be enrolled in at least six units, demonstrate Satisfactory Academic Progress for Aid recipients and must demonstrate financial need through the federal methodology using the FAFSA Application. Students must complete a mandatory loan entrance counseling session. Students must contact the Financial Aid Office or visit the College website for application procedures. You may complete the entrance counseling session online.

You must complete an online multi-year Master Promissory Note.

On August 13, 2021, the Secretary removes and amends regulations to conform with changes made by the Consolidated Appropriations Act, 2021. Specifically, the Secretary removes the subsidized usage loan limit restriction (SULA) for any borrower who receives a Federal Direct Stafford Subsidized Loan first disbursed on or after July 1, 2021, regardless of the award year associated with the loan.

The Financial Aid Office will be notified when the session has successfully been completed. In addition, you must fill out a Loan Request Form from your Financial Aid Office. You must complete an online multi-year Master Promissory Note.

You may also be required to submit an Educational Plan and be enrolled at the campus of your declared major. Please ask your Financial Aid Office for more information. The actual loan amount for which you are eligible will be determined by the Financial Aid Office. Checks will be disbursed twice per loan period. If you are a first-time student or borrower, your check will not be disbursed until at least 30 days after the start of the semester. If you have "Late Start" classes, you must be actively attending classes in at least six units, before your loan can be disbursed.

For additional information, please refer to the Financial Aid Bulletin or call the Financial Aid Office at 619-388-7864.

2. **Direct Unsubsidized loan**

An unsubsidized student loan is a type of loan in which interest begins accruing on the disbursement date. The accrued interest is capitalized and added to the loan balance until the repayment process begins, which is also charged during in-school, deferment, and grace periods. A student must be actively enrolled in at least six units, have a valid FAFSA on File, and demonstrate Satisfactory Academic Progress for Aid recipients. The students do not need to demonstrate financial need through the FAFSA's federal methodology, and the loan award cannot exceed the Federal Annual borrowing limit. The actual eligible amount of the loan will be determined by the Financial Aid Office once the application has been reviewed. Students must complete and submit the paper loan application to the Financial Aid office, along with all the required documentation described in the loan steps disclosed in the loan application. In addition, a copy of the Educational Academic plan may be required.

PLUS Loan

Parents of dependent undergraduate students may borrow from the PLUS loan program. The amount borrowed may be up to the cost of attendance minus any financial aid. Parents must begin repayment within 60 days of receiving the full disbursement of the loan. The interest rate is a fixed rate. Student and borrower must meet all other financial aid eligibility requirements, including completing the FAFSA.

Scholarships

Students are encouraged to apply for scholarships, which are available for students who meet the qualifications. These awards are donated by individual contributors, clubs and organizations both on campus and in the community. Amounts are determined by the donors and vary. Students are encouraged to apply for scholarships, which are available for students who meet the following qualifications.

- Merit based Scholarships: Awards based on academic performance and personal achievement.
- Merit & Need Scholarship: Awards based on academic performance and personal achievement, and financial need.
- Institution Scholarships: Awards based on criteria set by a private, non-affiliated organization or individual.

Scholarship applications may be obtained from the Miramar College Financial Aid Office, located in K1-312. Please check our scholarship webpage

If you are interested in information about donation, please visit the Foundation webpage for "Ways to Give."

National Student Clearinghouse

All current SDCCD student's enrollment levels are automatically sent to the National Student Clearinghouse. Submission and disclosure of enrollment levels is a federal requirement for students with current and past student loans according to regulations. Enrollment information for students with no prior or current student loan history is protected from disclosure by the contractual agreement between the National Student Clearinghouse and the San Diego Community College District. For more information, please contact your campus Financial Aid Office.

Library/Learning Resources

Location: L-200, Telephone: 619-388-7310, Library webpage

Audiovisual Department

Located on the first floor of the L Building (L-111), the AV Department primarily serves the instructional media needs of the faculty and staff at Miramar College. Services range from equipment checkout to training sessions on how to utilize the AV equipment in the classrooms, campus event setup, audio & video production. In addition, the AV Department provides students with media viewing stations for course-related media viewing. For department information and hours, please check the website online.

Library

Located on the second floor of the L-Building (L-200), the library serves faculty, students, and staff. The librarians assist students who need information to complete class assignments or wish to improve their research skills. Faculty members can use library resources for classroom instruction and can house instructional material on reserve to support instructors' curriculum. Librarians are also available to conduct library orientations for classes. LIBS 101, a course in Information Literacy and Library Research Skills is offered online (See page 394).

A few of the services the library provides include: reference materials and assistance, library orientations, Internet access, WiFi, a local area network of electronic databases, e-books, periodicals, interlibrary loans, quiet study areas, photocopiers, and a scanner. The library also provides a special law library collection that supports the paralegal program.

For additional information call 858-536-7310 or 619- 388-7310. For hours of operation, please log on to the Library website.

Computer Services

The use of District computer equipment is limited to District staff and students.

Wireless Access

Wireless Access is available at designated areas on campus. Access code available in Library.

Rising Scholars

Location: K1-304, Telephone: 619-388-7222, Rising Scholars Webpage

Part of the statewide Rising Scholars Network, the Miramar Rising Scholars program provides support for students who are currently and formerly incarcerated as well as those who are system-impacted. We offer an Associate of Science (AS) in Entrepreneurship degree program for students incarcerated at the Naval Consolidated Brig, Miramar, a prison on the Marine Corps Air Station, Miramar military base. Resources available through the Rising Scholars program include admissions and financial aid application assistance, direct aid, academic and counseling support (including a dedicated Rising Scholars counselor), peer mentoring, connection with other campus and community resources, events, a student group, and more. For more information and to join the Rising Scholars program, please visit our website or contact us at miramarrisingscholars@sdccd.edu.

San Diego Promise Program

Location: K2-101, Telephone: 619-388-7357, Miramar Promise Webpage

The San Diego Promise is a two-year completion program for recent high school graduates enrolled full-time (12 units per semester). The program provides up to two years of FREE tuition to eligible students. Participation in the San Diego Promise Program comes with a variety of benefits: an assigned peer mentor/success coach, specialized counseling and guidance support, and additional campus engagement opportunities. For detailed information on all services offered and application procedures, please contact the San Diego Promise Program located in K2-Welcome Center or visit our website.

Eligibility

In order to qualify for the San Diego Promise Program, you must meet the following criteria:

- First time college student, or
- Returning SDCCD students who have not enrolled in courses for three or more semesters (Not including summer), or
- Identify with one of the following groups:
    - San Diego College of Continuing Education Students
    - Foster Youth Student
    - Veteran of U.S. Armed Forces
    - Formerly Incarcerated Student
    - Undocumented Student
- San Diego College of Continuing Education Students
- Foster Youth Student
- Veteran of U.S. Armed Forces
- Formerly Incarcerated Student
- Undocumented Student

*Student who completed college courses while in high school are eligible

To find out if you may qualify to participate in the San Diego Promise, please contact us via email at sdpromisemiramar@sdccd.edu or call us at 619-388- 7357.

SDCCD Online Learning Pathways

San Diego City, Mesa, and Miramar Colleges

Quality Online Learning

Learn anytime, anywhere with our convenient, flexible online courses that fit your busy schedule. Enjoy interactive communication with your classmates and instructor as you complete your coursework in an engaging, supportive learning environment. Our quality online courses are developed and taught by experienced instructors from our three colleges—City College, Mesa College, and Miramar College.

Want to get started? Find out if online learning is for you, by accessing our Online Learning webpage.

Get ready for online learning success! Visit our Training for Online Students.

Online students receive 24/7 Technical Support at: Canvas Support Chat, or by calling toll free 866-271-8794. For login instructions visit our Frequently Asked Questions (FAQs).

Student Health and Mental Health Services

Location: K2-102, Telephone: 619-388-7881, Health Center Webpage

The student health and wellness center supports the academic success of students by attending to their physical and mental well-being. Student Health provides medical care and mental health services to students currently enrolled and attending classes. Visits with our Physician, Nurse Practitioners, and licensed mental health professionals are free. Appointments are preferred but walk-ins are also available depending on availability. All services are confidential.

- Acute and Preventive health care services include:
- Mental Health Counseling (short term)
- Crisis Intervention
- Student support groups
- Mental health workshops and events

Student Health Services provides general medical and nursing care for physical exams, laboratory testing, and blood pressure screenings, 1st aid, Immunizations, TB testing and screening, STI information, education, testing and treatment, Low cost prescription medications, Medical treatments and limited minor surgical procedures Women's Health and Family Planning

The health center engages students in public health events and activities for preventative purposes. The health center does not carry or refill any controlled substances. All students are strongly encouraged to obtain immunizations against communicable diseases as recommended by the California and San Diego Public Health Departments. Contact Health Services at 619-388-7881 or visit K2-102

Student Accident Insurance

The Student Accident Insurance Plan provides coverage for on-campus or college-related injuries. This insurance covers most reasonable charges. The student, however, is ultimately responsible for any medical expenses incurred. Evening students taking exercise science or designated "hazardous" classes are also covered.

Student Accident Insurance is co-insurance. Students covered by a primary health organization or any other type of medical insurance should first seek treatment and payment from the provider or insurance company. All student claims are made through the Student Health Services office. The student, however, is ultimately responsible for any medical expenses incurred.

Support Services

Student Accident Insurance Claims

Student accident insurance is co-insurance. Students covered by a primary health organization or any other type of medical insurance should first seek treatment and payment from that provider or insurance company. All student claims are made through the Health Services Office.

College Dining Facilities

The Miramar College Café/Jet Stop Convenience Store is located on the first floor of the K1 (Student Services) building and offers a la carte meals, snacks and beverages including proudly serving Starbucks items.

The Peppertree Café is located in the courtyard of the L (Library/LRC) building.

During the Fall and Spring semesters, the Café/ Convenience Store is open Monday through Friday while the Peppertree Café is open Monday through Thursday. Regular hours of operation are posted and printed in the Schedule of Classes. Food services vary during the Summer sessions and days/hours will be posted.

The Miramar vending machines are available at the K1 (Student Services) building's first floor lobby during all hours that the respective building is open.

Additional vending machine service is available at the south end of the A-100 building and on the north side of the U-100 building.

College Police Department

T-100, Miramar College Substation

The College Police Department is responsible for providing public safety, law enforcement and crime prevention services. Its mission is to maintain peace and order and a safe learning environment throughout our District. It is also responsible for administering the campus parking program, lost and found and the building security program. For police officer assistance, call 619-388-6405. Emergency services are provided 24 hours a day, 7 days a week. The police business office is located in T-100. For information and general assistance, call 619-388-7353 or 858-536-7353. Learn more about College Police, by accessing the website.

Emergency Messages

The college will not interrupt classroom instruction to deliver messages, except in an extreme emergency. All calls/ inquiries should be referred to the College Police Dispatch at 619-388-6405.

Police and Parking Services

The college police are available to provide escort, vehicle battery jumps, and vehicle lockout services during regular hours of operation. Students who wish to use these services should call College Police Dispatch at 619-388-6405 or go to any of the College Police Offices at the following locations for assistance:

City College (V-100)	619-388-3461
Mesa College (Q-100)	619-388-2749
Miramar College (T-100)	619-388-7353
or	858-536-7353
College Police Dispatch	619-388-6405

Parking

1. Student parking permits are available for purchase during online registration or at the campus accounting office. Permits paid for before classes begin are generally mailed and those purchased after classes begin must be picked up. Parking permits are required the first day of each semester; fall, spring, and summer. There is no grace period.
2. Students may not utilize staff/faculty parking areas unless they are the owner of a valid, state issued disabled placard. Owners of a valid disabled placard are not required to buy a parking permit.
3. There are time limited visitor parking spaces at each campus reserved for visitors' use only. Students, except owners of a valid state issued disabled placards, may not utilize visitor parking. All campuses have pay and display machines for visitor and student use. Visitors and students can also download the MobileNow! mobile app to pay by credit card. Pay and display permits and MobileNow! payments are only valid in student parking spaces.
4. Motorcycles must display a valid motorcycle permit and be parked in designated motorcycle parking only.
5. Bicycles must be parked only in designated bicycle racks. Students are not allowed to ride bicycles, motorized bikes, scooters or skateboards on campus. Violators are subject to citation and/or disciplinary action.

Vehicle Immobilization/Booting/ Towing/Hold

Vehicles that accumulate five (5) or more unpaid parking citations are subject to immobilization (booting) of their vehicle and/or impound (towing) at owners expense. In addition a hold may be placed on the vehicle registration. If a vehicle accumulates $100 or more in outstanding fines a hold may be placed on the student's registration and/or diploma.

Emergency Cell Phone Numbers

The College encourages students to provide cell phone numbers to communicate with them in the event of a college or district-wide emergency. Students can provide this important information, by accessing the mySDCCD portal.

Transportation for Students with Disabilities

Paratransit (curb-to-curb) service is available for a fee to persons with disabilities who cannot use public transportation. ADA certification is required. Please contact DSPS for additional information or forms for certification. Students may also contact MTS (Metropolitan Transit System) at 888-517-9627.

Transfer Services

Location: K1-306, Telephone: 619-388-7380, Transfer Center Webpage

The Transfer Center, located in K1-306, is dedicated to helping Miramar students successfully transfer to a four-year institution. Transferring can be a confusing process at times. The Transfer Center is here to provide information and resources to assist students in making the transition a smooth and easy one. Transfer Center resources include: workshops, transfer fairs, meetings with college representatives, campus tours, a library of catalogs and publications, information on transfer guarantees, computer software for college research, and transfer advising. For more information, please contact 858-536-7380 or 619-388-7380 or visit our Transfer Center website.

Tutoring–Academic Success Center (ASC)

Location: L-101, Telephone: 619-388-7852, ASC Webpage

The Academic Success Center is located on the first floor of the LLRC in L-101. The ASC provides students with academic support in a number of areas: math, writing, and college reading/study skills as well as various subjects.

One-on-one tutoring is available on a walk-in basis and by appointment. Please call (619) 388-7852 and/or come to room L-101 to meet with a tutor.

Currently enrolled SDCCD students may use our facility and any of our learning resources to improve their math, writing, and college reading/study skills. Please call (619)-388-7852 and/or stop by L-101 for further information about additional services that may be available and to pick up a brochure.

Veterans and Service Members

Location: K1-207, Telephone; 619-388-7862, Veterans Affairs Webpage

Veterans Center Military Service Connected Benefit Programs

The San Diego Community Colleges have been approved to offer military service connected benefit programs leading to a Certificate of Achievement and/or an Associate Degree or transfer to a four-year institution. The Veterans Affairs Office staff provides guidance to veterans and assists them in the selection of educational programs which qualify for veterans benefits. The final responsibility for monitoring the process of qualification for

educational benefits resides with the individual. Each veteran must read, understand, and comply with the many rules, regulations, and procedures that influence the benefit process.

Students on active duty and veterans who have been discharged within the past 15 years may be eligible for up to 4 years priority registration. Check with the college Admissions Office for eligibility. An Active Duty Military ID card or DD214 are required for verification.

Section 1005. Requirements for in-state tuition.

Removes the requirement for covered individuals to enroll in a course at a public institution of higher learning within three years of being discharged to receive in-state tuition. Also, VA will make publicly available on the VA website a database explaining any public institution's requirements for beneficiaries to be charged in-state tuition. Effective: August 1, 2021.

The District prohibits high-pressure recruitment tactics such as making multiple unsolicited contacts (3 or more), including contacts by phone, email, or in-person, and engaging in same-day recruitment and registration for the purpose of securing Service member enrollment. See AP 5013—Students in the Military for additional information.

Important Note: Failure to take the proper classes may result in an overpayment and the reduction or termination of benefits

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Disabled Veterans

Veterans who qualify for educational benefits as disabled veterans may be entitled to special educational benefits. Veterans with disabilities are encouraged to pursue services offered through Disability Support Programs and Services, K1-204. Veterans should visit the Veterans Administration Regional Office, 8810 Rio San Diego Dr., San Diego, CA 92108, to determine their eligibility for disabled status. Telephone: 800-827-1000.

Veteran Dependent Exemption

Children and spouses of U.S. Veterans with service connected disabilities may be eligible for waiver of college fees and/or for a small monthly payment. For more information see the Veterans Affairs Office or the Cal Vet website.

Liability

The veteran assumes full liability for any overpayment of veterans benefits.

Important Notes: All persons receiving educational benefits must report to the Veterans Affairs Office after enrollment **every semester** to continue their benefits. In addition, a Student Educational Plan (SEP) **must be on file by the end of the first term**; otherwise, certification of VA benefits will be delayed for the second semester. This plan must be developed and reviewed by a counselor.

Number of Units Required

For students enrolled in a degree program under CH: 30, 31, 35, 1606/1607, the following number of units are required each semester to qualify for educational and training allowance:

12 units or more	full allowance
9 – 11.5 units	three-fourths allowance
6 – 8.5 units	one-half allowance
2 – 5.5 units	one-quarter allowance*

* Chapters 32 and 1606 only. All other chapters, tuition and fees only.

Short-term and summer session courses are computed proportionately for payment purposes.

Rate of Pursuit (Chapter 33)

The Chapter 33 housing allowance is paid if the rate of pursuit is more than 50%. The Department of Veterans Affairs calculates the rate of pursuit by dividing the benefit-eligible credit hours/units (or credit hour equivalent) enrolled by the number of credit hours/units considered to be full-time by the school. The resulting percentage is the student's rate of pursuit.

Please visit the Veterans Affairs website for additional information and updates.

Withdrawal/Change of Classes

Veterans are required to notify the campus Veterans Affairs Office when they stop attending class, withdraw from the college, or add or drop a class. Such changes should be reported immediately after completing the add/drop procedure. Failure to comply with this regulation will be grounds for decertification of Veterans' benefits.

Veterans Academic Progress

A veteran student on Academic probation status will be disqualified when his/her semester grade point average (GPA) falls below 2.0 the subsequent semester. A veteran student on Lack of Progress probation status will be disqualified if he/she does not complete over 50% of attempted units in the subsequent semester. The College Veterans Affairs Office is required to notify the Department of Veterans Affairs (DVA) of this status. The DVA will terminate benefits unless it can be shown that the student is pursuing an appropriate objective and has a reasonable chance for success in the chosen program. Please contact the Veterans Affairs Office for more information.

Readmission After Termination Status

Students who wish to be considered for readmission after the VA termination will be required to meet with a VA Counselor and develop a Student Success Plan prior to being readmitted.

Repeated Classes

Veterans may not receive benefits for a repeat of a course in which a grade of "A," B," "C," or "P" has already been earned. Although District policy allows a student to repeat a course in which a grade of "D" has been received; the course may be certified for benefits only if this catalog states that a grade of "C" or better in that course is required to earn a degree or meet a prerequisite.

Work Experience

Veterans may be approved for Work Experience classes only if work experience is required in their major or if they have electives available according to their education plan.

Transcripts

Important Note: All official transcripts of prior college work and military schools, including copies of form DD214, DD2685, Joint Service Transcript, or Smart Transcript covering all periods of military service, must be on file in the Records Office by the end of the first semester of attendance at this college.

Certification for benefits for the second semester will be withheld if transcripts are not received. Visit the Veterans Affairs Office for necessary forms.


SAN DIEGO MIRAMAR COLLEGE
CAREER
&LIFE
DESIGN
SERVICES

Academic Requirements

The Baccalaureate Degree

The Bachelor of Science (BS) degree is intended for students interested in a high-level career in technical education.

Minimum 120 Units Required

The following is required for all California community college BS degrees:

- A combination of lower division and upper division coursework totaling a minimum of 120 semester units applicable to a baccalaureate degree.
- Completion of a minimum of 36 semester units of general education that includes lower division general education and upper division general education as outlined below.
- A minimum of 40 semester units of upper-division courses, including a minimum of nine semester units of upper-division general education.

Note: Unit requirements vary by program. See the specific program requirements section of the catalog for details on unit distribution and major requirements.

Grade Point Average (GPA) and Minimum Grade Requirements

- All courses designated as upper division major requirements must be completed with a grade of "C" or better. A 'P" (pass) grade meets this requirement.
- Completion of the requirement for the baccalaureate degree with a minimum grade point average of 2.0 in the degree-applicable courses.

Minimum Units in Residence

- Satisfactory completion of a minimum of 12 degree applicable semester units in residence within the San Diego Community College District.
- The 12-unit in residence requirement is effective regardless of catalog year.
- Courses completed via credit for prior learning, including credit by exam, do not qualify for the 12-unit in residence requirement.

General Education

Lower Division General Education

Select one of the following lower division general education options:

- SDCCD General Education and District Requirements plus six additional units selected from general education Area 1B-Area 6 (1 unit lab excluded).
  See District Requirements and General Education Requirements (Option 1) of this catalog.
- California General Education Transfer Curriculum (Cal-GETC).
  See General Education Requirements in the Transfer Guide of this catalog (Option 6).
- SDCCD General Education plus six additional units selected from Area 1B-Area 6 (1 unit lab excluded).
  See District General Education Requirements (Option 4) of this catalog.
- General Education Completion through an Earned Baccalaureate Degree
  - Students who submit an official transcript showing they have earned a baccalaureate degree from an institutionally accredited institution will have satisfied the SDCCD lower division general education and district requirements upon evaluation of their transcript. (Option 5)
  - Students seeking the Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) degree must complete the California General Education Transfer Curriculum (Cal-GETC) general education pattern.

Courses may fulfill multiple academic requirements, such as general education, major, and additional graduation requirements. However, one course may not be counted in more than one general education area, even if the course is approved in multiple general education areas.

Upper Division General Education

Students must successfully complete a minimum of nine semester units or 13.5 quarter units of upper division general education coursework. Upper division general education courses are integrated into each baccalaureate degree program. Courses must come from at least two disciplines outside the major field of study and at least one of these courses must emphasize written communication, oral communication, or computation skills.

Specific course requirements are detailed within each bachelor's degree program requirements.

Credit for Prior Learning

Students may receive credit for knowledge and skills acquired through the district's procedures for awarding credit for prior learning.

Limitation on Enrollment

Enrollment in upper division courses is restricted to students admitted to a baccalaureate degree program at a California community college.

The Associate Degree

On the recommendation of the faculty, the colleges of the San Diego Community College District award the Associate of Arts degree or the Associate of Science degree.

The Associate of Arts degree is awarded in the social sciences, humanities, the arts, and similar disciplines. The Associate of Science degree is awarded in engineering, physical and biological sciences, and occupational curricula.

All Degrees Have the Following Requirements in Common

Minimum Units in Residence

Satisfactory completion of a minimum of 12 degree applicable semester units in residence within the San Diego Community College District.

The 12-unit in residence requirement is effective for all degrees awarded regardless of catalog year.

Courses completed via credit for prior learning, including credit by exam, do not qualify for the 12-unit in residence requirement.

Major/Area of Emphasis Requirements

A minimum of 18 semester units (27 quarter units) of focused study in a major or interdisciplinary area of emphasis.

- A "major" is a focused program of study within a specific discipline, which may include some coursework outside the primary discipline. Programs designed to provide transfer preparation must be designed to meet specific lower-division requirements in comparable baccalaureate majors.
- An "area of emphasis" is an interdisciplinary program of study encompassing a broad range of courses from multiple related academic disciplines, providing the student with an academic pathway broader than a specific major but more focused than general education.

Six semester units must be completed at City, Mesa, or Miramar College. Refer to the Degree Curricula and Certificate Programs section of this catalog for specific requirements for each major.

Recency of Coursework Limitation

Academic departments may require that courses for the major be completed within a specified period of time prior to the granting of the Associate Degree, Certificate of Achievement, or Certificate of Performance. Students with questions about the applicability of previous coursework are advised to consult the Department as early as possible.

Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) for California State University (CSU)

The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Each AA-T or AS-T is accepted by some but not all CSU campuses. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree in that major. Please see a counselor and visit the California Community Colleges website for more information.

Students intending to transfer to a CSU should consult a counselor and visit ASSIST for guidance on appropriate transfer coursework.

Degree Requirements

The following is required for all AA-T or AS-T degrees:

1. Completion of 60 semester units that are eligible for transfer to the California State University.
2. Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
3. Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
4. Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
5. Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern. See the California General Education Transfer Curriculum pattern for more information.

Associate of Arts and Associate of Science Degree Requirements

Minimum 60 Units Required

A minimum of 60 semester units (90 quarter units) of degree-applicable lower division credit courses, including courses that apply to the major or area of emphasis in career technical fields and courses in composition, reading, and mathematics or quantitative reasoning not more than one level below transfer. Below transfer level course requirements must align with Education Code section 78213.

1. Satisfactory completion of a minimum of 12 semester units in residence within the San Diego Community College District.
2. Completion of a minimum 21 semester units (or 28–31.5 quarter units) general education pattern pursuant to section 55061, or completion of the requirements for an approved intersegmental lower-division general education pattern used for transfer to the University of California or the California State University.

Grade Point Average (GPA) and Minimum Grade Requirements

1. Students must earn a grade of "C" or better in courses required for the major. A "P" (pass) grade meets this requirement.
2. A grade point average of at least 2.0 (a "C " average) is required in the curriculum upon which the degree is based.

Credit for Prior Learning

1. Students may receive credit for knowledge or skills acquired through a district's procedures for awarding credit for prior learning. See Credit for Prior Learning.
2. Students may petition to have completion of a noncredit course counted toward satisfaction of requirements for an associate degree. See High School and Noncredit Courses for College Credit (Credit by Examination).

Select One of the Following General Education Options:

- SDCCD General Education and District Requirements.
  See District Requirements (Option 1) of this catalog.
- California General Education Transfer Curriculum (Cal-GETC)
  See General Education Requirements in the Transfer Guide of this catalog (Option 6).
- SDCCD General Education Requirements.
  See General Education Requirements (Option 4) of this catalog.

Students selecting this option should meet with a counselor to determine the appropriate General Education courses for their individual transfer goals. Option 4 is only available for the following Miramar College degrees:

- Administration of Justice (associate in science for transfer excluded)
- Art/Visual Studies
- Biology Studies
- Chemistry Studies
- Company Officer Certification
- Contemporary Police Technologies
- Correctional Technologies
- Earth Science Studies
- English/Literature Studies
- Entry Level Firefighter
- Exercise and Nutritional Sciences
- Fire Prevention
- Human Development Studies
- Humanities Studies
- Investigations Specialization
- Law Enforcement
- Mathematics Studies
- Music Studies
- Occupational/Technical Studies
- Open Water Lifeguard
- Pre-Engineering Studies
- Public Safety Management
- Social and Behavioral Sciences
- World Language Studies

- General Education Completion through an Earned Baccalaureate Degree

- Students who submit an official transcript showing they have earned a baccalaureate degree from an institutionally accredited institution will have satisfied the SDCCD associate degree general education and District requirements upon evaluation of their transcript. (Option 5)
- Students seeking the Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) degree must complete the California General Education Transfer Curriculum (Cal-GETC) general education pattern.

Additional General Education Options

Students who have established and maintained catalog rights prior to Fall 2025 may use the California State University General Education Breadth (CSU-GE) or the Intersegmental General Education Transfer Curriculum (IGETC) pattern beginning with the version that was current when they began at a California community college and as it is applied to their designated catalog year.

CSU GE Breadth is accepted by all CSU campuses and some private/independent or out-of-state universities. It is not accepted by the UC system.

IGETC is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out-of-state universities.

Students who plan to transfer to a four-year institution should review the Transfer Requirements section of this catalog.

General Education Requirements Defined

The Associate Degree provides a framework within which students complete patterns of learning experiences designed to develop capabilities and insights to support their academic and career goals. Among these capabilities and insights are competencies that are germane to all aspects of higher education and comprise a "general education" curriculum, such as the ability to think critically and to communicate clearly and effectively both orally and in writing, to use quantitative reasoning, understand the modes of inquiry of the major disciplines, to be aware of other cultures and times, to achieve insights gained through experience in thinking about ethical problems, and to develop the capacity for self-understanding.

Furthermore, general education introduces students to the variety of means through which people comprehend the modern world. It reflects the conviction of colleges that those who receive their degrees must have mastered principles, concepts, and methodologies both unique to and shared by the various disciplines. A general education program should create coherence and integration among the separate requirements and involve students actively in examining values inherent in proposed solutions to major social problems. General Education Requirements Title 5 Section 55063:

(1) English Composition, Oral Communication, and Critical Thinking

(minimum of 6 semester/8 quarter units) including:

(1A) English Composition

(minimum of 3 semester/4 quarter units).

Courses fulfilling this requirement must be baccalaureate-level and include expository and argumentative writing.

(1B) Oral Communication and Critical Thinking

(minimum of 3 semester / 4 quarter units).

Courses fulfilling this requirement must be baccalaureate-level and may include oral communication and critical thinking courses.

Students who complete English Composition, Oral Communication, and Critical Thinking courses will be able to:

- demonstrate an understanding of the principles of clear and coherent communication
- use verbal and non-verbal languages in a clear and precise manner
- develop logical and rational thinking skills while analyzing and communicating processes
- evaluate different quantitative and qualitative symbol expressions and systems

(2) Mathematical Concepts and Quantitative Reasoning

(minimum of 3 semester / 4 quarter units).

Courses fulfilling this requirement must be at least college-level and may include mathematics or quantitative reasoning courses, including logic, statistics, computer languages, and relate disciplines.

Students who complete Mathematical Concepts and Quantitative Reasoning courses will be able to:

- evaluate different quantitative and qualitative symbol expressions and systems

(3) Arts and Humanities

(minimum of 3 semester / 4 quarter units).

Courses in the humanities study the cultural activities and artistic expressions of human beings.

Such courses develop students' awareness of how people throughout the ages and in different cultures respond to themselves and the world around them in artistic and cultural creation, and develop students' aesthetic understandings and abilities to make value judgments. Courses fulfilling this requirement may include

introductory or integrative baccalaureate-level courses in the visual and performing arts, art history, foreign languages, literature, philosophy, religion, and related disciplines.

Students who complete arts and humanities general education courses will be able to:

- express understanding and appreciation of varieties of cultural and artistic expression
- articulate an understanding of the complex relationships between the arts and their cultural, historical, and economic contexts
- evaluate the various elements of artistic works

(4) Social and Behavioral Sciences

(minimum of 3 semester / 4 quarter units).

Courses in the social and behavioral sciences focus on people as members of society and develop awareness of the methods of inquiry used by the social and behavioral sciences. They stimulate critical thinking about how people act and have acted in response to their societies and promote appreciation of how societies and social subgroups operate. Courses fulfilling this requirement may include introductory or integrative baccalaureate-level courses in cultural anthropology, cultural geography, economics, history, political science, psychology, sociology, and related disciplines.

Students who complete social and behavioral sciences general education courses will be able to:

- express understanding of how people act and have acted in response to their societies and the natural environment
- articulate how societies and social subgroups operate in specific historical and contemporary contexts
- use methods of inquiry and measurement appropriate to the particular discipline being studied

(5) Natural Sciences

(minimum of 3 semester / 4 quarter units).

Courses in the natural sciences examine the physical universe, its life forms, and its natural phenomena, helping students appreciate and understand the scientific method and the relationships between science and other human activities. Courses fulfilling this requirement may include introductory or integrative baccalaureate-level courses in astronomy, biology, chemistry, general physical science, geology, meteorology, oceanography, physical geography, physical anthropology, physics, and other scientific disciplines.

Students who complete natural sciences general education courses will be able to:

- demonstrate an understanding and appreciation of the scientific method
- express an understanding of the relationships between science and other human activities
- examine the natural physical world and its life forms in a variety of courses
- utilize critical thinking skills in a variety of scientific applications

(6) Ethnic Studies

(minimum of 3 semester/4 quarter units).

Courses fulfilling this requirement may include baccalaureate-level courses in the four autonomous disciplines within Ethnic Studies: Black Studies, African American Studies, Africana Studies; Native American Studies; Chicano/a/x, Latino/a/x Studies/La Raza Studies; and Asian American Studies.

District Requirements (Option 1)

Students choosing Option 1 must complete the District Requirements as outlined below. Additionally, students choosing Option 1 must fulfill the General Education requirements detailed in the General Education Requirements section of this catalog.

1. American Institutions/California Government

Students are required to complete the United States History, Constitution and American Ideals before being awarded an associate degree. This requirement may be fulfilled by completing any combination of two classes that, when combined, fulfill areas: US-1, US-2, and US-3. A course may be used to fulfill more than one area.

A check mark [✓] indicates course has been approved to meet the requirement for the area.

	Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments
^	BLAS 140A African American History to Reconstruction (C,M,MMR)	✓	✓	
^	BLAS 140B African American History since Reconstruction to the Present (C,M,MMR)	✓		✓
^	CHIC 141A United States History from a Chicano Perspective (C,M,MMR)	✓	✓	
^	CHIC 141B United States History from a Chicano Perspective (C,M,MMR)	✓		✓
	HIST 109 History of the United States I (C,M,MMR)	✓	✓	
	HIST 110 History of the United States II (C,M,MMR)	✓		✓
^	HIST 115A History of the Americas I (C,M,MMR)	✓	✓	
^	HIST 115B History of the Americas II (C,M,MMR)	✓		✓
^	HIST 123 U.S. History from the Asian Pacific American Perspective (C,M, MMR)	✓		✓
	HIST 141 Women in United States History I (M,MMR)	✓	✓	

	Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments
	HIST 142 Women in United States History II (M,MMR)	✓		✓
^	HIST 150 Native Americans in United States History I (M)	✓	✓	
^	HIST 151 Native Americans in United States History II (M)	✓		✓
	HIST 175 California History (M)			✓
^	POLI 121 American Political Development (C,M,MMR)	✓	✓	
	POLS C1000 American Government and Politics (C,M,MMR)		✓	✓

NOTES:

- *Courses designated with a caret (^) may also be used to fulfill the District Multicultural studies requirement.*
- *Completion of the Advanced Placement examination in U.S. History with a score of 3 or higher will satisfy the requirement for the CSU American Institutions Area US-1 only.*
- *Completion of the Advanced Placement examination in U.S. Government & Politics with a score of 3 or higher will satisfy the requirement for Area US-2.*
- *Students who have completed the American Institutions requirement except for the California government portion must complete one course approved in Area US-3.*

2. Health Education

This requirement is met by completing Health Education 101: Health and Lifestyle, three units.

Note: This requirement is waived for students who earn degrees in Nursing Education, Physical Therapist Assistant, or are graduates of a certified paramedic training program. U.S. Veterans and active duty U.S. military personnel may be granted three units of college credit to fulfill the Health Education Requirement if service has been continuous for at least six months. Copies of form DD-214 or DD-295 or Joint Services Transcript (JST) or CCAF Transcript covering all periods of military service must be on file in the Records Office.

3. Exercise Science Activity

Students must complete two activity courses. Exercise Science courses numbered below PHYE 240 or below EXSC 229 are acceptable. Dance courses are also acceptable, except for DANC 181, 183 and 253. Administration of Justice 127A, 127B, 127C, 127D, 128A,128B, 128C, 128D, 260, 323A, 381 and 382 are also acceptable. Fire Protection Technology 100D, 150A, 150B, 380W, 381F are also acceptable. Lifeguarding 101, 301, are also acceptable. Students with physical conditions which prevent participation in regular exercise science activity classes must file a physician's statement with the College Evaluations Office. Adapted Exercise Science classes are available. A Physician's medical release form is required.

Note: This requirement is waived for students who possess an accredited Fire Fighter I certification or are graduates of a POST Commission certified regional law enforcement academy. U.S. Veterans and active duty U.S. military personnel may be granted one unit of college credit (0.5 units EXSC 140A and 0.5 units EXSC

140B) to fulfill the Exercise Science Activity requirement if service has been continuous for at least six months or students who completed basic training. Copies of form DD-214 or DD-295 or Joint Services Transcript (JST) or CCAF Transcript covering all periods of military service must be on file in the Records Office.

4. Multicultural Studies

Students may satisfy the District multicultural studies graduation requirement by satisfactorily completing a course related to the culture of one or more of the ethnic groups which are represented in American society. The course shall include a focus on the role of men and women in the origin, development, and current status of these cultures.

Note: Each student seeking the Associate Degree must complete a three-unit multicultural studies course selected from the general education courses marked with a ^ indicating that it meets the Multicultural Requirement. The three units may be applied to the 18 units required in general education.

This requirement is met by completing one of the following courses (these courses are also on the District General Education list).

	Course Subject and Number	Course Title	College
^	AAPI 103	Introduction to Pacific Islander Studies	(M)
^	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
^	AAPI 125	Asian American and Pacific Islander Identities and Cultures	(M)
^	AAPI 127	Asian Americans and American Ideals	(M)
^	AAPI 130	Asian American and Pacific Islander Women	(M)
^	ADJU 106	Diversity and Community Relations	(MMR)
^	AMSL 150	Introduction to Deaf Culture	(M)
^	ANTH 103	Introduction to Cultural Anthropology	(C, M, MMR)
^	ANTH 200	Introduction to North American Indians	(M)
^	ANTH 210	Introduction to the Indigenous People of California	(C, M)
^	ARTF 113	Arts of Africa, Oceania, and the Americas	(M, MMR)
^	ARTF 115	African Art	(C, M)
^	ARTF 120	Native American Art	(M)
^	BLAS 100	Introduction to Black Studies	(C, M, MMR)
^	BLAS 104	Black Psychology	(C, M, MMR)
^	BLAS 110	African American Art	(C, M)
^	BLAS 111	Cultural Influences on African Art	(M)

	Course Subject and Number	Course Title	College
^	BLAS 115	Sociology from a Black Perspective	(C)
^	BLAS 116	Contemporary Social Problems from a Black Perspective	(C, M)
^	BLAS 120	Black Music	(C, M)
^	BLAS 125	Dynamics of the Black Community	(M)
^	BLAS 130	The Black Family	(C, M)
^	BLAS 135	Introduction to Black Politics	(C)
^	BLAS 140A	African American History to Reconstruction	(C, M, MMR)
^	BLAS 140B	African American History since Reconstruction to the Present	(C, M, MMR)
^	BLAS 145A	Introduction to African History	(C, M)
^	BLAS 145B	Introduction to African History	(C)
^	BLAS 150	Black Women in Literature, Film and the Media	(C, M, MMR)
^	BLAS 155	African American Literature	(C, M, MMR)
^	CHIC 110A	Introduction to Chicana and Chicano Studies	(C, M, MMR)
^	CHIC 110B	Introduction to Chicano Studies	(C, M)
^	CHIC 135	Chicana/o Literature	(C, M, MMR)
^	CHIC 140	Chicana/o Sociology	(C, M)
^	CHIC 141A	United States History from a Chicano Perspective	(C, M, MMR)
^	CHIC 141B	United States History from a Chicano Perspective	(C, M, MMR)
^	CHIC 155	Introduction to Central American Studies	(M)
^	CHIC 190	Chicano Images in Film	(C, M)
^	CHIC 210	Chicano Culture	(C, M)
^	CHIC 250	Introduction to Chicana/o Dramatic Art	(C, M)
^	CHIL 141	The Child, Family and Community	(C, M, MMR)
^	COMS 180	Intercultural Communication	(C, M, MMR)
^	DRAM 109	Theatre and Social Issues	(C, M)

	Course Subject and Number	Course Title	College
^	ENGL 202	Introduction to Linguistics	(C, M)
^	ENGL 230	Asian American Literature	(M, MMR)
^	ENGL 234	Hip Hop Literature: A Poetry Class	(C, M, MMR)
^	FASH 122	Ethnic Costume	(M)
^	FILI 100	Filipino American Experience	(M, MMR)
^	FILI 101	Filipino American Psychology	(MMR)
^	GEND 101	Introduction to Gender Studies	(C, MMR)
^	GEOG 102	Cultural Geography	(C, M, MMR)
^	HIST 115A	History of the Americas I	(C, M, MMR)
^	HIST 115B	History of the Americas II	(C, M, MMR)
^	HIST 120	Introduction to Asian Civilizations	(C, M, MMR)
^	HIST 121	Asian Civilizations in Modern Times	(C, M, MMR)
^	HIST 123	U.S. History from the Asian Pacific American Perspective	(C, M, MMR)
^	HIST 130	The Modern Middle East	(M)
^	HIST 150	Native Americans in United States History I	(M)
^	HIST 151	Native Americans in United States History II	(M)
^	INTE 125	History of Furniture and Interiors	(M)
^	MUSI 109	World Music	(C, M, MMR)
^	MUSI 217A	Gospel Choir I	(MMR)
^	MUSI 217B	Gospel Choir II	(MMR)
^	MUSI 217C	Gospel Choir III	(MMR)
^	MUSI 217D	Gospel Choir IV	(MMR)
^	NAIS 100	Introduction to Native American and Indigenous Studies	(C, M, MMR)
^	NAIS 200	American Indian Spirituality	(C, M, MMR)
^	NUTR 153	Cultural Foods	(C, M)

	Course Subject and Number	Course Title	College
^	PHIL 125	Philosophy of Women	(C, M)
^	POLI 103	Comparative Politics	(C, M, MMR)
^	POLI 121	American Political Development	(C, M, MMR)
^	POLI 140	Contemporary International Politics	(C, M, MMR)
^	SOCO 101	Principles of Sociology	(C, M, MMR)
^	SOCO 110	Contemporary Social Problems	(C, M, MMR)
^	SOCO 125	Sociology of the Family	(C, M)
^	SOCO 150	Sociology of Latinos/Latinas	(C, M)
^	SOCO 207	Introduction to Race and Ethnicity	(C, M, MMR)
^	SOCO 223	Globalization and Social Change	(C, M, MMR)
^	WMNS 101	Introduction to Gender and Women's Studies	(M)

5. General Education

See the General Education Requirements (Option 1 and Option 4) section of this catalog for specific requirements.

General Education Requirements (Option 1 and 4)

A minimum of 21 semester units (28 – 31.5 quarter units)

Students selecting General Education Option 1 or Option 4 must fulfill the general education requirements outlined below. Additionally, students choosing Option 1 must complete the District Requirements, as detailed in the District Requirements section of this catalog.

Note: Courses may meet multiple requirements, including general education, a major or area of emphasis, and additional requirements. However, one course may not be counted in more than one general education area, even if the course is approved in multiple general education areas. Students may use the same course to meet a local general education requirement and to satisfy a general education requirement at the California State University or the University of California if that segment accepts the course for this purpose.

The following information is based on **2025–2026** course offerings and is subject to change. Please contact the Counseling Department for updates.

The State of California requires the completion of a minimum of 21 units of general education with at least a 2.0 grade point average. One course must be selected from each of the following areas: English Composition; Oral Communication and Critical Thinking; Mathematical Concepts and Quantitative Reasoning; Arts and Humanities; Social and Behavioral Sciences; Natural Sciences; and Ethnic Studies.

() Colleges in parenthesis indicate where the course is approved for General Education Requirements.

C-City College
M-Mesa College
MMR-Miramar College

^ Courses with a caret fulfill District multicultural studies graduation requirement.

* Courses with an asterisk may satisfy more than one area and/or general education requirement but may not be counted more than once for this.

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(1) English Composition, Oral Communication, and Critical Thinking

Minimum of 6 semester units/8 quarter units. Including:

(1A) English Composition

Minimum of 3 semester/4 quarter units. Complete one course with a grade of "C" or better. Courses fulfilling this requirement must be baccalaureate-level and include expository and argumentative writing.

	Course Subject and Number	Course Title	College
	ENGL C1000	Academic Reading and Writing	(C, M, MMR)
	ENGL 105	Composition and Literature	(C, M, MMR)

(1B) Oral Communication and Critical Thinking

Minimum of 3 semester / 4 quarter units. Complete one course with a grade of "C" or better.

	Course Subject and Number	Course Title	College
	COMM C1000	Introduction to Public Speaking	(C, M, MMR)
	COMS 135	Interpersonal Communication	(C, M, MMR)
	COMS 160	Argumentation and Critical Thinking	(C, M, MMR)
	COMS 170	Small Group Communication	(C, M, MMR)
^	COMS 180	Intercultural Communication	(C, M, MMR)
	ENGL C1001	Academic Reading and Writing	(C, M, MMR)
	GEOG 205	Critical Thinking and Writing in Geography	(C,M)
	HIST 105	Methodology and Practice in History	(M)
	PHIL 100	Logic and Critical Thinking	(C, M, MMR)
	PHIL 205	Critical Thinking and Writing	(C, M, MMR)

(2) Mathematical Concepts and Quantitative Reasoning

Minimum of 3 semester / 4 quarter units. Complete one course with a grade of "C" or better.

	Course Subject and Number	Course Title	College
	BANK 103	Introduction to Investments	(MMR)
	BIOL 200	Biological Statistics	(M)
	BUSE 101	Business Mathematics	(C, M, MMR)
	BUSE 115	Statistics for Business	(C, M, MMR)
	CHEM 251	Quantitative Analytical Chemistry	(C, M, MMR)
	CISC 150	Introduction to Computer and Information Sciences	(C, M)
	CISC 181	Principles of Information Systems	(C, M, MMR)
	CISC 187	Data Structures in C++	(C, M, MMR)
	CISC 190	Java Programming	(C, M, MMR)
	CISC 192	C/C++ Programming	(C, M, MMR)
	CISC 201	Advanced C++ Programming	(C, M)
	CISC 205	Object Oriented Programming using C++	(C)
	CISC 246	Discrete Mathematics for Computer Science	(C, M, MMR)
	ECON 120	Principles of Macroeconomics	(C, M, MMR)
	ECON 121	Principles of Microeconomics	(C, M, MMR)
	ENGE 151	Engineering Drawing	(C, M)
	ENGE 200	Statics	(C, M)
	ENGE 240	Digital Systems	(C, M)
	ENGE 250	Dynamics	(C, M)
	ENGE 260	Electric Circuits	(C, M)
	GISG 104	Geographic Information Science and Spatial Reasoning	(C, M)
	HEIT 256	Statistics for Healthcare	(M)
	MATH 92	Applied Beginning and Intermediate Algebra (City Apprenticeship Students Only)	(C)

	Course Subject and Number	Course Title	College
	MATH 96	Intermediate Algebra and Geometry (City Apprenticeship Students Only)	(C)
	MATH 98	Technical Algebra and Geometry (City Apprenticeship Students Only)	(C)
	MATH 104	Trigonometry	(C, M, MMR)
	MATH 107	Introduction to Scientific Programming	(C)
	MATH 107L	Introduction to Scientific Programming Lab	(C)
	MATH 109	Explorations in Mathematical Statistics	(C)
	MATH 115	Gateway to Experimental Statistics	(C)
	MATH 116	College and Matrix Algebra	(C, M, MMR)
	MATH 118	Math for the Liberal Arts Student	(C, M, MMR)
	MATH 121	Basic Techniques of Applied Calculus I	(C, M, MMR)
	MATH 122	Basic Techniques of Applied Calculus II	(C, M, MMR)
	MATH 141	Precalculus	(C, M, MMR)
	MATH 150	Calculus with Analytic Geometry I	(C, M, MMR)
	MATH 151	Calculus with Analytic Geometry II	(C, M, MMR)
	MATH 210A	Concepts of Elementary School Mathematics I	(C, M)
	MATH 210B	Concepts of Elementary School Mathematics II	(C, M)
	MATH 215	Introduction to Teaching Mathematics	(M)
	MATH 245	Discrete Mathematics	(C, M, MMR)
	MATH 252	Calculus with Analytic Geometry III	(C, M, MMR)
	MATH 254	Introduction to Linear Algebra	(C, M, MMR)
	MATH 255	Differential Equations	(C, M, MMR)
	MFET 210	Statistical Process Control	(C)
	MFET 220	Programmable Logic Controllers	(C)
	PHIL 101	Symbolic Logic	(C, M, MMR)

	Course Subject and Number	Course Title	College
	PHYS 125	General Physics	(C, M, MMR)
	PHYS 126	General Physics II	(C, M, MMR)
	PHYS 180A	General Physics I	(C, M, MMR)
	PHYS 180B	General Physics II	(C, M, MMR)
	PHYS 195	Mechanics	(C, M, MMR)
	PHYS 196	Electricity and Magnetism	(C, M, MMR)
	PHYS 197	Waves, Optics and Modern Physics	(C, M, MMR)
	POLI 201	Elementary Statistics for Political Science	(C, M)
	PSYC 258	Behavioral Science Statistics	(C, M, MMR)
	STAT C1000	Introduction to Statistics	(C, M, MMR)

(3) Arts and Humanities

Minimum of 3 semester / 4 quarter units

	Course Subject and Number	Course Title	College
^	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
	AMSL 120	American Sign Language Level I	(C, M, MMR)
	AMSL 121	American Sign Language Level II	(C, M, MMR)
	AMSL 220	American Sign Language Level III	(C, M)
	AMSL 221	American Sign Language Level IV	(C, M)
	ARAB 101	First Course in Arabic	(C)
	ARAB 102	Second Course in Arabic	(C)
	ARAB 201A	Third Course in Arabic	(C)
	ARCH 126	History of Ancient World Architecture	(M)
	ARCH 127	History of World Architecture: Renaissance Through Contemporary	(M)
	ARTF 100	Art Orientation	(C, M, MMR)
	ARTF 106	Art of the United States: Colonial to Modern Period	(M)
	ARTF 107	Contemporary Art	(M, MMR)
	ARTF 108	Women in Art	(M)
	ARTF 109	Modern Art	(C, M, MMR)
	ARTF 110	Art History: Prehistoric to Gothic	(C, M, MMR)
	ARTF 111	Art History: Renaissance to Modern	(C, M, MMR)
^	ARTF 113	Arts of Africa, Oceania, and the Americas	(M, MMR)
^	ARTF 115	African Art	(C, M)
^	ARTF 120	Native American Art	(M)
	ARTF 125	Art History: Arts of the Asian Continent	(C, M, MMR)
	ARTF 130	Pre-Columbian Art	(M)

	Course Subject and Number	Course Title	College
	ARTF 188	Women and Gender in Photography	(M)
	ARTF 191	Cultural Influences on Photography	(M)
	ARTF 194	Critical Photography	(M)
	ARTF 212	Sustainable Art and Design	(C)
^	BLAS 110	African American Art	(C, M)
^	BLAS 111	Cultural Influences on African Art	(M)
^	BLAS 120	Black Music	(C, M)
^	BLAS 150	Black Women in Literature, Film and the Media	(C, M, MMR)
^	BLAS 155	African American Literature	(C, M, MMR)
	CHIC 130	Mexican Literature in Translation	(C, M)
^	CHIC 135	Chicana/o Literature	(C, M, MMR)
	CHIC 138	Literature of La Raza in Latin America in Translation	(C, M)
^	CHIC 190	Chicano Images in Film	(C, M)
^*	CHIC 210	Chicano Culture	(C, M)
	CHIC 230	Chicano Art	(C, M)
^	CHIC 250	Introduction to Chicana/o Dramatic Art	(C, M)
	CHIN 101	First Course in Mandarin Chinese	(M)
	CHIN 102	Second Course in Mandarin Chinese	(M)
	CHIN 201	Third Course in Mandarin Chinese	(M)
	CHIN 202	Fourth Course in Mandarin Chinese	(M)
	DANC 181	History of Dance	(C, M)
	DFLM 101	Introduction to Film	(MMR)
	DFLM 102	The American Cinema	(MMR)
	DRAM 105	Introduction to Dramatic Arts	(C, M)
	DRAM 107	Study of Filmed Plays	(C, M)

	Course Subject and Number	Course Title	College
	DRAM 108	Playwriting	(C, M)
^	DRAM 109	Theatre and Social Issues	(C, M)
	DRAM 111	Chicana/o Theatre	(C)
	DRAM 136	History of Canonized Theatre - Ancient Greece to the Restoration	(C, M)
	DRAM 137	History of Canonized Western Theatre - Restoration to the Present	(C, M)
	DRAM 150	Cinema as Art and Communication I	(M)
	DRAM 151	Cinema as Art and Communication II	(M)
	DRAM 205	The American Musical on Stage and Screen	(C, M)
	DSGN 104	Graphic Design History	(C)
	ENGL 207	The Art of the Sentence	(M)
	ENGL 208	Introduction to Literature	(C, M, MMR)
	ENGL 209	Literary Approaches to Film	(C, M, MMR)
	ENGL 210	American Literature I	(C, M, MMR)
	ENGL 211	American Literature II	(C, M, MMR)
	ENGL 215	English Literature I: 800-1799	(C, M, MMR)
	ENGL 216	English Literature II: 1800-Present	(C, M, MMR)
	ENGL 220	Masterpieces of World Literature I: 1500 BCE-1600 CE	(C, M, MMR)
	ENGL 221	Masterpieces of World Literature II: 1600-Present	(C, M, MMR)
^	ENGL 230	Asian American Literature	(M, MMR)
^	ENGL 234	Hip Hop Literature: A Poetry Class	(C, M, MMR)
	ENGL 237	Women in Literature	(C, M, MMR)
	ENGL 238	Evaluating Children's Literature	(C)
	ENGL 240	Shakespeare	(C, M)
	FASH 120	Fashion History and Trends	(M)

	Course Subject and Number	Course Title	College
^	FASH 122	Ethnic Costume	(M)
	FJMP 100	Introduction to Cinema	(C)
	FREN 101	First Course in French	(C, M)
	FREN 102	Second Course in French	(C, M)
	FREN 201	Third Course in French	(C, M)
	FREN 202	Fourth Course in French	(C, M)
	GERM 101	First Course in German	(C, M)
	GERM 102	Second Course in German	(C, M)
	GERM 201	Third Course in German	(C, M)
*	HIST 100	World History I	(C, M, MMR)
*	HIST 101	World History II	(C, M, MMR)
*	HIST 105	Introduction to Western Civilization I	(C, M, MMR)
*	HIST 106	Introduction to Western Civilization II	(C, M, MMR)
^*	HIST 120	Introduction to Asian Civilizations	(C, M, MMR)
^*	HIST 121	Asian Civilizations in Modern Times	(C, M, MMR)
*	HIST 131	Latin America Before Independence	(M)
*	HIST 132	Latin America Since Independence	(M)
	HUMA 101	Introduction to the Humanities I	(C, M, MMR)
	HUMA 102	Introduction to the Humanities II	(C, M, MMR)
	HUMA 103	Introduction to the New Testament	(C, M)
	HUMA 104	Introduction to the Old Testament	(M)
	HUMA 106	World Religions	(C, M, MMR)
	HUMA 118	Eastern Humanities	(M)
	HUMA 119	Western Humanities	(M)
	HUMA 201	Mythology	(C, M, MMR)

	Course Subject and Number	Course Title	College
	HUMA 202	Mythology: Hero's Journey	(C)
	HUMA 205	Exploring Human Values Through Film	(M)
	HUMA 210	Women in Religion and Myth	(M)
^	INTE 125	History of Furniture and Interiors	(M)
	ITAL 101	First Course in Italian	(C,M)
	ITAL 102	Second Course in Italian	(C,M)
	ITAL 201	Third Course in Italian	(C,M)
	JAPN 101	First Course in Japanese	(M)
	JAPN 102	Second Course in Japanese	(M)
	JAPN 201	Third Course in Japanese	(M)
	JAPN 202	Fourth Course in Japanese	(M)
	MULT 116	Unity Game Development	(M)
	MUSI 100	Introduction to Music	(C, M, MMR)
	MUSI 103	History of Rock Music	(C, M, MMR)
^	MUSI 109	World Music	(C, M, MMR)
	MUSI 111	Jazz History	(C, M, MMR)
	MUSI 114	Music of The Beatles	(M)
	MUSI 117	Music in the United States	(M)
	MUSI 118	Asian & Pacific Music	(M,MMR)
	MUSI 119	Music in Latin America & North America	(M,MMR)
	MUSI 125	Music, the Arts, and Society	(M)
	MUSI 126	Rap Music and Hip Hop Culture	(M,MMR)
	MUSI 131	Music of California	(M)
	MUSI 138	Women in Music	(M)
	NAIS 200	American Indian Spirituality	(C,M,MMR)

	Course Subject and Number	Course Title	College
	PHIL 102A	Introduction to Philosophy: Reality and Knowledge	(C, M, MMR)
	PHIL 102B	Introduction to Philosophy: Values	(C, M, MMR)
	PHIL 103	Historical Introduction to Philosophy	(M)
	PHIL 104A	History Of Western Philosophy: Ancient to Medieval	(C, M, MMR)
	PHIL 104B	History of Western Philosophy: Modern to Contemporary	(C, M)
	PHIL 105	Contemporary Philosophy	(C, M)
	PHIL 106	Asian Philosophy	(C, M)
	PHIL 107	Reflections on Human Nature	(C, M, MMR)
*	PHIL 108	Perspectives on Human Nature and Society	(C, M)
	PHIL 110	Philosophy of Religion	(M)
	PHIL 111	Philosophy In Literature and Other Fiction	(C, M)
	PHIL 112	Philosophy of Science	(M)
^*	PHIL 125	Philosophy of Women	(C, M)
	PHIL 130	Philosophy of Art and Music	(C, M)
	PHIL 131	Environmental Ethnics	(C, M, MMR)
	PHOT 150	History of Photography	(C)
	RUSS 101	First Course in Russian	(M)
	RUSS 102	Second Course in Russian	(M)
	RUSS 201	Third Course in Russian	(M)
	SPAN 101	First Course in Spanish	(C, M, MMR)
	SPAN 102	Second Course in Spanish	(C, M, MMR)
	SPAN 201	Third Course in Spanish	(C, M, MMR)
	SPAN 202	Fourth Course in Spanish	(C, M, MMR)
	SPAN 215	Spanish for Spanish Speakers I	(C, M)
	SPAN 216	Spanish for Spanish Speakers II	(C, M)

	Course Subject and Number	Course Title	College
	SPAN 221	Hispanic Literature for Spanish Speakers	(M)
	SPAN 222	Hispanic Culture and Civilization for Spanish Speakers	(M)
	TAGA 101	First Course in Tagalog	(MMR)
	TAGA 102	Second Course in Tagalog	(MMR)
	TAGA 201	Third Course in Tagalog	(MMR)
	VIET 101	First Course in Vietnamese	(M)
	VIET 102	Second Course in Vietnamese	(M)
	VIET 201	Third Course in Vietnamese	(M)

(4) Social and Behavioral Sciences

Minimum of 3 semester / 4 quarter units

	Course Subject and Number	Course Title	College
^	AAPI 103	Introduction to Pacific Islander Studies	(M)
^*	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
^*	AAPI 125	Asian American and Pacific Islander Identities and Cultures	(M)
^	AAPI 127	Asian Americans and American Ideals, Institutions, and Politics	(M)
^*	AAPI 130	Asian American and Pacific Islander Women	(M)
	ADJU 101	Introduction to Administration of Justice	(C, MMR)
^	ADJU 106	Diversity and Community Relations	(MMR)
	ADJU 230	Constitutional Law I	(MMR)
	AGRI 100	Principles of Sustainable Agriculture	(C)
^	AMSL 150	Introduction to Deaf Culture	(M)
^	ANTH 103	Introduction to Cultural Anthropology	(C, M, MMR)
	ANTH 107	Introduction to Archaeology	(C, M, MMR)
	ANTH 110	Anthropology of Magic, Witchcraft, and Religion	(C, M)
	ANTH 117	Anthropology of Gender and Sexuality	(M)
	ANTH 140	Primatology	(C, M)
	ANTH 205	Introduction to Medical Anthropology	(M)
^	ANTH 210	Introduction to California Indians	(C)
	ANTH 215	Cultures of Latin America	(C, M)
^*	BLAS 100	Introduction to Black Studies	(C, M, MMR)
^	BLAS 104	Black Psychology	(C, M, MMR)
^	BLAS 115	Sociology from a Black Perspective	(C)
^	BLAS 116	Contemporary Social Problems from a Black Perspective	(C, M)

	Course Subject and Number	Course Title	College
^	BLAS 125	Dynamics of the Black Community	(M)
^	BLAS 130	The Black Family	(C, M)
^	BLAS 135	Introduction to Black Politics	(C)
^	BLAS 140A	African American History to Reconstruction	(C, M, MMR)
^	BLAS 140B	African American History since Reconstruction to the Present	(C, M, MMR)
^	BLAS 145A	Introduction to African History	(C, M)
^	BLAS 145B	Introduction to African History	(C, M)
	BLAS 165	Sexuality and Black Culture	(C, M)
	BLAS 175	Psycho-History of Racism and Sexism	(M)
	BUSE 100	Introduction to Business	(C, M, MMR)
	BUSE 140	Business Law and the Legal Environment	(C, M, MMR)
^*	CHIC 110A	Introduction to Chicana and Chicano Studies	(C, M, MMR)
^*	CHIC 110B	Introduction to Chicano Studies	(C, M)
^	CHIC 140	Chicana/o Sociology	(C, M)
^	CHIC 141A	United States History from a Chicano Perspective	(C, M, MMR)
^	CHIC 141B	United States History from a Chicano Perspective	(C, M, MMR)
	CHIC 150	History of Mexico	(C, M)
^	CHIC 155	Introduction to Central American Studies	(M)
	CHIC 170	La Chicana	(C, M, MMR)
	CHIC 201	The Indigenous Tradition of Mexico and Ancient Mesoamerica	(C, M)
^*	CHIC 210	Chicano Culture	(C, M)
	CHIL 101	Human Growth and Development	(C, M, MMR)
	CHIL 103	Lifespan Growth and Development	(MMR)
^	CHIL 141	The Child, Family and Community	(C, M, MMR)

	Course Subject and Number	Course Title	College
	COMS 201	Communication and Community	(C, MMR)
	CRES 101	Conflict Resolution and Mediation	(C)
	DSST 101	Introduction to Disability Studies	(C)
	ECON 120	Principles of Macroeconomics	(C, M, MMR)
	ECON 121	Principles of Microeconomics	(C, M, MMR)
	ECON 220	Economics of the Environment	(C, M)
^	ENGL 202	Introduction to Linguistics	(C, M)
^*	FILI 100	Filipino American Experience	(M, MMR)
	FJMP 101	Introduction to Mass Media	(C)
^	GEND 101	Introduction to Gender Studies	(C, MMR)
^	GEOG 102	Cultural Geography	(C, M, MMR)
	GEOG 104	World Regional Geography	(C, M, MMR)
	GEOG 154	Introduction to Urban Geography	(C, M)
	HEAL 103	Introduction to Public Health	(C, M)
	HEAL 104	Public Health and Social Justice	(M)
*	HIST 100	World History I	(C, M, MMR)
*	HIST 101	World History II	(C, M, MMR)
*	HIST 105	Introduction to Western Civilization I	(C, M, MMR)
	HIST 106	Introduction to Western Civilization II	(C, M, MMR)
	HIST 109	History of the United States I	(C, M, MMR)
	HIST 110	History of the United States II	(C, M, MMR)
^	HIST 115A	History of the Americas I	(C, M, MMR)
^	HIST 115B	History of the Americas II	(C, M, MMR)
^*	HIST 120	Introduction to Asian Civilization	(C, M, MMR)
^*	HIST 121	Asian Civilizations in Modern Times	(C, M, MMR)

	Course Subject and Number	Course Title	College
^*	HIST 123	U.S. History from the Asian Pacific American Perspective	(C, M, MMR)
^	HIST 130	The Modern Middle East	(M)
*	HIST 131	Latin America Before Independence	(M)
*	HIST 132	Latin America Since Independence	(M)
	HIST 135	History of Technology	(M)
	HIST 141	Women in United States History I	(M, MMR)
	HIST 142	Women in United States History II	(M, MMR)
^	HIST 150	Native Americans in United States History I	(M)
^	HIST 151	Native Americans in United States History II	(M)
	HIST 154	Ancient Egypt	(M)
	HIST 175	California History	(M)
	HUMS 101	Introduction to Human Aging	(C)
	JOUR 202	Introduction to Mass Communication	(M, MMR)
	NAIS 100	Introduction to Native American and Indigenous Studies	(C,M,MMR)
^	NUTR 153	Cultural Foods	(M)
	PADM 110	Introduction to Law and Society	(C, M)
	PADM 200	Introduction to Public Administration	(C, MMR)
	PEAC 101	Introduction to Peace Studies	(C)
*	PHIL 108	Perspectives on Human Nature and Society	(C, M)
	PHIL 109	Issues in Social Philosophy	(M,MMR)
^*	PHIL 125	Philosophy of Women	(C, M)
	PHIL 126	Philosophy of Contemporary Gender Issues	(C, M)
	POLI 101	Introduction to Political Science	(C, M, MMR)
^	POLI 103	Comparative Politics	(C, M, MMR)
^	POLI 121	American Political Development	(C, M, MMR)

	Course Subject and Number	Course Title	College
	POLI 123	Gender and Politics	(M)
	POLI 124	Power and Justice: An Introduction to Political Theory	(C, M)
^	POLI 140	Contemporary International Politics	(C, M, MMR)
	POLS C1000	American Government and Politics	(C, M, MMR)
	PSYC 111	Psychological /Social Aspects of Aging, Death and Dying	(C, M)
	PSYC 112	Interpersonal Relations	(M)
	PSYC 121	Introduction to Child Psychology	(M)
	PSYC 123	Adolescent Psychology	(MMR)
	PSYC 133	Psychology of Women	(M, MMR)
	PSYC 135	Marriage and Family Relations	(C, M, MMR)
	PSYC 137	Human Sexual Behavior	(C, M, MMR)
	PSYC 155	Introduction to Personality	(C, M, MMR)
	PSYC 166	Introduction to Social Psychology	(C, M, MMR)
	PSYC 211	Learning	(C, M, MMR)
	PSYC 230	Psychology of Lifespan Development	(C, M, MMR)
	PSYC 245	Abnormal Psychology	(C, M, MMR)
	PSYC 283	Introduction to Cognitive Psychology	(C, M, MMR)
	PSYC C1000	Introduction to Psychology	(C, M, MMR)
^	SOCO 101	Principles of Sociology	(C, M, MMR)
^	SOCO 110	Contemporary Social Problems	(C, M, MMR)
^	SOCO 125	Sociology of the Family	(C, M)
	SOCO 145	Health and Society	(C, M, MMR)
^	SOCO 150	Sociology of Latinos/Latinas	(C, M)
	SOCO 201	Advanced Principles of Sociology	(C, M, MMR)
^	SOCO 207	Introduction to Race and Ethnicity	(C, M, MMR)

	Course Subject and Number	Course Title	College
	SOCO 220	Introduction to Research Methods in Sociology	(C, M, MMR)
^	SOCO 223	Globalization and Social Change	(C, M, MMR)
	SUST 101	Introduction to Sustainability	(C, M, MMR)
^	WMNS 101	Introduction to Gender and Women's Studies	(M)

(5) Natural Sciences

Minimum of 3 semester / 4 quarter units

	Course Subject and Number	Course Title	College
	AGRI 107	Introduction to Agricultural Plant Science	(C)
	AGRI 125	Introduction to Soil Science	(C)
	ANTH 102	Introduction to Biological Anthropology	(C, M, MMR)
	ANTH 104	Laboratory in Biological Anthropology	(C, M, MMR)
	ASTR 101	Descriptive Astronomy	(C, M, MMR)
	ASTR 102	Exploring the Solar System and Life Beyond The Earth	(C, M, MMR)
	ASTR 109	Practice in Observing - Laboratory	(C, M, MMR)
	ASTR 111	Astronomy Laboratory	(C, M, MMR)
	AVIA 115	Aviation Weather	(MMR)
	BIOL 100	Natural History – Environmental	(M, MMR)
	BIOL 101	Issues in Environmental Science & Sustainability	(C, MMR)
	BIOL 107	General Biology- Lecture and Laboratory	(C, M, MMR)
	BIOL 110	Introduction to Oceanography	(M)
	BIOL 111	Cancer Biology	(C)
	BIOL 115	Marine Biology	(M, MMR)
	BIOL 120	The Environment of Man	(M)
	BIOL 130	Human Heredity	(C, M, MMR)
	BIOL 131	Introduction to Biotechnology	(MMR)
	BIOL 135	Biology of Human Nutrition	(MMR)
	BIOL 160	Elements of Human Anatomy & Physiology	(M, MMR)
	BIOL 180	Plants and People	(C, M, MMR)
	BIOL 205	General Microbiology	(C, M, MMR)
	BIOL 210A	Introduction to the Biological Sciences I	(C, M, MMR)

	Course Subject and Number	Course Title	College
	BIOL 210B	Introduction to the Biological Sciences II	(C, M, MMR)
	BIOL 215	Introduction to Zoology	(M)
	BIOL 230	Human Anatomy	(C, M, MMR)
	BIOL 235	Human Physiology	(C, M, MMR)
	BIOL 250	Introduction to Botany	(M)
	CHEM 100	Fundamentals of Chemistry	(C, M, MMR)
	CHEM 100L	Fundamentals of Chemistry - Laboratory	(C, M, MMR)
	CHEM 103	General, Organic, and Biological Chemistry	(M, MMR)
	CHEM 111	Chemistry in Society	(C, M, MMR)
	CHEM 111L	Chemistry and Society Laboratory	(C, M)
	CHEM 130	Introduction to Organic & Biological Chemistry	(C, M, MMR)
	CHEM 130L	Introduction to Organic & Biological Chemistry	(C, M, MMR)
	CHEM 152	Introduction to General Chemistry	(C, M, MMR)
	CHEM 152L	Introduction to General Chemistry	(C, M, MMR)
	CHEM 160	Introductory Biochemistry	(M, MMR)
	CHEM 200	General Chemistry I- Lecture	(C, M, MMR)
	CHEM 200L	General Chemistry I- Laboratory	(C, M, MMR)
	CHEM 201	General Chemistry II- Lecture	(C, M, MMR)
	CHEM 201L	General Chemistry II- Laboratory	(C, M, MMR)
	CHEM 231	Organic Chemistry I- Lecture	(C, M, MMR)
	CHEM 231L	Organic Chemistry I- Laboratory	(C, M, MMR)
	CHEM 233	Organic Chemistry II- Lecture	(C, M, MMR)
	CHEM 233L	Organic Chemistry II- Laboratory	(C, M, MMR)
	CHEM 251	Quantitative Analytical Chemistry	(C, M, MMR)
	GEOG 101	Physical Geography	(C, M, MMR)

	Course Subject and Number	Course Title	College
	GEOG 101L	Physical Geography	(C, M, MMR)
	GEOL 100	Physical Geology	(C, M, MMR)
	GEOL 101	Physical Geology Laboratory	(C, M, MMR)
	GEOL 104	Earth Science	(C, M, MMR)
	GEOL 111	The Earth Through Time	(C, M, MMR)
	GEOL 120	Earth Science	(C, M)
	GEOL 130	Field Geology of San Diego County	(C, M, MMR)
	MEDA 55	Fundamentals Human Anatomy and Physiology	(M)
	NUTR 150	Nutrition	(C, M, MMR)
	NUTR 155	Advanced Nutrition	(M, MMR)
	OCEA 101	The Oceans	(C, M, MMR)
	PHYN 100	Survey of Physical Science	(C, M, MMR)
	PHYN 101	Survey of Physical Science Laboratory	(C, M, MMR)
	PHYN 105	Physical Science for Elementary Education	(M, MMR)
	PHYN 114	Weather and Climate	(C, M, MMR)
	PHYS 100	Introductory Physics	(C, M)
	PHYS 125	General Physics	(C, M, MMR)
	PHYS 126	General Physics II	(C, M, MMR)
	PHYS 180A	General Physics I	(C, M, MMR)
	PHYS 180B	General Physics II	(C, M, MMR)
	PHYS 181A	General Physics Lab I	(C, M, MMR)
	PHYS 181B	General Physics Lab II	(C, M, MMR)
	PHYS 195	Mechanics	(C, M, MMR)
	PHYS 196	Electricity and Magnetism	(C, M, MMR)
	PHYS 197	Waves, Optics and Modern Physics	(C, M, MMR)

	Course Subject and Number	Course Title	College
	PSYC 260	Introduction to Physiological Psychology	(C, M, MMR)
	PSYC 260L	Introduction to Physiological Psychology Laboratory	(M)

(6) Ethnic Studies

Minimum of 3 semester / 4 quarter units

	Course Subject and Number	Course Title	College
^*	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
^*	AAPI 125	Asian American and Pacific Islander Identities and Cultures	(M)
^*	AAPI 130	Asian American and Pacific Islander Women	(M)
^*	BLAS 100	Introduction to Black Studies	(C, M, MMR)
^*	BLAS 140A	African American History to Reconstruction	(C, M, MMR)
^*	BLAS 140B	African American History since Reconstruction to the Present	(C, M, MMR)
^*	CHIC 110A	Introduction to Chicana and Chicano Studies	(C, M, MMR)
^*	CHIC 110B	Introduction to Chicana and Chicano Studies	(C, M)
^*	FILI 100	Filipino American Experience	(MMR)

Certificate of Achievement

On the recommendation of the faculty, the colleges of the San Diego Community College District award the Certificate of Achievement to students who complete the specified requirements. Programs in which a Certificate of Achievement may be awarded are described in the Degree Curricula and Certificate Programs section of this catalog. Certificate programs are designed for students with specific personal or occupational goals. To qualify for the Certificate of Achievement, students must satisfy the following requirements:

1. Meet all standards for admission to the desired certificate program;
2. Earn a grade of "C" or higher in each course. A "P" (pass) grade meets this requirement; and
3. A minimum of six semester units of the required courses for the major must be completed at City, Mesa or Miramar College.

Certificate of Performance

Programs in which a Certificate of Performance may be awarded are described in the Degree Curricula and Certificate Programs section of this catalog. A Certificate of Performance recognizes the attainment of knowledge and/or skill through the successful completion of two or more courses as specified by a department. Certificates of Performance are designed to prepare students for employment, job enhancement and/or job advancement. To qualify for the Certificate of Performance, students must satisfy the following requirements:

1. Achieve a grade of "C" or better in each of the required courses. A "P" (pass) grade meets this requirement.
2. Complete all required course work in the San Diego Community College District.
3. Course substitutions or course equivalencies from other colleges may not be used to satisfy Certificate of Performance requirements.

For additional information, contact the campus Evaluations Office or subject-area department.

Graduation

Apply for Graduation

Graduation from Miramar is not automatic. Students who expect to receive an Associate Degree or Certificate of Achievement must Apply for Graduation.

Students who expect to receive an Associate Degree and/or a Certificate of Achievement are encouraged to apply for graduation after they have registered for the semester in which they plan to complete the requirements for their degree program.

The deadline dates for applying to graduate, can be found online at, by accessing the Graduation Deadlines website.

Official college transcripts from all colleges attended must be on file before submitting the graduation application for an Associate Degree.

In cases where a student has taken courses at institutions outside of the San Diego Community College District (SDCCD) that are necessary for completing their Certificate of Achievement requirements, only the transcript from the institution where the relevant course(s) was completed is required.

An evaluation is a summary of college work completed and of requirements to be completed for the associate degree or the certificate of achievement. Only evaluations completed by one of the Evaluators are official.

Petition for Exceptions

Petitions for exceptions to graduation requirements, substitutions, or waiver of requirements are filed with the Counseling Office. All petitions are acted upon by the appropriate college committees/offices.

Catalog Rights

Students who maintain continuous enrollment may choose to graduate under the (City College, Mesa College, and Miramar College) catalog in effect at the time they began their studies in a California Community College, California State University, or University of California campus, or under the catalog in effect at the time of graduation.

Certification of a student's completion of the California General Education Transfer Curriculum (Cal-GETC) or the requirements for an approved intersegmental lower-division general education pattern used for transfer to the University of California or the California State University is not a graduation requirement. Therefore, students do not have catalog rights to a certification pattern used by a certifying institution or a CSU or UC campus.

Continuous Enrollment

Continuous enrollment is defined as enrollment within a calendar year in either the CSU, UC, or California Community College System. Withdrawals are considered enrollment.

Awarding of Degrees or Certificates

Associate Degrees/Certificates of Achievement will be awarded at the end of the semester in which the requirements are completed.

The graduation ceremony is held once a year. Candidates for Fall, Spring and Summer graduation may participate in the ceremony which is held at the end of the Spring semester.

Associate Degree Initiative

The San Diego Community College District proactively reviews student academic records to determine if program requirements for an associate degree have been met.

Student academic records will be reviewed if the student:

- completed at least 70 degree applicable units,
- submitted all transcripts from other institutions attended, and
- has an education plan on file.

If the degree requirements are met, students will be notified via email and awarded a diploma. Students have until the end of the semester to decline the degree.

All students may participate in the commencement ceremony which occurs annually at the end of the spring semester. Note that students who plan to transfer to a California State University (CSU), may want to consider an Associate Degree for Transfer and should consult a counselor or the Transfer Center for options.

Diplomas

Diplomas are issued only after completion of all graduation requirements has been verified. Diplomas will be issued in the name and to the address of record at the time the diploma is awarded. For information on obtaining your diploma or certificate of achievement, or a duplicate copy, please visit the Graduation Deadlines website.

Graduation with Distinction

Graduation with honors distinction will be based upon all coursework that is associate degree and lower division baccalaureate degree applicable.

Graduation with Honors is granted to students who achieve an overall 3.5 GPA, High Honors is granted to students who achieve an overall 3.75 GPA, and Highest Honors is granted to students who achieve an overall 4.0 GPA for coursework for the degree or certificate.

Students will be notified that this distinction is pending at the time of the graduation ceremony, when the GPA will be calculated based upon degree or certificate applicable coursework completed through the Fall semester of the year of the ceremony. The final distinction will be determined for the degree or certificate upon completion of all coursework completed through the Fall semester for fall graduates or the Spring semester for spring graduates or the summer term for summer graduates.

Graduation with Latin Honors (Baccalaureate Degrees Only)

Candidates for one of SDCCD College's baccalaureate degrees may be eligible for Latin Honors at the time of graduation if they have fulfilled the following cumulative GPA requirements:

- Summa Cum Laude Honors: GPA equal to 4.0
- Magna Cum Laude: GPA equal to or greater than 3.75 but less than 4.0
- Cum Laude: GPA equal to or greater than 3.5, but less than 3.75

Students will be notified that this distinction is pending at the time of the graduation ceremony, when the GPL will be calculated based upon degree applicable coursework for the degree through the fall semester of the year of the ceremony. The final distinction will be determined upon the completion of all coursework completed through the fall semester for fall graduates the spring semester for spring graduates, or the summer semester for summer graduates.

Additional College Degree

A student having received an associate or baccalaureate degree may qualify for an additional Associate of Arts or Associate of Science degree in a new major or concentration.

An additional degree:

1. Permits upgrading or preparation for upgrading current employment.
2. Prepares for employment in an area different from that provided by previous training
3. Provides general knowledge leading to fulfillment of personal goals.
4. Allows the student to improve priority of transfer applications by earning an Associate Degree for Transfer (ADT).

The following requirements are applicable:

1. A student must earn a minimum of 6 mutually exclusive required semester units in the new major or emphasis. A minimum of twelve (12) semester degree-applicable units must be completed in residence at the college granting the degree.
2. A student must fulfill current catalog degree requirements if continuous enrollment has not been maintained.
3. Counselors will review all previous college work to determine the student's eligibility for a second degree. The student must Apply for Graduation online, by accessing the mySDCCD portal.

ADT Exemption: Students who have previously been awarded an Associate Degree, and wish to receive one ADT in the same or similar major, will be exempt from the additional unit requirement of 6 new units.

Gainful Employment

Data on Gainful Employment and Licensure Eligibility Requirements are available, by accessing the CTE report.

Transfer Guide

What is Transfer?

Transfer is the process of continuing your education at a four-year college or university, usually after completing your major preparation and general education at a community college. If planned correctly, the courses that you pass at community college will count towards requirements for your bachelor's degree just as if they had been taken at the four-year institution.

Miramar College students transfer to a wide variety of universities within California and throughout the world.

Transfer Services

Students are advised to plan transfer pathways as early as possible and enroll in transferable courses in both general education and in courses that prepare students for specific university majors. Questions related to transfer programs should be discussed with a counselor in the Transfer Center or campus counseling office.

The Miramar College Transfer Center is designed to help you during each step of your transfer experience to ensure a smooth and positive transition. A variety of resources are available, including:

- Academic Counseling
- Guidance in researching and selecting a transfer institution
- Individual appointments with representatives from UC, CSU, and independent colleges and universities
- Transfer workshops including application and TAG
- Transfer Admission Agreements and Guarantees with selected universities
- A library of catalogs and college publications
- Information on important dates and deadlines
- Computer software for college research
- Transfer Fairs
- Field Trips

For additional information regarding specific services, contact the San Diego Miramar College Transfer Center at 619-388-7380 located in K1-306 or visit the Transfer Center website.

Steps to Transfer

Step 1: Career Exploration

Your career objective will determine the type of degree you need and your choices for selecting a major. See the Career & Life Design Services" in L-104 for assistance.

Step 2: Choosing Your University Major

A major is a field of study that you emphasize in your college education. It is what you "specialize" in with your degree. It's important to remember that your major is what you will study at the university you transfer to. At Miramar College, you can prepare to transfer into virtually any major at any university-there are literally thousands to choose from. To narrow down the options, students often begin to select their major by one of the following techniques:

- If you have an idea of the career field you want to enter, you can find majors that are related to, or prepare for, that career field. Majors and career fields are not always "perfectly matched." However, knowing your

intended career field can help narrow your options. You can visit the Counseling Office or Career & Life Design Services in L-104 for assistance in researching career fields.
- If you know what university you want to attend, you can select from the list of majors at that university. Lists of majors at California public universities are available by accessing ASSIST (click on "Explore Majors").
- If you think you might be interested in a particular major but are not sure, try taking a general education class in the major and see how you like it. Students often select their major based simply on the courses that are the most interesting to them.
- For descriptions of the 75 most popular majors, access the College Discovery Center.

Step 3: Choosing Your Transfer University

Each university may have different transfer requirements, so choosing a transfer university (first, second, and third choice) is important to ensure you complete the right courses. Universities in the United States are organized into different systems and categories. Choosing a transfer university is also important because:

- The majors offered at each university are different.
- Each university has unique features, including factors like its student body, its location, and its extracurricular activities.
- You are more likely to do well academically in a university environment that you enjoy.

The most common universities that Miramar students transfer to include:

University of California (UC)

The University of California (UC) system is a world-renowned public university system that combines undergraduate education with a strong emphasis on undergraduate education, graduate programs and research. The UC system comprises ten campuses across California, each offering a diverse range of academic programs leading to bachelor's, master's, and doctoral degrees.

UC campuses are known for their rigorous academic standards, research, and commitment to public services. California residents benefit from relatively lower tuition costs compared to private institutions, making the UC system an affordable and high-quality option for higher education.

UC San Diego (UCSD) is one of the ten campuses within the university system, recognized for its excellence in science, engineering, social sciences, and humanities. For detailed information on admissions requirements and transfer pathways, visit the University of California website.

UC Minimum Admission Requirements

Transfer students will be eligible for admission if they meet the following requirements:

1. Complete a minimum of 60 UC-transferable semester units or 90 transferable quarter units.
2. Obtain a minimum 2.4 GPA (2.8 for California non-residents). The GPA for admission can be significantly higher due to the applicant pool.
3. Complete two transferable college courses in English composition (3 semester or 4–5 quarter units each) and one transferable college course in mathematical concepts and quantitative reasoning (3 semester or 4–5 quarter units).
4. Complete four transferable college courses chosen from at least two of the following subject areas: arts and humanities, social and behavioral sciences, physical and biological sciences.

The UC gives high priority to students who complete major preparation coursework early in their academic career.

Students who complete the California General Education Transfer Curriculum (Cal-GETC) prior to transferring to the UC system will meet the transfer eligibility coursework requirement listed above (for details on Cal-GETC, see appropriate section of this guide for details). Students are strongly recommended to meet with a counselor to discuss additional requirements for competitive admissions based on major and campus choice.

UC Transfer and Physical Education Activity Courses

The University of California grants a maximum of four semester units of credit for appropriate Physical Education activity courses. Courses that are subject to this limit are listed as such on the college's UC Transfer Course

Agreement, available on web ASSIST under the UC Transferable Courses link. Physical Education Theory courses or courses that do not fit either the Theory or Activity category are not included in the four semester credit limit.

UC Transfer and Variable Topics Courses

These courses are also called "Independent Studies", "Special Studies ", "Special Topics ", "Internships ", "Field Work ", etc. Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus. This usually occurs after transfer and may require recommendations from faculty. UC does not grant credit for variable topics courses in Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology) or Library Departments because of credit restrictions in these areas.

California State University (CSU)

The California State University system is the largest four-year public university system in the United States, with 23 campuses across the state. The CSU system emphasizes quality undergraduate education, leading to bachelor's degrees, while also offering a range of master's programs. Faculty at CSU typically dedicate more time to classroom teaching than to research, which contributes to a more personalized and interactive learning environment.

CSU campuses are known for their strong emphasis on career preparation, providing students with hands-on learning experiences ensuring students gain practical skills and industry-specific knowledge to succeed in their chosen fields.

California residents benefit from relatively low tuition costs, make CSU an affordable option for higher education. San Diego State University (SDSU) and CSU San Marcos are two local universities in the 23-campus California State University system.

For more detailed information on admissions, academic programs and transfer opportunities, visit the California State University website.

CSU Minimum Admission Requirements

Transfer students will be eligible for admission if they meet the following requirements:

1. Complete a minimum of 60 CSU-transferable semester units or 90 transferable quarter units.
2. Obtain a minimum 2.0 GPA (2.4 for California non-residents). Impacted majors may have higher GPA Requirements.
3. Complete "The Golden Four" (Oral Communications, Written Communication, Critical Thinking, and Mathematics/Quantitative Reasoning) with a grade of "C" or better. Pass/ No-Pass grades are not recommended in these areas.

Students are urged to complete the California General Education Transfer Curriculum (Cal-GETC) pattern.

Students are strongly recommended to meet with a counselor to discuss additional requirements for competitive admissions based on major and campus choice.

Associate Degrees for transfer are another option to transfer to the CSU system. Refer to Academic Requirements or see your counselor or Transfer Center for details.

Private Colleges and Universities

Private colleges and universities operate independently of public funding, relying on tuition, endowments, and private contributions. Sometimes referred to as "independent" institutions, each private university is unique, offering specialized programs, majors, and degrees that reflect its distinct mission and focus.

Some private institutions integrate a particular religious or philosophical foundation into their academic programs, while others concentrate on specific disciplines such as the arts, technical fields, or professional studies. Many private university also cater to working adults by providing flexible continuing education and online degree options.

Private colleges are often smaller than public universities, fostering a more focused academic environment with smaller class sizes and a strong sense of community. While tuition tends to be higher, many private institutions offer generous financial aid and scholarships to make education more accessible. For more information about

private colleges and universities in California, visit Association of Independent California Colleges and Universities (AICC).

Historically Black Colleges and Universities (HBCU's)

Historically Black Colleges and Universities (HBCUs) were established to provide higher education opportunities for African-American students during a time when access to many institutions was limited. While HBCUs continue to have strong tradition of serving African-American students, they welcome individuals of all racial and ethnic backgrounds.

HBCUs can either be private or public institutions, with most located in the southern United States. They offer a wide range of academic programs, from undergraduate to graduate and professional degree, often with a strong emphasis on cultural heritage, leadership, and community engagement.

Students choosing an HBCU benefit from a supportive academic environment, rich traditions, and a network of alumni who have made significant contributions across various fields.

For more information on HBCUs, academic programs, and admissions, visit HBCU's official resources or explore individual campus websites.

Hispanic-Serving Institutions (HSIs)

Hispanic-Serving Institutions (HSIs) are colleges and universities committed to advancing Hispanic student success in higher education. To be designed as an HSI, at least 25% of a college or university's total student enrollment must be Hispanic. These institutions play a vital role in increasing access to higher education and providing resources tailored to the needs of Hispanic and underrepresented students.

The Hispanic Association of Colleges and Universities (HACU) is a national educational association that represents colleges and universities committed to Hispanic Higher education success in the United States (including Puerto Rico), Latin America, and Spain. Currently, there are 193 HSIs in 11 U.S. states and Puerto Rico, with 54 located in California. HSIs offer a broad range of academic programs and support services designed to enhance student achievement and career readiness.

For more information on HSIs, member institutions and available recourses, visit the Hispanic Association of Colleges and Universities (HACU) website.

Tribal Colleges and Universities (TCUs)

Tribal Colleges and Universities (TCUs) are federally recognized institutions dedicated to serving Native American students while preserving Indigenous culture, language, and traditions. There are 35 federally recognized Tribal Colleges and Universities in the United States primarily located in the Midwest and Southwest, collectively serving approximately 30,000 30,000 full- and part-time students.

TCUs provide a range of academic programs, including two-year associate degrees in over 200 disciplines, as well as bachelor's and master's degrees. Additionally, they offer vocational certificate programs designed to support workforce development and economic growth and Native communities. Many TCUs integrate Indigenous knowledge systems into their curricula while maintaining rigorous academic standards.

For more information about TCUs, academic programs, and admissions, visit the American Indian Higher Education Consortium (AIHEC) website.

Out-of-State Colleges and Universities

Out-of-State colleges and universities are institutions located outside of California and may be either public or private. These colleges and universities offer a wide range of academic programs, campus environments, and opportunities that may not be available within the state.

For students considering an out-of-state education, there are resources available to help navigate admissions, tuition costs, and transfer agreements. The Western Interstate Commission for Higher Education (WICHE) offers the Western Undergraduate Exchange (WUE) program, which allows eligible California residents to attend participating out-of-state colleges at a reduced tuition rate.

For more details on out-of-state colleges and transfer opportunities, visit: WICHE, Regional Admissions, and/or College Source.

Step 4: Academic Preparation

Preparation for Major Courses

For each major at a four-year institution, there are lower-division (freshman and sophomore level) preparatory courses designed to prepare students for upper-division study (junior and senior level). Based on the availability of courses, students are strongly encouraged to complete as many major prerequisite courses as possible prior to transfer.

Preparation for Major courses for UC and CSU schools can be found on ASSIST. The ASSIST website is designed to provide students with the most accurate and up-to-date information available. ASSIST lists which community college courses are equivalent to their four-year counterparts and/or will meet specific requirements. Students can also get valuable information such as additional screening requirements, if the major is impacted, and if there is a required GPA for a specific major on ASSIST.

For students looking to transfer to a private/ independent or out-of-state school, you should first access the Miramar Transfer Center website or talk to a Counselor to find out if Miramar has an articulation agreement with your school of interest. If Miramar has no articulation with the school, you should contact the school's admissions office directly or talk to a Miramar Counselor to find out the best way for you to take courses towards major preparation.

Step 5: Applying to a University

About applying for admission

Universities require you to apply and be admitted before you start attending school there. All students who apply must meet the minimum requirements (usually certain coursework requirements and a minimum transferable GPA). Some schools accept all transfer students who meet the minimum requirements, while others go through a selection process to determine which students will be offered admission.

Application dates and deadlines

Different systems have different dates and deadlines to apply. If you plan to attend a private/independent or out-of-state university, you should check with that school to find their application deadline and procedures. The following dates and deadlines apply to California public universities only:

California State University

Term of Transfer	Initial Filing Period
Summer	February 1–28/29 of current year
Fall	October 1 – November 30 of preceding year
Winter	June 1–30 of preceding year
Spring	August 1–31 of preceding year

University of California

Term of Transfer	Initial Filing Period
Fall Semester or Quarter	October 1– November 30 of preceding year
Winter Quarter	July 1–31 of preceding year

Spring Quarter	October 1–31 of preceding year

All campuses are open for any given Fall term. For Winter/Spring terms, students should verify that the specific campus accepts transfers for that specific term. Check for CSU campuses and UC campuses.

Each campus accepts applications until the end of the filing period or until capacities are reached. If applying after the initial filing period check the campus websites to verify if the campus is still open.

How to apply

The UC and CSU systems strongly encourage all students to apply using the online application process. Not only does it make it easier to read and evaluate your application, but the websites also "check your work" to make sure you are not missing any required information before you submit your final application.

The UC application is available online.

The CSU application is available online.

Step 6: Final Steps to Transfer

Many universities require you to submit documents, take assessment exams, attend orientations, or meet other requirements before you enroll. It's also a good idea to apply for your degree and General Education certification from Miramar College prior to transfer. You should do as much as you can now to make the transition to your university as smooth as possible.

Apply to Graduate from Miramar

Graduation from Miramar College is not automatic. You must apply to graduate through the mySDCCD portal to receive your degree or certificate. We recommend you apply to graduate even if you are only completing transfer coursework. Most transfer students are eligible to receive a General Education Certificate and/or an Associate degree in a transfer-related subject area. You should apply to graduate during your second to last semester at Miramar

File for General Education (GE) Certification

General Education (GE) Certification is a legal agreement between Miramar College and a California public university (UC or CSU campus) confirming that a student has completed all lower division GE requirements for transfer to a CSU or UC campus. Certification can be awarded for completion of the California General Education Transfer Curriculum (Cal-GETC), which is also accepted by some private and independent universities.

Students should apply for GE certification when they are enrolled in their final GE courses and have selected their transfer university. Certification of Cal-GETC also fulfills the requirements for the Cal-GETC, Certificate of Achievement.

To apply, visit the Evaluations Office (K1-207).

Attend Graduation

You don't have to attend Miramar College graduation to transfer or to receive a degree, but it's a great way to celebrate and be publicly recognized for your achievement. You earned it! Information about the graduation ceremony is available on the Miramar College website.

Find Out How to Get There

Are you using public transportation to commute to your new university? It's a good idea to figure out your best route to the university now, before you start attending. Visit the campus.

Submit Intent to Register and Transcripts

After offering you admission, most universities require you to send a statement of intent to register (SIR), official transcripts, a deposit, and sometimes additional materials. Review your university admission paperwork for details. Information on ordering transcripts from the San Diego Community College District is available, by accessing the website.

Attend New Student Orientation

Most universities offer a new student orientation day, where you learn about university services and requirements, get academic advising, register for classes, tour the campus, etc. Review your university admission paperwork for details.

Complete Assessment Tests

Some universities require transfer students to complete assessment tests either prior to enrollment or during their first year of attendance. Review your university admission paperwork for details.

Find Housing

Are you going to live on campus? If so, you will need to apply for campus housing. See your university admission paperwork or the university website for more information. If you are living off campus you may need to start searching for housing in the local community. Most universities have housing assistance offices to help you.

Send Your Final Transcripts

You are usually required to send your university a final official transcript after the end of your last regular semester prior to transfer. Information on ordering transcripts from the San Diego Community College District is available, by accessing the website.

Meet Immunization Requirements

Most universities require you to provide documentation of immunizations against certain communicable diseases, like measles or rubella. Review your university admission paperwork for more information.

Transfer General Education

General Education

General Education (GE) is a set of courses from a variety of different subject areas that every student must complete in order to earn a bachelor's degree, regardless of major. The goal is to provide a well-rounded education that cultivates the knowledge, skills, and attitudes essential to becoming an "educated person."

The completion of GE prior to transfer is not required for admission to most universities. However, it is usually in the student's best interest to complete an appropriate transfer GE pattern at the community college. This is because GE requirements that are not fulfilled prior to transfer must be completed later at the university, which often extends the time and expense of university education.

The Cal-GETC Pattern

Cal-GETC is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/independent or out-of-state universities.

It is strongly recommended that students consult with a counselor to determine which general education pattern is most appropriate for their individual goals.

General Education Certification

General Education Certification is a legal agreement between the UC or CSU systems and the California Community Colleges that permits a student to transfer from a community college to a UC or CSU campus without the need to complete additional lower division general education courses to satisfy university GE requirements after transfer.

SDCCD will provide Cal-GETC certification to a four-year university when specifically requested by the student. This certification may include courses taken from other colleges or credit earned through other means, such as Advanced Placement (AP) test credit. All official transcripts must be on file.

About the Cal-GETC Pattern

The California General Education Transfer Curriculum (Cal-GETC) is a general education pattern that will fulfill all lower-division general education requirements at all California State University (CSU) campuses and most University of California (UC) campuses/majors. It is also accepted by some private/independent or out of state universities. Cal-GETC is usually recommended for students who intend to transfer to a UC campus, or who are not yet sure of their intended transfer university. Completion of the Cal-GETC pattern is not an admission requirement for transfer to most UC or CSU campuses, nor is it the only way to fulfill the lower division GE requirements of a UC or CSU campus prior to transfer.

Additional Cal-GETC Information and Restrictions

- Each course must have been Cal-GETC approved at the time it was completed. See ASSIST for a list of certified courses and approval dates.
- Courses may be approved for more than one Cal-GETC area. However, each course may be used to certify only one of the areas it is approved for.
- Students should apply for Cal-GETC certification at the last community college attended prior to transfer. Cal-GETC certification requests will be processed for students who have completed at least one course at a SDCCD college. Certification forms are available at the Counseling or Evaluations Office.
- AP credit and coursework completed at accredited U.S. colleges and universities may be used to fulfill some Cal-GETC requirements. All such credit must be evaluated through the Evaluations office. Courses completed at a foreign college or university cannot be used to satisfy Cal-GETC general education requirements.
- All courses must be passed with a "C" or higher. Pass (P) grades are also acceptable. "C-" is not acceptable.
- Some UC campuses do not allow use of Cal-GETC for students who were previously enrolled at a UC campus.
- Some community college courses have limitations on the amount of credit awarded by the receiving university. See a counselor, the course description in the college catalog, or ASSIST for more information.

Cal-GETC is not recommended for the following transfer destinations:

- UC San Diego Revelle Colleges
- UC Berkeley Colleges of Business, Chemistry, Engineering, Natural Resources, Optometry
- UC Santa Barbara Colleges of Engineering
- UC Los Angeles Schools of Engineering and Applied Science
- UC Merced School of Engineering and Natural Sciences

The Cal-GETC Pattern

() Colleges in parenthesis indicate where the course is approved for Cal-GETC requirements.

C-City College
M-Mesa College
MMR-Miramar College

* Courses with an asterisk are listed in more than one area but shall not be certified in more than one area.

+ Courses with a plus indicate transfer credit may be limited by either UC or CSU, or both. Please consult with a counselor for additional information.

Area 1: English Communication

Three Courses: one English Composition, one Critical Thinking and Composition, and one Oral Communication (Nine semester units)

Area 1A: English Composition

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	ENGL C1000	Academic Reading and Writing	(C, M, MMR)
	ENGL 105	Composition and Literature	(C, M, MMR)

Area 1B: Critical Thinking and Composition

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	ENGL C1001	Critical Thinking and Writing	(C, M, MMR)
	GEOG 205	Critical Thinking and Writing in Geography	(C, M)
	PHIL 205	Critical Thinking and Writing in Philosophy	(C, M, MMR)
	HIST 205	Methodology and Practice in History	(M)

Area 1C: Oral Communication

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	COMM C1000	Introduction to Public Speaking	(C, M, MMR)

Area 2: Mathematical Concepts and Quantitative Reasoning

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
+	BIOL 200	Biological Statistics	(M, MMR)
+	BUSE 115	Statistics for Business	(C, M, MMR)
	CISC 246	Discrete Mathematics for Computer Science	(C, M, MMR)
+	MATH 115	Gateway to Experimental Statistics	(C)
+	MATH 116	College and Matrix Algebra	(C, M, MMR)
+	MATH 121	Basic Techniques of Applied Calculus I	(C, M, MMR)
+	MATH 122	Basic Techniques of Applied Calculus II	(C, M, MMR)
+	MATH 141	Precalculus	(C, M, MMR)
+	MATH 150	Calculus with Analytic Geometry I	(C, M, MMR)
+	MATH 151	Calculus with Analytic Geometry II	(C, M, MMR)
	MATH 245	Discrete Mathematics	(C, M, MMR)
	MATH 252	Calculus with Analytic Geometry III	(C, M, MMR)
	MATH 254	Introduction to Linear Algebra	(C, M, MMR)
	MATH 255	Differential Equations	(C, M, MMR)
+	POLI 201	Elementary Statistics for Political Science	(C, M)
+	PSYC 258	Behavioral Science Statistics	(C, M, MMR)
+	STAT C1000	Introduction to Statistics	(C, M, MMR)

Area 3: Arts and Humanities

Two courses: one Arts and one Humanities (Six semester units)

Area 3A: Arts

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	ARTF 100	Art Orientation	(C, M, MMR)
	ARTF 106	Art of the United States: Colonial to Modern Period	(M)
	ARTF 107	Contemporary Art	(M, MMR)
*	ARTF 108	Women in Art	(M)
	ARTF 109	Modern Art	(C, M, MMR)
	ARTF 110	Art History: Prehistoric to Gothic	(C, M, MMR)
	ARTF 111	Art History: Renaissance to Modern	(C, M, MMR)
+	ARTF 113	Arts of Africa, Oceania, and the Americas	(M, MMR)
+	ARTF 115	African Art	(C, M)
+	ARTF 120	Native American Art	(M)
	ARTF 125	Art History: Arts of the Asian Continent	(C, M, MMR)
	ARTF 130	Pre-Columbian Art	(M)
*	ARTF 188	Women and Gender in Photography	(M)
	ARTF 191	Cultural Influences on Photography	(M)
	ARTF 194	Critical Photography	(M)
	ARTF 212	Sustainable Art and Design	(C)
	BLAS 110	African American Art	(C, M)
+	BLAS 111	Cultural Influences on African Art	(M)
	BLAS 120	Black Music	(C, M)
	CHIC 230	Chicano Art	(C, M)
	CHIC 250	Introduction to Chicana/o Dramatic Art	(C, M)

	Course Subject and Number	Course Title	College
	DFLM 101	Introduction to Film	(MMR)
	DFLM 102	The American Cinema	(MMR)
	DRAM 105	Introduction to Dramatic Arts	(C, M)
	DRAM 107	Study of Filmed Plays	(C, M)
	DRAM 109	Theatre and Social Issues	(C, M)
	DRAM 111	Chicana/o Theatre	(C)
	DRAM 136	History of Canonized Theatre - Ancient Greece to the Restoration	(C)
	DRAM 137	History of Canonized Western Theatre - Restoration to the Present	(C)
	DRAM 150	Cinema as Art and Communication I	(M)
	DRAM 151	Cinema as Art and Communication II	(M)
	DRAM 205	The American Musical on Stage and Screen	(C, M)
	DSGN 104	Graphic Design History	(C)
	FASH 122	Ethnic Costume	(M)
	FJMP 100	Introduction to Cinema	(C)
	MUSI 100	Introduction to Music	(C, M, MMR)
	MUSI 103	History of Rock Music	(C, M, MMR)
	MUSI 109	World Music	(C, M, MMR)
	MUSI 111	Jazz History	(C, M, MMR)
	MUSI 114	Music of The Beatles	(M)
	MUSI 117	Music in the United States	(M)
	MUSI 118	Asian & Pacific Music	(M, MMR)
	MUSI 119	Music in Latin America & North America	(M, MMR)
	MUSI 125	Music, the Arts, and Society	(M)
	MUSI 126	Rap Music and Hip Hop Culture	(M, MMR)

	Course Subject and Number	Course Title	College
	MUSI 131	Music of California	(M)
	MUSI 138	Women in Music	(M)
	PHOT 150	History of Photography	(C)

Area 3B: Humanities

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	AMSL 121	American Sign Language Level II	(C, M, MMR)
*	AMSL 150	Introduction to Deaf Culture	(C, M)
	AMSL 220	American Sign Language Level III	(C, M)
	AMSL 221	American Sign Language Level IV	(C, M)
	ARAB 102	Second Course in Arabic	(C)
	ARAB 201A	Third Course in Arabic	(C)
	ARCH 126	History of Ancient World Architecture	(M)
	ARCH 127	History of World Architecture: Renaissance Through Contemporary	(M)
*	ARTF 108	Women in Art	(M)
*	ARTF 188	Women and Gender in Photography	(M)
	ARTF 191	Cultural Influences on Photography	(M)
*	BLAS 145A	Introduction to African History	(C, M)
*	BLAS 145B	Introduction to African History	(C, M)
	BLAS 150	Black Women in Literature, Film and the Media	(C, M, MMR)
	BLAS 155	African American Literature	(C, M, MMR)
	CHIC 130	Mexican Literature in Translation	(C, M)
	CHIC 135	Chicana/o Literature	(C, M, MMR)
	CHIC 138	Literature of La Raza in Latin America in Translation	(C, M)
	CHIC 190	Chicano Images in Film	(C, M)
*	CHIC 210	Chicano Culture	(C, M)
	CHIN 102	Second Course in Mandarin Chinese	(M)
	CHIN 201	Third Course in Mandarin Chinese	(M)
	CHIN 202	Fourth Course in Mandarin Chinese	(M)

	Course Subject and Number	Course Title	College
	ENGL 208	Introduction to Literature	(C, M, MMR)
	ENGL 209	Literary Approaches to Film	(C, M, MMR)
	ENGL 210	American Literature I	(C, M, MMR)
	ENGL 211	American Literature II	(C, M, MMR)
	ENGL 215	English Literature I: 800-1799	(C, M, MMR)
	ENGL 216	English Literature II: 1800-Present	(C, M, MMR)
	ENGL 220	Masterpieces of World Literature I: 1500 BCE-1600 CE	(C, M, MMR)
	ENGL 221	Masterpieces of World Literature II: 1600-Present	(C, M, MMR)
	ENGL 230	Asian American Literature	(M, MMR)
	ENGL 234	Hip Hop Literature: A Poetry Class	(C, M, MMR)
	ENGL 237	Women in Literature	(C, M, MMR)
	ENGL 240	Shakespeare	(C, M)
	FREN 102	Second Course in French	(C, M)
	FREN 201	Third Course in French	(C, M)
	FREN 202	Fourth Course in French	(C, M)
	GERM 102	Second Course in German	(C, M)
	GERM 201	Third Course in German	(C, M)
*	HIST 100	World History I	(C, M, MMR)
*	HIST 101	World History II	(C, M, MMR)
*	HIST 105	Introduction to Western Civilization I	(C, M, MMR)
*	HIST 106	Introduction to Western Civilization II	(C, M, MMR)
*	HIST 120	Introduction to Asian Civilizations	(C, M, MMR)
*	HIST 121	Asian Civilizations in Modern Times	(C, M, MMR)
*	HIST 131	Latin America Before Independence	(M)
*	HIST 132	Latin America Since Independence	(M)

	Course Subject and Number	Course Title	College
	HUMA 101	Introduction to the Humanities I	(C, M, MMR)
	HUMA 102	Introduction to the Humanities II	(C, M, MMR)
	HUMA 103	Introduction to the New Testament	(C, M)
	HUMA 104	Introduction to the Old Testament	(M)
	HUMA 106	World Religions	(C, M, MMR)
	HUMA 118	Eastern Humanities	(M)
	HUMA 119	Western Humanities	(M)
	HUMA 201	Mythology	(C, M, MMR)
	HUMA 205	Exploring Human Values Through Film	(M)
	HUMA 210	Women in Religion and Myth	(M)
	ITAL 102	Second Course in Italian	(C,M)
	ITAL 201	Third Course in Italian	(C,M)
	JAPN 102	Second Course in Japanese	(M)
	JAPN 201	Third Course in Japanese	(M)
	JAPN 202	Fourth Course in Japanese	(M)
	NAIS 200	American Indian Spirituality	(C, M, MMR)
	PHIL 102A	Introduction to Philosophy: Reality and Knowledge	(C, M, MMR)
	PHIL 102B	Introduction to Philosophy: Values	(C, M, MMR)
	PHIL 103	Historical Introduction to Philosophy	(M)
	PHIL 104A	History Of Western Philosophy: Ancient to Medieval	(C, M, MMR)
	PHIL 104B	History of Western Philosophy: Modern to Contemporary	(C, M)
	PHIL 105	Contemporary Philosophy	(C, M)
	PHIL 106	Asian Philosophy	(C, M)
	PHIL 107	Reflections on Human Nature	(C, M, MMR)
	PHIL 108	Perspectives on Human Nature and Society	(C, M)

	Course Subject and Number	Course Title	College
	PHIL 110	Philosophy of Religion	(C, M)
	PHIL 111	Philosophy In Literature and Other Fiction	(C, M)
	PHIL 112	Philosophy of Science	(M)
	PHIL 125	Philosophy of Women	(C, M)
*	PHIL 126	Philosophy of Contemporary Gender Issues	(C, M)
	PHIL 130	Philosophy of Art and Music	(C, M)
	PHIL 131	Environmental Ethics	(C, M, MMR)
	RUSS 102	Second Course in Russian	(M)
	RUSS 201	Third Course in Russian	(M)
+	SPAN 102	Second Course in Spanish	(C, M, MMR)
+	SPAN 201	Third Course in Spanish	(C, M, MMR)
	SPAN 202	Fourth Course in Spanish	(C, M, MMR)
	SPAN 215	Spanish for Spanish Speakers I	(C, M)
	SPAN 216	Spanish for Spanish Speakers II	(C, M)
	SPAN 221	Hispanic Literature for Spanish Speakers	(M)
	SPAN 222	Hispanic Culture and Civilization for Spanish Speakers	(M)
	TAGA 102	Second Course in Tagalog	(MMR)
	TAGA 201	Third Course in Tagalog	(MMR)
	VIET 102	Second Course in Vietnamese	(M)
	VIET 201	Third Course in Vietnamese	(M)

Area 4: Social and Behavioral Sciences

Two courses (two academic disciplines, 6 semester or 8 quarter units)

	Course Subject and Number	Course Title	College
	AAPI 103	Introduction to Pacific Islander Studies	(M)
*	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
*	AAPI 125	Asian American and Pacific Islander Identities and Cultures	(M)
	AAPI 127	Asian American and American Ideals, Institutions, and Politics	(M)
*	AAPI 130	Asian American and Pacific Islander Women	(M)
	ADJU 101	Introduction to Administration of Justice	(C, MMR)
	ADJU 230	Constitutional Law I	(MMR)
	AGRI 100	Principles of Sustainable Agriculture	(C)
*	AMSL 150	Introduction to Deaf Culture	(C, M)
	ANTH 103	Introduction to Cultural Anthropology	(C, M, MMR)
	ANTH 106	World Prehistory	(C)
	ANTH 107	Introduction to Archaeology	(C, M, MMR)
	ANTH 110	Anthropology of Magic, Witchcraft, and Religion	(C, M)
	ANTH 117	Anthropology of Gender and Sexuality	(M)
	ANTH 140	Primatology	(C, M)
	ANTH 210	Introduction to the Indigenous People of California	(C)
	ANTH 215	Cultures of Latin America	(M)
*	ARTF 108	Women in Art	(M)
*	BLAS 100	Introduction to Black Studies	(C, M, MMR)
+	BLAS 104	Black Psychology	(C, M, MMR)
+	BLAS 115	Sociology from a Black Perspective	(C)
	BLAS 116	Contemporary Social Problems from a Black Perspective	(C, M)

	Course Subject and Number	Course Title	College
	BLAS 125	Dynamics of the Black Community	(M)
	BLAS 130	The Black Family	(C, M)
	BLAS 135	Introduction to Black Politics	(C)
+*	BLAS 140A	African American History to Reconstruction	(C, M, MMR)
+*	BLAS 140B	African American History since Reconstruction to the Present	(C, M, MMR)
*	BLAS 145A	Introduction to African History	(C, M)
*	BLAS 145B	Introduction to African History	(C, M)
	BLAS 175	Psycho-History of Racism and Sexism	(M)
*	CHIC 110A	Introduction to Chicana and Chicano Studies	(C, M, MMR)
*	CHIC 110B	Introduction to Chicano Studies	(C, M)
	CHIC 140	Chicana/o Sociology	(C, M)
+	CHIC 141A	United States History from a Chicano Perspective	(C, M, MMR)
+	CHIC 141B	United States History from a Chicano Perspective	(C, M, MMR)
	CHIC 150	History of Mexico	(C, M)
	CHIC 155	Introduction to Central American Studies	(M)
	CHIC 170	La Chicana	(C, M, MMR)
	CHIC 201	The Indigenous Tradition of Mexico and Ancient Mesoamerica	(C, M)
*	CHIC 210	Chicano Culture	(C, M)
+	CHIL 101	Human Growth and Development	(C, M, MMR)
+	CHIL 103	Lifespan Growth and Development	(MMR)
*	COMS 135	Interpersonal Communication	(C, M, MMR)
	COMS 201	Communication and Community	(C, MMR)
	CRES 101	Conflict Resolution and Mediation	(C)
	DSST 101	Introduction to Disability Studies	(C)

	Course Subject and Number	Course Title	College
	ECON 120	Principles of Macroeconomics	(C, M, MMR)
	ECON 121	Principles of Microeconomics	(C, M, MMR)
	ECON 220	Economics of the Environment	(C, M)
	ENGL 202	Introduction to Linguistics	(C, M)
*	FILI 100	Filipino American Experience	(M, MMR)
	FJMP 101	Introduction to Mass Media	(C)
	GEND 101	Introduction to Gender Studies	(C, MMR)
	GEOG 102	Cultural Geography	(C, M, MMR)
	GEOG 104	World Regional Geography	(C, M, MMR)
	GEOG 154	Introduction to Urban Geography	(C, M)
*	HEAL 103	Introduction to Public Health	(C, M)
	HEAL 104	Public Health and Social Justice	(M)
*	HIST 100	World History I	(C, M, MMR)
*	HIST 101	World History II	(C, M, MMR)
*	HIST 105	Introduction to Western Civilization I	(C, M, MMR)
*	HIST 106	Introduction to Western Civilization II	(C, M, MMR)
+	HIST 109	History of the United States I	(C, M, MMR)
+	HIST 110	History of the United States II	(C, M, MMR)
	HIST 115A	History of the Americas I	(C, M, MMR)
	HIST 115B	History of the Americas II	(C, M, MMR)
*	HIST 120	Introduction to Asian Civilization	(C, M, MMR)
*	HIST 121	Asian Civilizations in Modern Times	(C, M, MMR)
	HIST 123	U.S. History from the Asian Pacific American Perspective	(C, M, MMR)
	HIST 130	The Modern Middle East	(M)
*	HIST 131	Latin America Before Independence	(M)

	Course Subject and Number	Course Title	College
*	HIST 132	Latin America Since Independence	(M)
	HIST 135	History of Technology	(M)
+	HIST 141	Women in United States History I	(M, MMR)
+	HIST 142	Women in United States History II	(M, MMR)
+	HIST 150	Native Americans in United States History I	(M)
+	HIST 151	Native Americans in United States History II	(M)
	HIST 154	Ancient Egypt	(M)
	HIST 175	California History	(M)
	JOUR 202	Introduction to Mass Communication	(C, M, MMR)
	LABR 100	American Labor Movement	(C)
	NAIS 100	Introduction to Native American and Indigenous Studies	(C, M, MMR)
	NUTR 153	Cultural Foods	(C, M, MMR)
	PADM 110	Introduction to Law and Society	(C, M)
	PADM 200	Introduction to Public Administration	(C, MMR)
	PEAC 101	Introduction to Peace Studies	(C)
	PHIL 109	Issues in Social Philosophy	(C, M, MMR)
*	PHIL 126	Philosophy of Contemporary Gender Issues	(C, M)
	POLI 101	Introduction to Political Science	(C, M, MMR)
	POLI 103	Comparative Politics	(C, M, MMR)
	POLI 121	American Political Development	(C, M, MMR)
	POLI 123	Gender and Politics	(M)
	POLI 124	Power and Justice: An Introduction to Political Theory	(C, M)
	POLI 140	Contemporary International Politics	(C, M, MMR)
	POLS C1000	American Government and Politics	(C, M, MMR)
+	PSYC C1000	Introduction to Psychology	(C, M, MMR)

	Course Subject and Number	Course Title	College
	PSYC 111	Psychological /Social Aspects of Aging, Death and Dying	(C, M)
	PSYC 112	Interpersonal Relations	(M)
+	PSYC 121	Introduction to Child Psychology	(M)
+	PSYC 123	Adolescent Psychology	(MMR)
	PSYC 133	Psychology of Women	(M, MMR)
	PSYC 135	Marriage and Family Relations	(C, M, MMR)
+	PSYC 137	Human Sexual Behavior	(C, M, MMR)
	PSYC 155	Introduction to Personality	(C, M, MMR)
	PSYC 166	Introduction to Social Psychology	(C, M, MMR)
	PSYC 211	Learning	(C, M, MMR)
	PSYC 230	Psychology of Lifespan Development	(C, M, MMR)
	PSYC 245	Abnormal Psychology	(C, M, MMR)
	PSYC 283	Introduction to Cognitive Psychology	(C, M, MMR)
+	SOCO 101	Principles of Sociology	(C, M, MMR)
	SOCO 110	Contemporary Social Problems	(C, M, MMR)
	SOCO 125	Sociology of the Family	(C, M)
	SOCO 145	Health and Society	(C, M, MMR)
	SOCO 150	Sociology of Latinos/Latinas	(C, M)
	SOCO 201	Advanced Principles of Sociology	(C, M, MMR)
	SOCO 207	Introduction to Race and Ethnicity	(C, M, MMR)
	SOCO 220	Introduction to Research Methods in Sociology	(C, M, MMR)
	SOCO 223	Globalization and Social Change	(C, M, MMR)
	SPAN 222	Hispanic Culture Civilization for Spanish Speakers	(M)
	SUST 101	Introduction to Sustainability	(C, M, MMR)
	WMNS 101	Introduction to Gender and Women's Studies	(M)

Area 5: Physical and Biological Science

Two courses: one Physical Science course and one Biological Science course (Seven semester units). One of the courses must be a laboratory.

- One course in 5A (underlined courses include a laboratory component)
- One course in 5B (underlined courses include a laboratory component)
- One of the courses selected to fulfill Area 5 requirement (5A or 5B) must include a laboratory component or a separate course must be taken from 5C. If a separate laboratory course is taken from 5C, it must match one of the two lecture courses taken from 5A or 5B.

Area 5A: Physical Science

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	AGRI 125	Introduction to Soil Science	(C)
	ASTR 101	Descriptive Astronomy	(C, M, MMR)
	ASTR 102	Exploring the Solar System and Life Beyond The Earth	(C, M, MMR)
	AVIA 115	Aviation Weather	(MMR)
+	CHEM 100	Fundamentals of Chemistry	(C, M, MMR)
	CHEM 103	General, Organic, and Biological Chemistry	(M, MMR)
	CHEM 111	Chemistry in Society	(C, M, MMR)
+	CHEM 130	Introduction to Organic & Biological Chemistry	(C, M, MMR)
+	CHEM 152	Introduction to General Chemistry	(C, M, MMR)
	CHEM 160	Introductory Biochemistry	(M, MMR)
	CHEM 200	General Chemistry	(C, M, MMR)
	CHEM 201	General Chemistry I	(C, M, MMR)
+	CHEM 231	Organic Chemistry I Lecture	(C, M, MMR)
	CHEM 233	Organic Chemistry II Lecture	(C, M, MMR)
	CHEM 251	Quantitative Analytical Chemistry	(C, M, MMR)
	GEOG 101	Physical Geography	(C, M, MMR)
	GEOL 100	Physical Geology	(C, M, MMR)
	GEOL 104	Earth Science	(C, M, MMR)

	Course Subject and Number	Course Title	College
	GEOL 111	The Earth Through Time	(C, M, MMR)
	GEOL 130	Field Geology of San Diego County	(C, M, MMR)
	OCEA 101	The Oceans	(C, M, MMR)
+	PHYN 100	Survey of Physical Science	(C, M, MMR)
	PHYN 105	Physical Science for Elementary Education	(M)
	PHYN 114	Weather and Climate	(C, M, MMR)
+	PHYS 100	Introductory Physics	(C, M)
+	PHYS 125	General Physics	(C, M, MMR)
+	PHYS 126	General Physics II	(C, M, MMR)
+	PHYS 180A	General Physics I	(C, M, MMR)
+	PHYS 180B	General Physics II	(C, M, MMR)
+	PHYS 195	Mechanics	(C, M, MMR)
+	PHYS 196	Electricity and Magnetism	(C, M, MMR)
+	PHYS 197	Waves, Optics and Modern Physics	(C, M, MMR)

Area 5B: Biological Science

One course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	AGRI 107	Introduction to Agricultural Plant Science	(C)
	ANTH 102	Introduction to Biological Anthropology	(C, M, MMR)
+	BIOL 100	Natural History – Environmental	(M, MMR)
	BIOL 101	Issues in Environmental Science & Sustainability	(C, MMR)
+	BIOL 107	General Biology- Lecture and Laboratory	(C, M, MMR)
	BIOL 110	Introduction to Oceanography	(M)
	BIOL 115	Marine Biology	(M, MMR)
+	BIOL 120	The Environment of Man	(M)
	BIOL 130	Human Heredity	(C, M, MMR)
	BIOL 131	Introduction to Biotechnology	(MMR)
+	BIOL 180	Plants and People	(C, M, MMR)
	BIOL 205	General Microbiology	(C, M, MMR)
	BIOL 210A	Introduction to the Biological Sciences I	(C, M, MMR)
	BIOL 210B	Introduction to the Biological Sciences II	(C, M, MMR)
+	BIOL 215	Introduction to Zoology	(M)
	BIOL 230	Human Anatomy	(C, M, MMR)
	BIOL 235	Human Physiology	(C, M, MMR)
+	BIOL 250	Introduction to Botany	(M)
	PSYC 260	Introduction to Physiological Psychology	(C, M, MMR)

Area 5C: Laboratory

One course (1 semester or 1 quarter unit)

	Course Subject and Number	Course Title	College
	ANTH 104	Laboratory in Biological Anthropology	(C, M, MMR)
+	ASTR 109	Practice in Observing - Laboratory	(C, M, MMR)
+	ASTR 111	Astronomy Laboratory	(C, M, MMR)
+	CHEM 100L	Fundamentals of Chemistry - Laboratory	(C, M, MMR)
+	CHEM 111L	Chemistry and Society Laboratory	(C, M)
+	CHEM 130L	Introduction to Organic & Biological Chemistry	(C, M, MMR)
+	CHEM 152L	Introduction to General Chemistry	(C, M, MMR)
	CHEM 200L	General Chemistry I	(C, M, MMR)
	CHEM 201L	General Chemistry II	(C, M, MMR)
+	CHEM 231L	Organic Chemistry I Laboratory	(C, M, MMR)
	CHEM 233L	Organic Chemistry II Laboratory	(C, M, MMR)
	GEOG 101L	Physical Geography	(C, M, MMR)
	GEOL 101	Physical Geology Laboratory	(C, M, MMR)
	GEOL 120	Earth Science Laboratory	(C, M)
+	PHYN 101	Survey of Physical Science Laboratory	(C, M)
+	PHYS 181A	General Physics Lab I	(C, M, MMR)
+	PHYS 181B	General Physics Lab II	(C, M, MMR)
	PSYC 260L	Introduction to Physiological Psychology Laboratory	(M)

Area 6: Ethnic Studies

One Course (3 semester or 4 quarter units)

	Course Subject and Number	Course Title	College
	AAPI 124	Introduction to Asian American and Pacific Islander Studies	(C, M, MMR)
	AAPI 125	Asian American and Pacific Islander Identities and Cultures	(M)
	AAPI 130	Asian American and Pacific Islander Women	(M)
	BLAS 100	Introduction to Black Studies	(C, M, MMR)
	BLAS 140A	African American History to Reconstruction	(C, M, MMR)
	BLAS 140B	African American History since Reconstruction to the Present	(C, M, MMR)
*	CHIC 110A	Introduction to Chicana and Chicano Studies	(C, M, MMR)
*	CHIC 110B	Introduction to Chicana and Chicano Studies	(C, M)
	FILI 100	Filipino American Experience	(MMR)

Other Transfer General Education Options

Overview

While Cal-GETC is the standard general education (GE) pathway for students transferring to a UC or CSU, some students may benefit from alternative GE patterns based on their major, transfer university, or personal academic goals.

It is strongly recommended students meet with a counselor to determine the best GE pathway for their transfer plan.

Students may benefit from an alternative GE pattern if they fall into one of the following categories:

1. Students entering high unit majors such as an engineering or science discipline.
    - Many science and engineering majors have extensive major preparation requirements, leaving little room for GE courses.
    - Some universities prefer or require students focus on completing major preparation courses prior to transfer.
    - Students should check the transfer university's catalog or advising materials and consult a counselor for course selection.
2. Students transferring to a private/independent or out-of-state university.
    - Some private/ independent and out-of-state universities accept Cal-GETC or an approved intersegmental lower-division general education pattern used to transfer to the University of California or the California State University, but most do not. Instead, each university has its own unique GE pattern.

- Miramar College has established articulation agreements with many private and out-of-state universities. These agreements specify the courses students can complete at Miramar to fulfill the university's GE requirements. They are available online. For more information on transferring to a private/ independent or out-of-state university, visit the Transfer Center or see a counselor.

3. Students who wish to complete the general education requirements of one specific university.

   Some students decide to complete the GE requirements for one specific university, rather than the more universally applicable Cal-GETC, for several reasons:

   - Some universities and/or majors do not accept Cal-GETC and instead suggest following the university's own GE pattern.
   - Some students know that they will attend only one university (such as those with a guarantee of transfer admission) and so plan to complete the specific GE pattern for that institution only.
   - Some university-specific GE patterns require fewer total units than Cal-GETC.

Each university's unique GE pattern can be found in the university catalog. In addition, some UC and CSU campuses have posted their unique general education patterns to the ASSIST.

Additional General Education Options for Transfer

Students who have established and maintained catalog rights prior to Fall 2025 may use:

- California State University General Education Breadth (CSU-GE); or
- Intersegmental General Education Transfer Curriculum (IGETC) pattern

CSU GE Breadth is accepted by all CSU campuses and some private/independent or out-of-state universities. It is not accepted by the UC system.

IGETC is accepted by all CSU campuses and most UC campuses and majors. It is also accepted by some private/ independent or out-of-state universities.

Students with catalog rights may use the version of the GE pattern that was current when they began at a California community college and as it applied to their designated catalog year.

Tip: Students who plan to transfer to a four-year institution should review the Transfer Requirements section of this catalog.

Transfer Admission Guarantee (TAG)

Miramar College offers a number of Guarantee Admission Programs. Come to the Transfer Center (K1-306) or visit the Transfer Center for program requirements. Plan early as some agreements must be submitted at least a year in advance of the transfer semester/quarter.

CSU U.S. History, Constitution, and American Ideals Certification

Before awarding a degree, the California State University requires students to complete courses or pass examinations that cover:

1. The historical development of American institutions and ideals (Area US-1), and
2. The Constitution of the United States and the operation of representative democratic government under that Constitution (Area US-2), and
3. The process of California state and local government (Area US-3).

This requirement may be fulfilled at a California Community College prior to transfer by completing a combination of courses that satisfies all three areas of the requirement. The requirement may also be completed at a CSU campus after transfer. Courses approved in two US areas may be used to satisfy both areas.

Although this requirement is not part of the General Education requirements for CSU, all students must complete course work in U.S. History, Constitution and Government before graduation from a CSU campus. The courses may also be used to partially fulfill Area D of the CSU General Education Breadth Requirements.

A check mark [✓] indicates courses has been approved to meet the area.
Note: Not required for Certification.

Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments
BLAS 140A African American History to Reconstruction (C,M,MMR)	✓	✓	
BLAS 140B African American History since Reconstruction to the Present (C,M,MMR)	✓		✓
CHIC 141A United States History from a Chicano Perspective (C,M,MMR)	✓	✓	
CHIC 141B United States History from a Chicano Perspective (C,M,MMR)	✓		✓
HIST 109 History of the United States I (C,M,MMR)	✓	✓	
HIST 110 History of the United States II (C,M,MMR)	✓		✓
HIST 115A History of the Americas I (C,M,MMR)	✓	✓	
HIST 115B History of the Americas II (C,M,MMR)	✓		✓
HIST 123 U.S. History from the Asian Pacific American Perspective (C,M, MMR)	✓		
HIST 141 Women in United States History I (M,MMR)	✓	✓	
HIST 142 Women in United States History II (M,MMR)	✓		✓
HIST 150 Native Americans in United States History I (M)	✓	✓	
HIST 151 Native Americans in United States History II (M)	✓		✓
HIST 175 California History (M)			✓

Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments
POLI 121 American Political Development (C,M,MMR)	✓	✓	
POLS C1000 American Government and Politics (C,M,MMR)		✓	✓

NOTES:

- *Completion of the Advanced Placement examination in U.S. History with a score of 3 or higher will satisfy the requirement for the CSU American Institutions Area US-1 only.*
- *Completion of the Advanced Placement examination in U.S. Government & Politics with a score of 3 or higher will satisfy the requirement for Area US-2.*
- *Students who have completed the American Institutions requirement except for the California government portion must complete one course approved in Area US-3.*

Degree Curricula and Certificate Programs

200-HOUR REGISTERED YOGA TEACHER - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

This certificate prepares students to meet the requirements for the 200-Hour Registered Yoga Teacher (RYT) certification through Yoga Alliance. The requirements are thorough and comprehensive, including a broad background of yoga's essential elements. Courses in the major include content in history and philosophy, anatomy and physiology, proper sequencing, alignment principles, experience in a variety of yoga styles, and hands-on practical experience.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the 200-Hour Registered Yoga Teacher Program will be able to:

1. Instruct appropriate progressions and regressions of yoga poses (asanas) to create a safe and effective multi-level class experience.
2. Design intelligently structured and sequenced yoga classes.
3. Demonstrate appropriate teaching methodologies and effective communication skills while leading a varied group of yoga participants.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

EXSC 292A	Yoga Teacher Training Essentials (Active)	3.0
EXSC 292B	Yoga Teacher Training Progressive Methodologies (Active)	3.0

Complete at least one unit from the following courses: **Semester Units:** 1.0

EXSC 145A	Yoga I (Active)	0.5-1.0
EXSC 145B	Yoga II (Active)	0.5-1.0
EXSC 145C	Yoga III (Active)	0.5-1.0
EXSC 145D	Yoga IV (Active)	0.5-1.0

300-HOUR REGISTERED YOGA TEACHER - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

This certificate prepares students to meet the requirements for the 300-Hour Registered Yoga Teacher (RYT) certification through Yoga Alliance. This advanced training builds upon and deepens the trainee's understanding of the fundamental concepts of the practice and teaching of yoga that are taught in the 200-hour certification. Specifically, this training enhances one's ability to evaluate and analyze various levels of yoga classes (beginning through advanced), while obtaining essential and advanced yoga principles.

Note: Students are required to complete the coursework for the 200-hour RYT certification prior to enrolling in the 300-hour RYT certification courses. The 200-hour RYT coursework may be completed through San Diego Miramar College or a different institution. Please consult the catalog and counselors for more information.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the 300-Hour Registered Yoga Teacher Program will be able to:

1. Instruct appropriate progressions and regressions of yoga poses (asanas) to create a safe and effective multi-level class experience.
2. Design intelligently structured and sequenced yoga classes.
3. Demonstrate appropriate teaching methodologies and effective communication skills while leading a varied group of yoga participants.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0-10.0

EXSC 293A	Yoga Teacher Training Integration (Active)	3.0
EXSC 293B	Yoga Teacher Training Implementation (Active)	3.0
EXSC 270	Exercise Science Internship / Work Experience (Active)	1.0-4.0

Complete at least five (5) units from the following courses: **Semester Units:** 5.0

EXSC 145A	Yoga I (Active)	0.5-1.0
EXSC 145B	Yoga II (Active)	0.5-1.0
EXSC 145C	Yoga III (Active)	0.5-1.0
EXSC 145D	Yoga IV (Active)	0.5-1.0
EXSC 393A	Special Topics in Exercise and Fitness Theory and Training (Active)	1.0-3.0
HUMA 201	Mythology (Active)	3.0
No more than one of the following business entrepreneurship courses:		3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
OR		
BUSE 155	Small Business Management (Active)	3.0
OR		
BUSE 157	Developing a Plan for the Small Business (Active)	3.0

ACCOUNTANCY - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

General knowledge of financial and managerial accounting in a technological environment as well as introductory knowledge of inventory, cost, and payroll accounting.

Competence in Microsoft Excel is recommended preparation for employment in the field of accountancy.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Accountancy Program will be able to:

1. Create accurate, reliable, and relevant accounting documents and reports for decision makers using the information.
2. Demonstrate effective use of accounting software applications considered applicable to the current accounting environment.
3. Demonstrate an understanding of basic accounting terminology and the process by which transactions are analyzed, evaluated, and communicated into the financial statements.

4. Understand and practice high ethical standards with internal and external stakeholders.
5. Prepare a federal and California individual income tax return in proper form according to current federal and state tax rules and regulations.
6. Demonstrate the ability to compute, record, and verify quantitative and qualitative information in order to maintain financial records.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 37.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
ACCT 120	Federal Income Tax (Active)	3.0
ACCT 121	California Income Tax (Active)	1.0
ACCT 150	Computer Accounting Applications (Active)	3.0
ACCT 201A	Intermediate Accounting I (Active)	3.0
BUSE 100	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

ACCOUNTANCY - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

General knowledge of financial and managerial accounting in a technological environment as well as introductory knowledge of inventory, cost, and payroll accounting.

Note: Competence in Microsoft Excel is recommended preparation for employment in the field of accountancy.

Learning Outcome(s): Students who complete the Accountancy Program will be able to:

1. Create accurate, reliable, and relevant accounting documents and reports for decision makers using the information.
2. Demonstrate effective use of accounting software applications considered applicable to the current accounting environment.
3. Demonstrate an understanding of basic accounting terminology and the process by which transactions are analyzed, evaluated, and communicated into the financial statements.
4. Understand and practice high ethical standards with internal and external stakeholders.
5. Prepare a federal and California individual income tax return in proper form according to current federal and state tax rules and regulations.
6. Demonstrate the ability to compute, record, and verify quantitative and qualitative information in order to maintain financial records.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 22.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
ACCT 120	Federal Income Tax (Active)	3.0
ACCT 121	California Income Tax (Active)	1.0
ACCT 150	Computer Accounting Applications (Active)	3.0
ACCT 201A	Intermediate Accounting I (Active)	3.0

CISC 181	Principles of Information Systems (Active)	4.0

ACCOUNTING BOOKKEEPING - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The documentation of business activities is accomplished through accounting. Without accurate and timely accounting information businesses do not know their financial position, who owes them money, whom they owe money to, or what assets they have available for business processes, etc.

This program addresses the minimum skill levels to enter the technical and exacting world of accountancy. With the basic knowledge of financial and managerial accounting, computerized accounting applications, tax compliance, auditing principles, accounting terminology, and the process and flow of accounting, an individual is ready for entry level positions in service, retail, and manufacturing businesses as well as tax preparation for individuals.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Accounting Bookkeeping Program will be able to:

1. Create accurate, reliable, and relevant accounting documents and reports for decision makers using the information.
2. Demonstrate effective use of accounting software applications considered applicable to the current accounting environment.
3. Understand and practice high ethical standards with internal and external stakeholders.
4. Demonstrate an understanding of basic accounting terminology and the process by which transactions are analyzed, evaluated, and communicated into the financial statements.
5. Prepare a federal and California individual income tax return in proper form according to current federal and state tax rules and regulations.
6. Demonstrate the ability to compute, record, and verify quantitative and qualitative information in order to maintain financial records.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 12.0-13.0
		3.0-4.0
ACCT 102	Basic Accounting (Active)	3.0
OR		
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 150	Computer Accounting Applications (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0

ADMINISTRATION OF JUSTICE - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE

Summary

The Associate in Science in Administration of Justice for Transfer is intended for students who plan to complete a bachelor's degree in Administration of Justice or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Administration of Justice Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

ADJU 101[1]	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0

[1]ADJU 101 * Course also fulfills general education requirements for the CSU GE or IGETC pattern.

Select two of the following courses: **Semester Units:** 6.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 220	Law Enforcement Forensics (Active)	3.0

Select two of the following courses (minimum 6 units): **Semester Units:** 6.0

(It is recommended to select courses that meet lower division major preparation requirements for your transfer university)

		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0

ADMINISTRATIVE ASSISTANT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Computer Business Technology program provides theory and hands-on training in major office systems, webpage design, and technology used to enhance productivity and communications. Students are prepared through extensive coursework with the necessary skills and knowledge for initial employment in business and related fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Administrative Assistant Program will be able to:

1. Identify effective business communications skills.
2. Demonstrate proficiency in using software applications to enter data, format and organize data, complete calculations, graph data, create templates, develop professional reports, forms, and queries, and produce professional looking presentations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

CBTE 114	Introduction to Microsoft Windows (Active)	1.0
CBTE 122	Intermediate Microsoft Word (Active)	3.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 165	Webpage Creation with Dreamweaver (Active)	3.0
CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 119	Business Communications (Active)	3.0

ADMINISTRATIVE ASSISTANT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Prepares the student for employment in business or civil service as a general office clerk, clerk-typist, file clerk, receptionist, cashier, word processor, machine transcriptionist, or other positions not requiring stenography.

Learning Outcome(s): Students who complete the Administrative Assistant Program will be able to:

1. Identify effective business communications skills.
2. Demonstrate proficiency in using software applications to enter data, format and organize data, complete calculations, graph data, create templates, develop professional reports, forms, and queries, and produce professional looking presentations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

CBTE 114	Introduction to Microsoft Windows (Active)	1.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 210	Computers in Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0

ADMINISTRATIVE ASSISTANT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

This certificate prepares students for entry-level positions as administrative assistants.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Administrative Assistant Program will be able to:

1. Identify effective business communications skills.
2. Demonstrate proficiency in using software applications to enter data, format and organize data, complete calculations, graph data, create templates, develop professional reports, forms, and queries, and produce professional looking presentations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

CBTE 114	Introduction to Microsoft Windows (Active)	1.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 180	Microsoft Office (Active)	3.0

ADVANCED EMISSION SPECIALIST - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE)

certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Advanced Emission Specialist Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 5.0-8.0

AUTO 186	BAR Specified Diagnostic, Repair, and Level 2 Inspection Training (Active)	4.0
AUTO 270	Work Experience (Active)	1.0-4.0

ADVANCED ENGLISH LANGUAGE ACQUISITION - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Advanced ELAC Certificate recognizes a high level of English language achievement. Students who earn this award have successfully completed advanced ELAC coursework in grammar; writing; reading, listening, and speaking skills; and critical thinking.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Advanced English Language Acquisition Program will be able to:

1. Speak, read, and write with a variety of complex sentence and grammatical structures with minimal errors that do not interfere with meaning.
2. Write supporting paragraphs with major and minor details related to each topic sentence.
3. Express a clear and coherent opinion about a selected topic and provide at least two points of appropriate support for an opinion in a speech of three to five minutes.
4. Write an essay with a thesis statement that is clear, direct, and answers the prompt.
5. Organize writing with unity and coherence.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

ELAC 33	Academic Listening and Speaking II (Active)	3.0
ELAC 145	Integrated Reading, Writing, and Grammar III (Active)	6.0

ADVANCED TRAFFIC ACCIDENT INVESTIGATION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Learning Outcome(s): Students who complete the Advanced Traffic Accident Investigation Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.7

ADJU 260	POST Certified Regional Academy (Active)	24.0
ADJU 322A	Basic Traffic Accident Investigation (Active)	1.0
ADJU 304A	Intermediate Traffic Accident Investigation (Active)	0.5
ADJU 305A	Advanced Traffic Accident Investigation (Active)	1.5
ADJU 332A	POST Certified Driving Under the Influence Course (Active)	0.5
ADJU 366	Radar-Laser Operator (LIDAR) (Active)	0.2

ANTHROPOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

This degree is accepted by some but not all CSU campuses.

The Associate in Arts in Anthropology for Transfer Degree is intended for students who plan to complete a bachelor's degree in Anthropology or a related major in the California State University (CSU) system. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Anthropology Program will be able to:

1. Think critically in reading, writing, and/or speaking about topics in Anthropology, thereby identifying problems, theses, arguments, evidence and conclusions.
2. Demonstrate knowledge of key anthropological concepts, facts, and ideas that guide anthropological research and understandings, including biological and cultural adaptations.
3. Demonstrate an ability to understand one's role in human society and in relation to global cultures, as well as among living organisms on Earth.
4. Articulate and analyze the origin of inequities related to social and cultural constructions of race, gender, and power.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ANTH 102	Introduction to Biological Anthropology (Active)	3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ANTH 107	Introduction to Archaeology (Active)	3.0
		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0

Select 1-2 courses (4-5 units) from the following: **Semester Units:** 4.0-5.0

ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
BIOL 230	Human Anatomy (Active)	4.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0

Select 1 or more courses (3 units minimum) from the following: **Semester Units:** 3.0-4.0

ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
BIOL 230	Human Anatomy (Active)	4.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0
FILI 100	Filipino American Experience (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0

HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
HUMA 106	World Religions (Active)	3.0
MUSI 109	World Music (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0

APPLIED BIOTECHNOLOGY-MOLECULAR BIOLOGY - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

Students may take the specific biotechnology courses and receive a Certificate of Performance authorized and issued by the academic department. It is not intended to nor will it be recognized as an official state approved program. It is intended to provide students with intensive laboratory skills development experience to meet entry-level employment requirements in the biotechnology industry.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Applied Biotechnology-Molecular Biology Program will be able to:

1. Demonstrate proficiency with current scientific lab techniques.
2. Demonstrate and apply the proper method when creating laboratory reports required for an entry level position in the Biotechnology field.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

BIOL 132	Applied Biotechnology I (Active)	4.0
BIOL 133	Applied Biotechnology II (Active)	4.0

ART HISTORY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

This degree is accepted by some but not all CSU campuses.

The Associate in Arts in Art History for Transfer Degree is intended for students who plan to complete a bachelor's degree in Art History or a related major in the California State University (CSU) system. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Art History Program will be able to:

1. Identify the theoretical, cultural, and historical context of art.
2. Discuss the significance of visual expression and use of materials in art throughout history.
3. Critically analyze, interpret, and evaluate works of art.
4. Explain the social, religious, and political highlights of Western and Non-Western cultures and their effects on art forms from prehistoric to modern times.
5. Apply skills-based practice, art theory, and research methodologies to understand the creative process of art-making and compose visually effective images.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0

Select one course (3 units minimum) from the following: **Semester Units:** 3.0

ARTF 107	Contemporary Art (Active)	3.0
ARTF 109	Modern Art (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
DFLM 101	Introduction to Film (Active)	3.0

ART/VISUAL STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

Art is the study of the arrangement of forms that affect the senses, communicate political, social, cultural, religious, or emotional ideas that manifest in scenes and through objects produced throughout the world. This field includes the study and design of both two-dimensional and three-dimensional art. The art program is designed to maximize transferable course units and to provide basic skills required for employment in art-related fields.

The Associate of Arts degree with an area of emphasis in Art/Visual Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in an art-related major

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Art/Visual Studies Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.

2. Develop a foundation of art skills and a high level of craftsperson ship by utilizing a variety of tools and technologies associated with the visual arts.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.
5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0

Select at least 12 units, including at least two ARTF courses, from the following: **Semester Units:** 12.0

ARTF 100	Art Orientation (Active)	3.0
ARTF 107	Contemporary Art (Active)	3.0
ARTF 109	Modern Art (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0
ARTF 155B	Freehand Drawing II (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0
ARTF 210B	Life Drawing II (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 103	Lifespan Growth and Development (Active)	3.0
ENGL 209	Literary Approaches to Film (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

AUDIO PRODUCTION AND ENGINEERING - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate in Science Degree in Audio Production and Engineering prepares students with a solid foundation in digital recording, mixing and mastering musical projects using state-of-the-art software and plug-ins. Students produce musical projects using Musical Instrument Digital Interface (MIDI) sequencing, as well as music for multimedia projects, film and video. Combined with coursework in basic musicianship skills and abilities, students are prepared for entry-level positions in a variety of fields in the music and audio industries.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Learning Outcome(s): Students who complete the Audio Production and Engineering Program will be able to:

1. Conduct an in depth analysis of contemporary music identifying genres from different periods as well as an analysis of music from historical and theoretical perspectives.
2. Summarize societal issues associated with the production, dissemination, celebration and consumption of Music.
3. Describe the relationship between technology using the technological tools applicable as it relates to music.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

MUSI 108	The Business of Music (Active)	3.0
MUSI 150A	Basic Musicianship (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
MUSI 201	Recording Arts (Active)	3.0
MUSI 202	Computer Music (Active)	3.0
MUSI 204	Audio System Design and Maintenance (Active)	3.0
MUSI 205A	Audio Production Projects I (Active)	3.0
MUSI 205B	Audio Production Projects II (Active)	3.0

AUDIO PRODUCTION AND ENGINEERING - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Certificate of Achievement in Audio Production and Engineering prepares students with a solid foundation in digital recording, mixing and mastering musical projects using state-of-the-art software and plug-ins. Students produce musical projects using Musical Instrument Digital Interface (MIDI) sequencing, as well as music for multimedia projects, film and video. Combined with coursework in basic musicianship skills and abilities, students are prepared for entry-level positions in a variety of fields in the music and audio industries.

Learning Outcome(s): Students who complete the Audio Production and Engineering Program will be able to:

1. Conduct an in depth analysis of contemporary music identifying genres from different periods as well as an analysis of music from historical and theoretical perspectives.
2. Summarize societal issues associated with the production, dissemination, celebration and consumption of Music.
3. Describe the relationship between technology using the technological tools applicable as it relates to music.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

MUSI 108	The Business of Music (Active)	3.0
MUSI 150A	Basic Musicianship (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
MUSI 201	Recording Arts (Active)	3.0
MUSI 202	Computer Music (Active)	3.0
MUSI 204	Audio System Design and Maintenance (Active)	3.0
MUSI 205A	Audio Production Projects I (Active)	3.0
MUSI 205B	Audio Production Projects II (Active)	3.0

AUDIO PRODUCTION AND ENGINEERING - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Certificate of Performance in Audio Production and Engineering prepares students with a solid foundation in digital recording, mixing and mastering musical projects using state-of-the-art software and plug-ins. Students produce musical projects using Musical Instrument Digital Interface (MIDI) sequencing, as well as music for multimedia projects, film and video.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Audio Production and Engineering Program will be able to:

1. Conduct an in depth analysis of contemporary music identifying genres from different periods as well as an analysis of music from historical and theoretical perspectives.
2. Summarize societal issues associated with the production, dissemination, celebration and consumption of Music.
3. Describe the relationship between technology using the technological tools applicable as it relates to music.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

MUSI 190	Introduction to Music Technology (Active)	3.0
MUSI 201	Recording Arts (Active)	3.0
MUSI 202	Computer Music (Active)	3.0
MUSI 205A	Audio Production Projects I (Active)	3.0
MUSI 205B	Audio Production Projects II (Active)	3.0

AUTOMOTIVE CHASSIS - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Learning Outcome(s): Students who complete the Automotive Chassis Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.

3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

		4.0
AUTO 161G	Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
OR		
AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
		4.0
AUTO 162G	Advanced Electrical (Active)	4.0
OR		
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
		4.0
AUTO 176G	Automotive Brake Systems (Active)	4.0
OR		
AUTO 176T	Honda/Toyota Automotive Brake Systems (Active)	4.0
		4.0
AUTO 178G	Suspension, Steering and Handling (Active)	4.0
OR		
AUTO 178T	Honda/Toyota Suspension, Steering and Handling (Active)	4.0

AUTOMOTIVE ELECTRICAL - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Learning Outcome(s): Students who complete the Automotive Electrical Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

		4.0
AUTO 161G	Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
OR		
AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
		4.0
AUTO 162G	Advanced Electrical (Active)	4.0
OR		
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
		4.0
AUTO 165G	Engine Performance (Active)	4.0
OR		
AUTO 165T	Honda/Toyota Engine Performance (Active)	4.0
		4.0
AUTO 169G	Climate Control Systems (Active)	4.0
OR		
AUTO 169T	Honda/Toyota Climate Control Systems (Active)	4.0

AUTOMOTIVE ENGINE PERFORMANCE - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Learning Outcome(s): Students who complete the Automotive Engine Performance Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

		4.0

AUTO 156G	Engine and Related Systems (Active)	4.0
OR		
AUTO 156T	Honda/Toyota Engine and Related Systems (Active)	4.0
		4.0
AUTO 161G	Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
OR		
AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
		4.0
AUTO 162G	Advanced Electrical (Active)	4.0
OR		
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
		4.0
AUTO 165G	Engine Performance (Active)	4.0
OR		
AUTO 165T	Honda/Toyota Engine Performance (Active)	4.0
		4.0
AUTO 167G	Advanced Engine Performance (Active)	4.0
OR		
AUTO 167T	Honda/Toyota Advanced Engine Performance (Active)	4.0

AUTOMOTIVE TECHNOLOGY - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Automotive Technology Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 40.0

		4.0
AUTO 156G	Engine and Related Systems (Active)	4.0
OR		
AUTO 156T	Honda/Toyota Engine and Related Systems (Active)	4.0
		4.0
AUTO 161G	Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
OR		
AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
		4.0
AUTO 162G	Advanced Electrical (Active)	4.0
OR		
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
		4.0
AUTO 165G	Engine Performance (Active)	4.0
OR		
AUTO 165T	Honda/Toyota Engine Performance (Active)	4.0
		4.0
AUTO 167G	Advanced Engine Performance (Active)	4.0
OR		
AUTO 167T	Honda/Toyota Advanced Engine Performance (Active)	4.0
		4.0
AUTO 169G	Climate Control Systems (Active)	4.0
OR		
AUTO 169T	Honda/Toyota Climate Control Systems (Active)	4.0
		4.0
AUTO 172G	Manual Drive Train and Axles (Active)	4.0
OR		
AUTO 172T	Honda/Toyota Manual Drive Train and Axles (Active)	4.0
		4.0
AUTO 174G	Automatic Transmissions/Axles (Active)	4.0
OR		
AUTO 174T	Honda/Toyota Automatic Transmissions/Axles (Active)	4.0
		4.0
AUTO 176G	Automotive Brake Systems (Active)	4.0
OR		
AUTO 176T	Honda/Toyota Automotive Brake Systems (Active)	4.0
		4.0
AUTO 178G	Suspension, Steering and Handling (Active)	4.0
OR		
AUTO 178T	Honda/Toyota Suspension, Steering and Handling (Active)	4.0

AUTOMOTIVE TRANSMISSIONS - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist.

The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Learning Outcome(s): Students who complete the Automotive Transmissions Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

		4.0
AUTO 161G	Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
OR		
AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
		4.0
AUTO 162G	Advanced Electrical (Active)	4.0
OR		
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
		4.0
AUTO 165G	Engine Performance (Active)	4.0
OR		
AUTO 165T	Honda/Toyota Engine Performance (Active)	4.0
		4.0
AUTO 172G	Manual Drive Train and Axles (Active)	4.0
OR		
AUTO 172T	Honda/Toyota Manual Drive Train and Axles (Active)	4.0
		4.0
AUTO 174G	Automatic Transmissions/Axles (Active)	4.0
OR		
AUTO 174T	Honda/Toyota Automatic Transmissions/Axles (Active)	4.0

AVIATION BUSINESS ADMINISTRATION - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

Courses must be taken for a letter grade if used to satisfy degree requirements.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Aviation Business Administration Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 125	Aviation and Airport Management (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
BUSE 119	Business Communications (Active)	3.0

FAA-issued Private Pilot certificate satisfies the AVIA 101 requirement.

Select one of the following leadership/management-related courses: **Semester Units:** 3.0

AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0

Select one of the following business information systems-related courses: **Semester Units:** 3.0-4.0

CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

Select one of the following business economics-related courses: **Semester Units:** 3.0-4.0

ACCT 116A	Financial Accounting (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select an additional three units from the following: **Semester Units:** 3.0-4.0

AVIA 101L	Private Pilot Flight Lab (Active)	1.0
AVIA 115	Aviation Weather (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 228	Group Dynamics II (Active)	3.0
AVIA 270	Aviation Operations Internship / Work Experience (Active)	1.0-4.0
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Courses must be taken for a letter grade if used to satisfy degree requirements.

AVIATION GENERAL STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Prepares the student for employment in the aviation industry. This program DOES NOT meet the FAA minimum requirements for the Airframe or Powerplant rating. This is also an ideal program for students who already have their Mechanic's Certificate but wish to obtain a degree.

Prerequisites may be waived depending on the student's background.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Aviation General Studies Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0

Select 2 or more units from the following:

General Curriculum: **Semester Units:** 0.0

AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 0.0

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5

AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

Powerplant Curriculum: **Semester Units:** 0.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION GENERAL STUDIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Prepares the student for employment in the aviation industry. This program DOES NOT meet the FAA minimum requirements for the Airframe or Powerplant rating. This is also an ideal program for students who already have their Mechanic's Certificate but wish to obtain a degree.

Learning Outcome(s): Students who complete the Aviation General Studies Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0

Select 2 or more units from the following:

General Curriculum: **Semester Units:** 0.0

AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 0.0

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5
AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

Powerplant Curriculum: **Semester Units:** 0.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - AIRFRAME - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Qualifies the student for the FAA Airframe exam.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Airframe Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 25.5

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0

AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5
AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - AIRFRAME - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Qualifies the student for the FAA Airframe exam.

Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Airframe Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 25.5

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5

AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5
AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - AIRFRAME & POWERPLANT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Qualifies the student for the FAA Airframe and Powerplant exam.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Airframe & Powerplant Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit For Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0

AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 25.5

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5
AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

Powerplant Curriculum: **Semester Units:** 31.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - AIRFRAME & POWERPLANT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Qualifies the student for the FAA Airframe and Powerplant exam.

Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Airframe & Powerplant Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Airframe Curriculum: **Semester Units:** 25.5

AVIM 103A	Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	3.0
AVIM 104A	Applied Aircraft Wood, Fabric, Finishing and Composite Structures (Active)	1.5
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 103C	Aircraft Hydraulic Systems (Active)	3.0
AVIM 104C	Applied Aircraft Hydraulic Systems (Active)	1.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 105B	Aircraft Assembly, Rigging and Inspection (Active)	1.5
AVIM 106B	Applied Aircraft Assembly, Rigging and Inspection (Active)	1.0
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0

Powerplant Curriculum: **Semester Units:** 31.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5

AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - POWERPLANT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Qualifies the student for the FAA Powerplant exam.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Powerplant Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit For Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0

AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Powerplant Curriculum: **Semester Units:** 31.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION MAINTENANCE TECHNOLOGY - POWERPLANT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Qualifies the student for the FAA Powerplant exam.

Learning Outcome(s): Students who complete the Aviation Maintenance Technology - Powerplant Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

General Curriculum: **Semester Units:** 21.5

AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5

Powerplant Curriculum: **Semester Units:** 31.0

AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110B	Applied Powerplant Ignition Systems (Active)	0.5
AVIM 109C	Powerplant Electrical Systems (Active)	3.0
AVIM 110C	Applied Powerplant Electrical Systems (Active)	0.5
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 241	Aircraft Propeller Systems (Active)	3.0
AVIM 242	Applied Aircraft Propeller Systems (Active)	1.0
AVIM 249	Induction and Fuel Metering (Active)	3.0
AVIM 250	Applied Induction and Fuel Metering (Active)	1.0
AVIM 253	Lubrication, Cooling, and Exhaust (Active)	3.0
AVIM 254	Applied Lubrication, Cooling, and Exhaust (Active)	1.0

AVIATION OPERATIONS MANAGEMENT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Aviation Operations Management Certificate of Achievement is designed to prepare a student for employment as an entry-level line supervisor or manager in an aviation operations-related field.

Learning Outcome(s): Students who complete the Aviation Operations Management Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 125	Aviation and Airport Management (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
BUSE 119	Business Communications (Active)	3.0

Select one of the following leadership/management-related courses: **Semester Units:** 3.0

AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0

FAA-issued Private Pilot certificate satisfies the AVIA 101 requirement. Students satisfying requirements via FAA certificates must complete alternate coursework approved by the department in order to satisfy the requirement for 18 units in the major.

BIOLOGY - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Biology for Transfer is intended for students who plan to complete a bachelor's degree in Biology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.

- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Biology Program will be able to:

1. Use acquired knowledge of biology to evaluate current events.
2. Communicate core concepts and processes central to biology using scientific terminology.
3. Gather, organize, and analyze data and illustrate results in graphical and appropriate formats.
4. Apply the scientific method in order to explain natural phenomena and world.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0

Select one of the following mathematics courses **Semester Units:** 3.0-5.0

MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 122	Basic Techniques of Calculus II (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

Select one of the following physics course sequences: **Semester Units:** 10.0

		10.0
PHYS 195	Mechanics (Active)	5.0
AND		
PHYS 196	Electricity and Magnetism (Active)	5.0
		10.0
PHYS 125	General Physics (Active)	5.0
AND		
PHYS 126	General Physics II (Active)	5.0
		10.0
PHYS 180A	General Physics I (Active)	4.0
AND		
PHYS 181A	General Physics Laboratory I (Active)	1.0
AND		
PHYS 180B	General Physics II (Active)	4.0
AND		
PHYS 181B	General Physics Laboratory II (Active)	1.0

BIOLOGY FOR ALLIED HEALTH - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Consult the Nursing Education faculty (City College) or a counselor to verify current course requirements for associate degree and baccalaureate nursing program preparation.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Biology for Allied Health Program will be able to:

1. Use acquired knowledge of biology to evaluate current events.
2. Analyze and present biological data in a graphical format.
3. Communicate core concepts central to biology using scientific terminology.
4. Apply the scientific method in order to explain natural phenomena and world.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0

BIOLOGY STUDIES - ASSOCIATE OF SCIENCE DEGREE

Summary

The Associate of Science degree with an area of emphasis in Biology Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a biology-related major.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this major should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Biology Studies Program will be able to:

1. Use acquired knowledge of biology to evaluate current events.
2. Analyze and present biological data in a graphical format.
3. Communicate the core concepts and processes central to biology using scientific terminology.
4. Apply the scientific method in order to explain natural phenomena and world.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0

Select at least 5 units from the following: **Semester Units:** 5.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BIOL 115	Marine Biology (Active)	4.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
MATH 116	College and Matrix Algebra (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 122	Basic Techniques of Calculus II (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
PHYS 125	General Physics (Active)	5.0
PHYS 126	General Physics II (Active)	5.0
PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

BIOTECHNOLOGY - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Biotechnology program is intended to provide students with an intensive laboratory skills development experience to meet entry-level employment requirements in the biotechnology industry. Topics covered in the program include the fundamental chemical processes common in prokaryotic and eukaryotic biology, chemistry of bio-molecules (proteins, enzymes, nucleic acids and lipids), cellular and molecular biology, basic immunology, and classical and molecular genetics with an emphasis on gene expression and genetic engineering. The program courses address skills and techniques common to the biotechnology industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Biotechnology Program will be able to:

1. Demonstrate proficiency with current scientific lab techniques.
2. Demonstrate and apply the proper method of scientific notation when creating laboratory reports required for an entry level position in the Biotechnology field.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0-25.0

		4.0
BIOL 131	Introduction to Biotechnology (Active)	4.0
OR		

BIOL 107[1]	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 132	Applied Biotechnology I (Active)	4.0
BIOL 133	Applied Biotechnology II (Active)	4.0
BIOL 136	Quality and Regulatory Practices in Biotechnology (Active)	3.0
		2.0-3.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
OR		
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CHEM 152	Introduction to General Chemistry (Active)	3.0
CHEM 152L	Introduction to General Chemistry Laboratory (Active)	1.0
		3.0
COMS 135	Interpersonal Communication (Active)	3.0
OR		
COMM C1000[2]	Introduction to Public Speaking (Historical)	3.0

[1]BIOL 131 is recommended but BIOL 107 is acceptable.
[2]COMS 135 is recommended but COMM C1000 is acceptable.

BIOTECHNOLOGY - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Biotechnology program is intended to provide students with an intensive laboratory skills development experience to meet entry-level employment requirements in the biotechnology industry. Topics covered in the program include the fundamental chemical processes common in prokaryotic and eukaryotic biology, chemistry of bio-molecules (proteins, enzymes, nucleic acids and lipids), cellular and molecular biology, basic immunology, and classical and molecular genetics with an emphasis on gene expression and genetic engineering. The program courses address skills and techniques common to the biotechnology industry.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Biotechnology Program will be able to:

1. Demonstrate proficiency with current scientific lab techniques.
2. Demonstrate and apply the proper method of scientific notation when creating laboratory reports required for an entry level position in the Biotechnology field.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

		4.0
BIOL 131	Introduction to Biotechnology (Active)	4.0
OR		
BIOL 107[1]	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 132	Applied Biotechnology I (Active)	4.0
BIOL 133	Applied Biotechnology II (Active)	4.0

[1]BIOL 131 is recommended but BIOL 107 is acceptable.

BUSINESS ADMINISTRATION - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Business Administration degree is intended for students who plan to complete a bachelor's degree at a transfer institution in a business-related major.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major option. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Business Administration Program will be able to:

1. Evaluate and analyze business-related data using various mathematical techniques.
2. Describe common business functions and practices.
3. Analyze and solve financial, economic, technological, or other problems in business organizations.
4. Utilize common business terminology.
5. Develop business-related written materials such as letters, memoranda, case studies, reports, or other documents.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 14.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select at least three courses from the following: **Semester Units:** 9.0-10.0

BUSE 100[1]	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
MARK 100	Principles of Marketing (Active)	3.0

[1]BUSE 100 is recommended as a first semester course.

Select at least one course from the following: **Semester Units:** 3.0-5.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

BUSINESS ADMINISTRATION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Business Administration certificate is intended for students who plan to complete a bachelor's degree at a transfer institution in a business-related major.

This certificate is designed to accommodate the differing requirements of a wide variety of transfer institutions and major option. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this certificate should be selected with the assistance of a Miramar College counselor.

Learning Outcome(s): Students who complete the Business Administration Program will be able to:

1. Evaluate and analyze business-related data using various mathematical techniques.
2. Describe common business functions and practices.
3. Analyze and solve financial, economic, technological, or other problems in business organizations.
4. Utilize common business terminology.
5. Develop business-related written materials such as letters, memoranda, case studies, reports, or other documents.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 14.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select at least three courses from the following: **Semester Units:** 9.0-10.0

BUSE 100[1]	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
MARK 100	Principles of Marketing (Active)	3.0

[1]BUSE 100 is recommended as a first semester course.

Select at least one course from the following: **Semester Units:** 3.0-5.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

BUSINESS ADMINISTRATION 2.0 - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Business Administration 2.0 for Transfer is intended for students who plan to complete a bachelor's degree in Business Administration or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Business Administration 2.0 Program will be able to:

1. Evaluate and analyze business-related data using various mathematical techniques.
2. Describe common business functions and practices.
3. Analyze and solve financial, economic, technological, or other problems in business organizations.
4. Utilize common business terminology.
5. Develop business-related written materials such as letters, memoranda, case studies, reports, or other documents.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select one of the following statistics courses: **Semester Units:** 3.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0

Select one of the following calculus courses: **Semester Units:** 3.0-5.0

MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

BUSINESS MANAGEMENT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Business managers plan, organize, direct, and oversee the activities needed to accomplish an organization's mission. They ensure that vital resources - people, money, equipment, information, and work processes - are used effectively and efficiently. They work in organizations of all kinds, including for-profit business, nonprofits, and public institutions.

This program prepares students for entry-level positions in the field of business management or to complete a bachelor's degree in Business Administration or a related major at a four-year university.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Business Management Program will be able to:

1. Evaluate and analyze business-related data using various mathematical techniques.
2. Describe common business functions and practices.
3. Analyze and solve financial, economic, technological, or other problems in business organizations.
4. Utilize common business terminology.
5. Develop business-related written materials such as letters, memoranda, case studies, reports, or other documents.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 15.0-16.0
BUSE 100[1]	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
		3.0
BUSE 150	Human Relations in Business (Active)	3.0
OR		
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
		3.0-4.0
CBTE 180	Microsoft Office (Active)	3.0
OR		
CBTE 210	Computers in Business (Active)	3.0
OR		
CISC 181	Principles of Information Systems (Active)	4.0

[1]BUSE 100 is recommended as a first semester course.

Complete at least six (6) units from the following business/business-related courses (not selected above):		**Semester Units:** 6.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
CBTE 210	Computers in Business (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0
PADM 200	Introduction to Public Administration (Active)	3.0

Complete at least one of the following mathematics courses:		**Semester Units:** 3.0-5.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0

MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

Complete at least three (3) units from the following occupational courses (not selected above): **Semester Units:** 3.0

BUSE 120	Personal Financial Management (Active)	3.0
BUSE 270	Business Internship / Work Experience (Active)	1.0-4.0
ACCT 102	Basic Accounting (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 122	Intermediate Microsoft Word (Active)	3.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 180	Microsoft Office (Active)	3.0
LIBS 101	Information Literacy and Research Skills (Active)	1.0

BUSINESS MANAGEMENT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Business managers plan, organize, direct, and oversee the activities needed to accomplish an organization's mission. They ensure that vital resources - people, money, equipment, information, and work processes - are used effectively and efficiently. They work in organizations of all kinds, including for-profit business, nonprofits, and public institutions.

This program prepares students for entry-level positions in the field of business management or to complete a bachelor's degree in Business Administration or a related major at a four-year university.

Learning Outcome(s): Students who complete the Business Management Program will be able to:

1. Evaluate and analyze business-related data using various mathematical techniques.
2. Describe common business functions and practices.
3. Analyze and solve financial, economic, technological, or other problems in business organizations.
4. Utilize common business terminology.
5. Develop business-related written materials such as letters, memoranda, case studies, reports, or other documents.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0-16.0

BUSE 100[1]	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
		3.0
BUSE 150	Human Relations in Business (Active)	3.0
OR		
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
		3.0-4.0

CBTE 180	Microsoft Office (Active)	3.0
OR		
CBTE 210	Computers in Business (Active)	3.0
OR		
CISC 181	Principles of Information Systems (Active)	4.0

[1]BUSE 100 is recommended as a first semester course.

Complete at least six (6) units from the following business/business-related courses (not selected above): **Semester Units:** 6.0

BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
CBTE 210	Computers in Business (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0
PADM 200	Introduction to Public Administration (Active)	3.0

Complete at least one of the following mathematics courses: **Semester Units:** 3.0

BUSE 101	Business Mathematics (Active)	3.0
BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

Complete at least three (3) units from the following occupational courses (not selected above): **Semester Units:** 3.0

BUSE 120	Personal Financial Management (Active)	3.0
BUSE 270	Business Internship / Work Experience (Active)	1.0-4.0
ACCT 102	Basic Accounting (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 122	Intermediate Microsoft Word (Active)	3.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 180	Microsoft Office (Active)	3.0
LIBS 101	Information Literacy and Research Skills (Active)	1.0

CHEMISTRY STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate of Science degree with an area of emphasis in Chemistry Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a chemistry-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Chemistry Studies Program will be able to:

1. Be proficient in the nomenclature, reactions, calculations, concepts, and theories common to first- and second-year general and organic chemistry courses at a level that is competitive with other students upon transfer to a 4-year college/university or entrance to a professional school.
2. Successfully perform and communicate information related to experiments involving chemical equipment, measurement, and data collection.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.0

CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0

Select at least eight units from the following: **Semester Units:** 8.0

CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0
CHEM 233	Organic Chemistry II - Lecture (Active)	3.0
CHEM 233L	Organic Chemistry II - Laboratory (Active)	2.0
CHEM 251	Quantitative Analytical Chemistry (Active)	5.0
ASTR 101	Descriptive Astronomy (Active)	3.0
CISC 192	C/C++ Programming (Active)	4.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 104	Earth Science (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0

CHILD DEVELOPMENT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

This degree prepares students to provide instruction to children and supervise Assistant and Associate Teachers. Child Development courses must be completed with a grade of "C" or better. Additional general education and graduation requirements are listed in the Academic Requirements section of this catalog. The Associate Degree requires a minimum of 60 units.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Child Development Program will be able to:

1. Communicate effectively with children, families, staff, and the community.

2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 151	Program Planning (Active)	3.0

Concurrent enrollment in (2-4 units total): **Semester Units:** 2.0-4.0

		1.0-4.0
CHIL 270	Work Experience (Active)	1.0-4.0
OR		
CHIL 275	Supervised Field Study (Active)	1.0-3.0

Note: Must select 2-4 units in CHIL 270 or 275.

Select one of the following three options: **Semester Units:** 3.0-4.0

		3.0-4.0
		4.0
CHIL 160	Observation and Assessment of Children (Active)	2.0
AND		
CHIL 161	Observations and Issues in Child Development (Active)	2.0
OR		
CHIL 165	Children With Special Needs (Active)	3.0
OR		
CHIL 175	Infant-Toddler Growth and Development (Active)	3.0

CHILD DEVELOPMENT ASSISTANT TEACHER - CERTIFICATE OF ACHIEVEMENT

Summary

This certificate prepares students to assist in the instruction of children under the supervision of an Associate Teacher or higher. Child Development courses must be completed with a grade of "C" or better.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Child Development Assistant Teacher Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0

Select two courses from: **Semester Units:** 6.0

CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0

CHILD DEVELOPMENT ASSOCIATE TEACHER - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

This certificate prepares students to provide instruction to children and supervise Assistant Teachers. Child Development courses must be completed with a grade of "C" or better.

Learning Outcome(s): Students who complete the Child Development Associate Teacher Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0

Select two courses from: **Semester Units:** 6.0

CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0

Select three or more units from: **Semester Units:** 3.0-4.0

CHIL 160	Observation and Assessment of Children (Active)	2.0
CHIL 161	Observations and Issues in Child Development (Active)	2.0
CHIL 270	Work Experience (Active)	1.0-4.0
CHIL 291	Child Development Lab Practicum (Active)	1.0-4.0
CHIL 291A	Child Development Center Practicum (Active)	1.0
CHIL 291B	Child Development Center Practicum (Active)	1.0
CHIL 291C	Child Development Center Practicum (Active)	1.0
CHIL 291D	Child Development Center Practicum (Active)	1.0

CHILD DEVELOPMENT MASTER TEACHER - CERTIFICATE OF ACHIEVEMENT

Summary

This certificate prepares students to provide instruction to children and supervised Assistant/ Associate Teachers and Teachers. It further prepares the Master Teacher to coordinate curriculum and staff development. Child Development courses must be completed with a grade of "C" or better.

Learning Outcome(s): Students who complete the Child Development Master Teacher Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 25.0-28.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 151	Program Planning (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 215	Adult Supervision and Mentoring in Early Childhood Settings (Active)	3.0
		1.0-4.0
CHIL 270	Work Experience (Active)	1.0-4.0
OR		
CHIL 275	Supervised Field Study (Active)	1.0-3.0

Select one of the following specializations for a total of 6-7 units: **Semester Units:** 6.0-7.0

Guiding Young Children

CHIL 160	Observation and Assessment of Children (Active)	2.0
CHIL 161	Observations and Issues in Child Development (Active)	2.0
CHIL 162	Positive Child Guidance (Active)	3.0

OR - Special Needs

CHIL 165	Children With Special Needs (Active)	3.0
CHIL 166	Curriculum for Diverse Learners (Active)	3.0

OR - Infant/Toddler

CHIL 175	Infant-Toddler Growth and Development (Active)	3.0
CHIL 176	Principles of Infant-Toddler Caregiving (Active)	3.0

OR - Family Life

CHIL 160	Observation and Assessment of Children (Active)	2.0
CHIL 161	Observations and Issues in Child Development (Active)	2.0
CHIL 188	Violence in the Lives of Children and Families (Active)	3.0

CHILD DEVELOPMENT SITE SUPERVISOR - ASSOCIATE OF SCIENCE DEGREE

Summary

This degree prepares students to supervise single site programs, provide instruction to children and coordinate curriculum and staff development. Child Development courses must be completed with a grade of "C" or better. Additional general education and graduation requirements are listed in the Academic Requirements section of this catalog. The Associate Degree requires a minimum of 60 units.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Child Development Site Supervisor Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 151	Program Planning (Active)	3.0
CHIL 202	Administration of Early Childhood Programs (Active)	3.0
CHIL 210	Supervision of Early Childhood Programs (Active)	3.0
CHIL 215	Adult Supervision and Mentoring in Early Childhood Settings (Active)	3.0

Concurrent enrollment in (2-4 units total): **Semester Units:** 2.0-4.0

		1.0-4.0
CHIL 270	Work Experience (Active)	1.0-4.0
OR		
CHIL 275	Supervised Field Study (Active)	1.0-3.0

Note: Must select 2-4 units in CHIL 270 or 275.

Select one of the following three options: **Semester Units:** 3.0-4.0

		3.0-4.0
		4.0
CHIL 160	Observation and Assessment of Children (Active)	2.0
AND		
CHIL 161	Observations and Issues in Child Development (Active)	2.0
OR		
CHIL 165	Children With Special Needs (Active)	3.0
OR		

CHIL 175	Infant-Toddler Growth and Development (Active)	3.0

CHILD DEVELOPMENT TEACHER - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

This certificate prepares students to provide instruction to children and supervise Assistant and Associate Teachers. Child Development courses must be completed with a grade of "C" or better.

Learning Outcome(s): Students who complete the Child Development Teacher Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 151	Program Planning (Active)	3.0

Concurrent enrollment in (2-4 units total): **Semester Units:** 2.0-4.0

		1.0-4.0
CHIL 270	Work Experience (Active)	1.0-4.0
OR		
CHIL 275	Supervised Field Study (Active)	1.0-3.0

Note: Must select 2-4 units in CHIL 270 or 275.

Select one of the following three options: **Semester Units:** 3.0-4.0

		3.0-4.0
		4.0
CHIL 160	Observation and Assessment of Children (Active)	2.0
AND		
CHIL 161	Observations and Issues in Child Development (Active)	2.0
OR		
CHIL 165	Children With Special Needs (Active)	3.0
OR		
CHIL 175	Infant-Toddler Growth and Development (Active)	3.0

COMBINED DRAWING/PAINTING - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

Art is the study of the arrangement of forms that affect the senses, communicate political, social, cultural, religious, or emotional ideas that manifest in scenes and through objects produced throughout the world. This field includes the study and design of both two-dimensional and three-dimensional art. The art program is designed to maximize transferable course units and to provide basic skills required for employment in art-related fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Combined Drawing/Painting Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.
2. Develop a foundation of art skills and a high level of craftsperson ship by utilizing a variety of tools and technologies associated with the visual arts.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.
5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0
ARTF 155B	Freehand Drawing II (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0

Select six units from the following: **Semester Units:** 6.0

ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0

Select three units from the following: **Semester Units:** 3.0

ARTF 107	Contemporary Art (Active)	3.0
ARTF 165C	Composition in Painting III (Active)	3.0
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 210B	Life Drawing II (Active)	3.0

COMMERCIAL PILOT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar

College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

When passed with a "C" or better, indicates student qualification to take the FAA Commercial Pilot Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Commercial Pilot Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 201	Commercial Pilot Ground School (Active)	3.0

COMMUNICATION STUDIES 2.0 - ASSOCIATE IN ARTS FOR TRANSFER DEGREE

Summary

The Associate in Arts in Communication Studies 2.0 for Transfer is intended for students who plan to complete a bachelor's degree in Communication Studies or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Communication Studies 2.0 Program will be able to:

1. Apply appropriate communication skills across settings, purposes, and audiences.
2. Practice critical thinking to develop innovative and well-founded perspectives related to the communicated message.
3. Demonstrate the ability to effectively deliver formal and informal oral presentations to a variety of audiences in multiple contexts.
4. Demonstrate the ability to construct effective written messages in various formats and styles to a variety of audiences.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 135	Interpersonal Communication (Active)	3.0

LIST A: SELECT THREE COURSES (9 UNITS) FROM THE FOLLOWING: **Semester Units:** 9.0

COMS 104	Advanced Public Communication (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
COMS 170	Small Group Communication (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0
COMS 201	Communication and Community (Active)	3.0

LIST B: SELECT ONE COURSE (3 UNITS) NOT SELECTED ABOVE FROM THE FOLLOWING: **Semester Units:** 3.0

COMS 104	Advanced Public Communication (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
COMS 170	Small Group Communication (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0
COMS 201	Communication and Community (Active)	3.0

COMPANY OFFICER CERTIFICATION - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Company Officer Certification Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
4. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
5. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.

Admission Criteria

The Miramar Fire Technology program offers an option for students to earn their State Fire Training Firefighter I Certification required for entry-level employment by attending a "cohort" of courses on campus. Students interested in attending the On Campus Fire Academy option should visit the Fire Technology Program website to review the application process and requirements to attend. The cohort of courses will be offered in sequence during the Fall and Spring Semesters. The courses include: FIPT 150W, 150A, 150B, 150C, 150T, 322A, 322C, 322F, 323B, 324A, 381G, and 322D. The FIPT 381G Skills Review and Certification course includes the State Fire Training Written and Skills Exam for Structure, Wildland and Hazardous Materials meeting the IFSAC and ProBoard Accreditation. Live Fire Control 3B Certification is provided as an accreditation requirement for Firefighter I Certification. The Certification of Completion and course hours are identical to the traditional Regional Accredited Fire Academy. There are three prerequisites that must be completed prior to the start of the Fire Academy: 1. Completion of EMT course 2. FIPT 101, Fire Protection Organization 3. FIPT 100D, Fire Department Testing Procedures.

CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
FIPT 323C	Hazardous Materials Incident Commander (Active)	0.5
FIPT 324D	Intermediate Wildland Fire Behavior S-290 (Active)	0.5
FIPT 340	Company Officer 2A: Human Resource Management for Company Officers (Active)	0.5
FIPT 341	Company Officer 2B: General Administration Functions for Company Officers (Active)	0.5
FIPT 342	Company Officer 2C: Fire Investigation and Inspection for Company Officers (Active)	0.5
FIPT 343	Company Officer 2D: All Risk Command Operations for Company Officers (Active)	0.5
FIPT 344	Company Officer 2E: Wildland Incident Operations for Company Officers (Active)	0.5
FIPT 345	Fire and Emergency Services Instructor: Instructor Methodology (Active)	0.5

Select one of the following Firefighter 1 academy options: **Semester Units:** 10.5-13.0

		10.5-13.0
FIPT 381S	San Diego City Basic Firefighter I Academy (Active)	13.0
OR		
		10.5
FIPT 381F	Regional Firefighter I Academy (Active)	9.0
AND		
FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5

COMPANY OFFICER CERTIFICATION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Learning Outcome(s): Students who complete the Company Officer Certification Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system and identify alarm system components and their operations.
4. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
5. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.

Admission Criteria

The Miramar Fire Technology program offers an option for students to earn their State Fire Training Firefighter I Certification required for entry-level employment by attending a "cohort" of courses on campus. Students interested in attending the On Campus Fire Academy option should visit the Fire Technology Program website to review the application process and requirements to attend. The cohort of courses will be offered in sequence during the Fall and Spring Semesters. The courses include: FIPT 150W, 150A, 150B, 150C, 150T, 322A, 322C, 322F, 323B, 324A, 381G, and 322D. The FIPT 381G Skills Review and Certification course includes the State Fire Training Written and Skills Exam for Structure, Wildland and Hazardous Materials meeting the IFSAC and ProBoard Accreditation. Live Fire Control 3B Certification is provided as an accreditation requirement for Firefighter I Certification. The Certification of Completion and course hours are identical to the traditional Regional Accredited Fire Academy. There are three prerequisites that must be completed prior to the start of the Fire Academy: 1. Completion of EMT course 2. FIPT 101, Fire Protection Organization 3. FIPT 100D, Fire Department Testing Procedures.

CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
FIPT 323C	Hazardous Materials Incident Commander (Active)	0.5
FIPT 324D	Intermediate Wildland Fire Behavior S-290 (Active)	0.5
FIPT 340	Company Officer 2A: Human Resource Management for Company Officers (Active)	0.5
FIPT 341	Company Officer 2B: General Administration Functions for Company Officers (Active)	0.5
FIPT 342	Company Officer 2C: Fire Investigation and Inspection for Company Officers (Active)	0.5
FIPT 343	Company Officer 2D: All Risk Command Operations for Company Officers (Active)	0.5
FIPT 344	Company Officer 2E: Wildland Incident Operations for Company Officers (Active)	0.5
FIPT 345	Fire and Emergency Services Instructor: Instructor Methodology (Active)	0.5

Select one of the following firefighter 1 academy options: **Semester Units:** 10.5-13.0

		10.5-13.0
FIPT 381S	San Diego City Basic Firefighter I Academy (Active)	13.0
OR		
		10.5
FIPT 381F	Regional Firefighter I Academy (Active)	9.0
AND		
FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5

COMPUTER PROGRAMMING - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Computer programming is a fundamental component of many applications used in daily life, from smartphone weather apps to contact lists. But programming is not limited to software or web development: Computer programmers are the backbone of cutting-edge research into artificial intelligence, virtual reality, cloud computing, quantum computing, self-driven cars, and other technological advances.

This program prepares students for entry-level positions in computer programming. It is designed so that students with no computer background can develop basic computer and coding skills, which leads to advanced concepts of object-oriented programming and computer algorithms. The program also prepares students to develop basic statistical literacy, which can be used to pursue data-related careers. Students have the option to develop more advanced programming skills in Java, Python, or Assembly programming language.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Computer Programming Program will be able to:

1. Develop and implement a solution for a problem using appropriate programming techniques.
2. Successfully follow a specification
3. Successfully create electronic documents
4. Describe computer systems' components, organization, and architecture.
5. Demonstrate the ability to use business software.

6. Write, execute, and debug assembly programs.
7. Apply algorithmic reasoning to a variety of computational problems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

CISC 181	Principles of Information Systems (Active)	4.0
Select one of the following statistics courses:		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0
CISC 187	Data Structures in C++ (Active)	4.0

SELECT TWO COURSES (8 UNITS) FROM THE FOLLOWING: **Semester Units:** 8.0

CISC 179	Introduction to Python Programming (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 191	Intermediate Java Programming (Active)	4.0
CISC 211	Computer Organization and Assembly Language (Active)	4.0
CISC 217	Intermediate Python Programming (Active)	4.0

COMPUTER PROGRAMMING - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Computer programming is a fundamental component of many applications used in daily life, from smartphone weather apps to contact lists. But programming is not limited to software or web development: Computer programmers are the backbone of cutting-edge research into artificial intelligence, virtual reality, cloud computing, quantum computing, self-driven cars, and other technological advances.

This program prepares students for entry-level positions in computer programming. It is designed so that students with no computer background can develop basic computer and coding skills, which leads to advanced concepts of object-oriented programming and computer algorithms. The program also prepares students to develop basic statistical literacy, which can be used to pursue data-related careers. Students have the option to develop more advanced programming skills in Java, Python, or Assembly programming language.

Learning Outcome(s): Students who complete the Computer Programming Program will be able to:

1. Develop and implement a solution for a problem using appropriate programming techniques.
2. Successfully follow a specification
3. Successfully create electronic documents
4. Describe computer systems' components, organization, and architecture.
5. Demonstrate the ability to use business software.
6. Write, execute, and debug assembly programs.
7. Apply algorithmic reasoning to a variety of computational problems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

CISC 181	Principles of Information Systems (Active)	4.0

Select one of the following statistics courses		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0
CISC 187	Data Structures in C++ (Active)	4.0

SELECT TWO COURSES (8 UNITS) FROM THE FOLLOWING: **Semester Units:** 8.0

CISC 179	Introduction to Python Programming (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 191	Intermediate Java Programming (Active)	4.0
CISC 211	Computer Organization and Assembly Language (Active)	4.0
CISC 217	Intermediate Python Programming (Active)	4.0

COMPUTER PROGRAMMING - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

This Certificate of Performance in computer programming requires completion of the courses listed below and is meant to prepare students who are planning on preparing for entry-level positions in computer programming and/or information technology. The Certificate of Performance also offers students the opportunity to learn or enhance computer programming skills.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Computer Programming Program will be able to:

1. Develop and implement a solution for a problem using appropriate programming techniques.
2. Successfully follow a specification
3. Successfully create electronic documents
4. Describe computer systems' components, organization, and architecture.
5. Demonstrate the ability to use business software.
6. Write, execute, and debug assembly programs.
7. Apply algorithmic reasoning to a variety of computational problems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

CISC 186	Visual Basic Programming (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0

COMPUTER SCIENCE - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Computer Science for Transfer is intended for students who plan to complete a bachelor's degree in Computer Science or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Computer Science Program will be able to:

1. Demonstrate the ability to use business software.
2. Write, execute, and debug assembly programs.
3. Describe computer systems' components, organization, and architecture.
4. Apply algorithmic reasoning to a variety of computational problems.
5. Develop and implement a solution for a problem using appropriate programming techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.0

CISC 190	Java Programming (Active)	4.0
		4.0
CISC 187	Data Structures in C++ (Active)	4.0
OR		
CISC 191	Intermediate Java Programming (Active)	4.0
CISC 211	Computer Organization and Assembly Language (Active)	4.0
CISC 246	Discrete Mathematics for Computer Science (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
PHYS 195	Mechanics (Active)	5.0

SELECT ONE OF THE FOLLOWING SCIENCE OPTIONS **Semester Units:** 4.0-5.0

PHYS 196	Electricity and Magnetism (Active)	5.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
		5.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
AND		
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0

CONTEMPORARY POLICE TECHNOLOGIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Contemporary Police Technologies Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ADJU 260	POST Certified Regional Academy (Active)	24.0

Select nine units from the following: **Semester Units:** 9.0

ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0

CONTEMPORARY POLICE TECHNOLOGIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a

variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Learning Outcome(s): Students who complete the Contemporary Police Technologies Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ADJU 260	POST Certified Regional Academy (Active)	24.0

Select nine units from the following: **Semester Units:** 9.0

ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0

CONTINUING EDUCATION FOR CPA CANDIDATES - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The documentation of business activities is accomplished through accounting. Without accurate and timely accounting information businesses do not know their financial position, who owes them money, whom they owe money to, or what assets they have available for business processes, etc.

This program addresses the minimum skill levels to enter the technical and exacting world of accountancy. With the basic knowledge of financial and managerial accounting, computerized accounting applications, tax compliance, auditing principles, accounting terminology, and the process and flow of accounting, an individual is ready for entry level positions in service, retail, and manufacturing businesses as well as tax preparation for individuals.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Continuing Education for CPA Candidates Program will be able to:

1. Demonstrate the ability to compute, record, and verify quantitative and qualitative information in order to maintain financial records.
2. Prepare a federal and California individual income tax return in proper form according to current federal and state tax rules and regulations

3. Understand and practice high ethical standards with internal and external stakeholders.
4. Demonstrate an understanding of basic accounting terminology and the process by which transactions are analyzed, evaluated, and communicated into the financial statements.
5. Demonstrate effective use of accounting software applications considered applicable to the current accounting environment.
6. Create accurate, reliable, and relevant accounting documents and reports for decision makers using the information.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ACCT 135	Principles of Auditing (Active)	3.0
ACCT 201A	Intermediate Accounting I (Active)	3.0
ACCT 201B	Intermediate Accounting II (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0

CORRECTIONAL TECHNOLOGIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Court Support Services, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon and night classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science Degree or select from a variety of certificates of completion and certificates of achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Correctional Technologies Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.5

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 323A	S.T.C. Certified Corrections Officer Core Course (Active)	11.5

CORRECTIONAL TECHNOLOGIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Court Support Services, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon and night classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate in Science Degree or select from a variety of certificates of completion and certificates of achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.
Learning Outcome(s): Students who complete the Correctional Technologies Program will be able to:

1. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.
2. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
5. Understand the three components of the criminal justice system and how they interrelate.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.5

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 323A	S.T.C. Certified Corrections Officer Core Course (Active)	11.5

CRAFT SKILLS - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

Art is the study of the arrangement of forms that affect the senses, communicate political, social, cultural, religious, or emotional ideas that manifest in scenes and through objects produced throughout the world. This field includes the study and design of both two-dimensional and three-dimensional art. The art program is designed to maximize transferable course units and to provide basic skills required for employment in art-related fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Craft Skills Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.
2. Develop a foundation of art skills and a high level of craftsperson ship by utilizing a variety of tools and technologies associated with the visual arts.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.

5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0

Select six units from the following: **Semester Units:** 6.0

ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0

Select three units from the following: **Semester Units:** 3.0

ARTF 107	Contemporary Art (Active)	3.0
ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
ARTF 155B	Freehand Drawing II (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 170C	Contemporary Crafts III (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 195C	Ceramics III (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0

CRAFT SKILLS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

Art is the study of the arrangement of forms that affect the senses, communicate political, social, cultural, religious, or emotional ideas that manifest in scenes and through objects produced throughout the world. This field includes the study and design of both two-dimensional and three-dimensional art. The art program is designed to maximize transferable course units and to provide basic skills required for employment in art-related fields.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Craft Skills Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.
2. Use a diverse range of global events to express personal ideas and opinions through artwork.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.

5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 170C	Contemporary Crafts III (Active)	3.0

ENGINE OVERHAUL, CATERPILLAR - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Overhaul, Caterpillar Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 122	Diesel Engines B (Active)	7.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0

ENGINE OVERHAUL, CUMMINS - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers

the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Overhaul, Cummins Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 124	Diesel Engines D (Active)	7.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0

ENGINE OVERHAUL, DETROIT DIESEL - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Overhaul, Detroit Diesel Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 121	Diesel Engines A (Active)	7.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0

ENGINE REPAIR, CATERPILLAR - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Repair, Caterpillar Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 126	Diesel Engines II (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0

ENGINE REPAIR, CUMMINS - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Repair, Cummins Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 128	Diesel Engines III (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0

ENGINE REPAIR, DETROIT DIESEL - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Engine Repair, Detroit Diesel Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 125	Diesel Engines I (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0

DIESEL FUEL INJECTION SYSTEMS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Diesel Fuel Injection Systems Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 144	Electronics for Diesel Technology (Active)	3.0

EARLY EDUCATION ENTREPRENEURSHIP - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Program Description:
Child Development offers programs for career and transfer students. Certificates of Performance, Certificates of Achievement, and Associate Degree programs are available to students interested in a range of child development opportunities that meet the requirements for the State of California Child Development permits and the California State Department of Social Services, Title 22, Community Care Licensing.

Career Options:
The San Diego Community College District offers certificates, degrees and transfer options in the field of Child Development/Early Childhood Education. The FAMILY CHILD CARE Certificate offered at City, Mesa and Miramar and the HOME DAY CARE Certificate offered at Mesa provides skills and knowledge for child care in family settings. The FAMILY AND CHILD RELATIONS Certificate offered at Miramar prepares students to work with families and their children in educational settings and service related agencies. The INFANT/TODDLER CARE Certificate of Performance offers skills for working with children aged birth to three years. The SCHOOL AGE CHILD CARE Certificate of Performance offered at City and Mesa provides training for working with school age children. The ASSISTANT TEACHER Certificate of Achievement prepares an individual to work in public and private child care settings. The Certificate of Achievement options, ASSISTANT TEACHER, ASSOCIATE TEACHER, TEACHER, and MASTER TEACHER, prepares individuals for higher level instructional positions. The ASSISTANT TEACHER, ASSOCIATE TEACHER, TEACHER, and MASTER TEACHER certificates meet the requirements for the State of California Child Development Permits. The Child Development Associate of Science Degrees prepare for teacher, master teacher, director, and site supervisory positions.

Award Description:
The Certificate of Achievement in Early Education Entrepreneurship is intended to prepare future leaders and teachers to work with children at a range of ages and to plan, begin, and administer programs in childcare or child education.

Learning Outcome(s): Students who complete the Early Education Entrepreneurship Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Apply human development growth theories and principles to early childhood settings
3. Plan and implement developmentally appropriate curriculum for children.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

BUSE 100	Introduction to Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 141	The Child, Family, and Community (Approved)	3.0
CHIL 202	Administration of Early Childhood Programs (Active)	3.0

Complete at least one of the following supplemental business courses: **Semester Units:** 3.0-4.0

BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
BUSE 270	Business Internship / Work Experience (Active)	3.0-4.0
ACCT 102	Basic Accounting (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

Note: If BUSE 270 is selected, then students must complete at least 3 units.

Complete at least one of the following supplemental child development courses: **Semester Units:** 3.0

CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 165	Children With Special Needs (Active)	3.0
CHIL 166	Curriculum for Diverse Learners (Active)	3.0
CHIL 176	Principles of Infant-Toddler Caregiving (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0

EARLY EDUCATION ENTREPRENEURSHIP - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Program Description:
Child Development offers programs for career and transfer students. Certificates of Performance, Certificates of Achievement, and Associate Degree programs are available to students interested in a range of child development opportunities that meet the requirements for the State of California Child Development permits and the California State Department of Social Services, Title 22, Community Care Licensing.

Career Options:
The San Diego Community College District offers certificates, degrees and transfer options in the field of Child Development/Early Childhood Education. The FAMILY CHILD CARE Certificate offered at City, Mesa and Miramar and the HOME DAY CARE Certificate offered at Mesa provides skills and knowledge for child care in family

settings. The FAMILY AND CHILD RELATIONS Certificate offered at Miramar prepares students to work with families and their children in educational settings and service related agencies. The INFANT/TODDLER CARE Certificate of Performance offers skills for working with children aged birth to three years. The SCHOOL AGE CHILD CARE Certificate of Performance offered at City and Mesa provides training for working with school age children. The ASSISTANT TEACHER Certificate of Achievement prepares an individual to work in public and private child care settings. The Certificate of Achievement options, ASSISTANT TEACHER, ASSOCIATE TEACHER, TEACHER, and MASTER TEACHER, prepares individuals for higher level instructional positions. The ASSISTANT TEACHER, ASSOCIATE TEACHER, TEACHER, and MASTER TEACHER certificates meet the requirements for the State of California Child Development Permits. The Child Development Associate of Science Degrees prepare for teacher, master teacher, director, and site supervisory positions.

Award Description:
The Associate of Science Degree in Early Education Entrepreneurship is intended to prepare future leaders and teachers to work with children at a range of ages and to plan, begin, and administer programs in childcare or child education.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Early Education Entrepreneurship Program will be able to:

1. Apply human development growth theories and principles to early childhood settings.
2. Communicate effectively with children, families, staff, and the community.
3. Plan and implement developmentally appropriate curriculum for children.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

BUSE 100	Introduction to Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 202	Administration of Early Childhood Programs (Active)	3.0

Complete at least one of the following supplemental business courses: **Semester Units:** 3.0-4.0

BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
BUSE 270	Business Internship / Work Experience (Active)	3.0-4.0
ACCT 102	Basic Accounting (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

Note: If BUSE 270 is selected, then students must complete at least 3 units.

Complete at least one of the following supplemental child development courses: **Semester Units:** 3.0

CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 165	Children With Special Needs (Active)	3.0
CHIL 166	Curriculum for Diverse Learners (Active)	3.0
CHIL 176	Principles of Infant-Toddler Caregiving (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0

EARTH SCIENCE STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate of Science degree with an area of emphasis in Earth Science Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a physical or earth science related major.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Earth Science Studies Program will be able to:

1. Visualize important physical features of a given physical phenomenon
2. Demonstrate understanding of a physical phenomenon using scientific theory.
3. Interpret scientific results collected by others and/or assess the validity of results collected in a physical science laboratory
4. Solve problems related to concepts in the physical sciences

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 4.0

GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0

SELECT AT LEAST EIGHT (8) UNITS FROM THE FOLLOWING PHYSICAL SCIENCE COURSES: **Semester Units:** 8.0

ASTR 101	Descriptive Astronomy (Active)	3.0
ASTR 111	Astronomy Laboratory (Active)	1.0
AVIA 115	Aviation Weather (Active)	3.0
CHEM 111	Chemistry in Society (Active)	3.0
CHEM 152	Introduction to General Chemistry (Active)	3.0
CHEM 152L	Introduction to General Chemistry Laboratory (Active)	1.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
GEOG 101	Physical Geography (Active)	3.0
GEOG 101L	Physical Geography Laboratory (Active)	1.0
GEOL 104	Earth Science (Active)	3.0
GEOL 111	Dinosaurs, Mass Extinctions, and Earth History (Active)	4.0
OCEA 101	The Oceans (Active)	3.0

PHYN 100	Survey of Physical Science (Active)	3.0
PHYN 114	Weather and Climate (Active)	3.0
PHYS 125	General Physics (Active)	5.0
PHYS 180A	General Physics I (Active)	4.0
PHYS 195	Mechanics (Active)	5.0

SELECT AT LEAST THREE (3) UNITS FROM THE FOLLOWING BIOLOGICAL SCIENCE COURSES: **Semester Units:** 3.0

ANTH 102	Introduction to Biological Anthropology (Active)	3.0
ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
BIOL 100	Natural History - Environmental Biology (Active)	4.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 115	Marine Biology (Active)	4.0
BIOL 130	Human Heredity (Active)	3.0
BIOL 180	Plants and People (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0

SELECT AT LEAST THREE (3) UNITS FROM THE FOLLOWING MATHEMATICS COURSES: **Semester Units:** 3.0

BUSE 115	Statistics for Business (Active)	3.0
MATH 116	College and Matrix Algebra (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 122	Basic Techniques of Calculus II (Active)	3.0
MATH 141	Precalculus (Active)	5.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

ECONOMICS - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Economics for Transfer is intended for students who plan to complete a bachelor's degree in Economics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.

- Minimum grade of “C” or “P” or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Economics Program will be able to:

1. Determine indicators and measures of economic change.
2. Understand the function of market and prices as allocative mechanisms.
3. Understand concepts underlying comparative advantage.
4. Apply the concept of equilibrium to both microeconomics and macroeconomics.
5. Identify types of market failures.
6. Analyze the impacts of economics on social values and policy.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 12.0-14.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
		3.0
BUSE 115	Statistics for Business (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
		3.0-5.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
OR		
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

Select two of the following courses:		**Semester Units:** 6.0-8.0
ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ENGL 105	Composition and Literature (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
MATH 116	College and Matrix Algebra (Active)	3.0
MATH 122	Basic Techniques of Calculus II (Active)	3.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
MATH 255	Differential Equations (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

EMERGENCY MEDICAL TECHNICIAN - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

Emergency Medical Technicians (EMTs) provide emergency medical care and transportation to the ill and injured. EMT certification also provides entry level training for advanced careers such as paramedicine, physician assistant, nursing, and medicine.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Emergency Medical Technician Program will be able to:

1. Apply knowledge of physical, psychosocial, and developmental characteristics of individuals throughout the life span to the provision of emergency medical care.
2. Explain the roles, responsibilities, and legal aspects of the EMT practice.
3. Perform cardiopulmonary resuscitation (CPR), airway management, and defibrillation.
4. Identify various types of medical emergencies, assess the body systems involved, and cite the appropriate emergency medical intervention and rationale.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.5

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5

ENGLISH - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in English for Transfer is intended for students who plan to complete a bachelor's degree in English or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the English Program will be able to:

1. Comprehend information from a variety of texts.
2. Integrate logical support, including informed opinion and fact, as well as personal interpretations, to develop complex ideas and opinions.
3. Organize thoughts and ideas effectively and express them clearly in writing.
4. Apply appropriate writing strategies, standard grammar, and conventional academic documentation to writings of various types and purposes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 208	Introduction to Literature (Active)	3.0
ENGL 215	English Literature I: 800-1799 (Active)	3.0
ENGL 216	English Literature II: 1800 - Present (Active)	3.0

Select 1 course (3 units) from the following: **Semester Units:** 3.0

ENGL 210	American Literature I (Active)	3.0
ENGL 211	American Literature II (Active)	3.0

Select 1 course (3 units minimum) from the following: **Semester Units:** 3.0

ENGL C1000	Academic Reading and Writing (Active)	3.0
ENGL 105	Composition and Literature (Active)	3.0
ENGL 209	Literary Approaches to Film (Active)	3.0
ENGL 210	American Literature I (Active)	3.0
ENGL 211	American Literature II (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
ENGL 230	Asian American Literature (Active)	3.0
ENGL 237	Women in Literature (Active)	3.0
ENGL 249A	Introduction to Creative Writing I (Active)	3.0

ENGLISH/LITERATURE STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in English/Literature Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in an English- or literature-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the English/Literature Studies Program will be able to:

1. Comprehend information from a variety of texts.
2. Integrate logical support, including informed opinion and fact, as well as personal interpretations, to develop complex ideas and opinions.
3. Organize thoughts and ideas effectively and express them clearly in writing.
4. Apply appropriate writing strategies, standard grammar, and conventional academic documentation to writings of various types and purposes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

		3.0

ENGL C1000	Academic Reading and Writing (Active)	3.0
OR		
ENGL 105	Composition and Literature (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0

Select at least 12 units, including at least two ENGL courses, from the following: **Semester Units:** 12.0

BLAS 140A	African American History to Reconstruction (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
ENGL 208	Introduction to Literature (Active)	3.0
ENGL 210	American Literature I (Active)	3.0
ENGL 211	American Literature II (Active)	3.0
ENGL 215	English Literature I: 800-1799 (Active)	3.0
ENGL 216	English Literature II: 1800 - Present (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
ENGL 230	Asian American Literature (Active)	3.0
ENGL 237	Women in Literature (Active)	3.0
ENGL 249A	Introduction to Creative Writing I (Active)	3.0
HIST 109	History of the United States I (Active)	3.0
HIST 141	Women in United States History I (Active)	3.0
HUMA 201	Mythology (Active)	3.0
JOUR 202	Introduction to Mass Communication (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

ENTREPRENEURSHIP - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Business entrepreneurs plan, start, and operate new businesses or new ventures within existing companies. They generate new business ideas and innovate to produce new products, services, and business processes.

This program helps students understand the elements of successful high growth ventures, what is involved in launching and marketing a startup, and the entrepreneurial process. The experience includes both theoretical courses to help develop the entrepreneurial mindset and learn the fundamentals of entrepreneurship, as well as an optional lab component where students can practice the theory by participating in an incubation program.

The Entrepreneurship degree prepares students to plan, start, and manage a new business. Students also develop competencies needed to work in existing businesses where innovation and high growth are priorities.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Entrepreneurship Program will be able to:

1. Identify opportunities using ideation and trend-spotting techniques.
2. Describe the process and multiple ways to become an entrepreneur.
3. Evaluate and critique opportunities by assessing the impact and feasibility of ideas by examining critical components of a business model.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

BUSE 100	Introduction to Business (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
		3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
OR		
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
		3.0
BUSE 155	Small Business Management (Active)	3.0
OR		
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0

Complete at least three (3) units from the following supplemental business courses (not already selected above): **Semester Units:** 3.0-4.0

BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
ACCT 102	Basic Accounting (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

Complete at least three (3) units from the following occupational courses(not already selected above): **Semester Units:** 3.0-6.0

BUSE 120	Personal Financial Management (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
BUSE 270	Business Internship / Work Experience (Active)	1.0-4.0
BUSE 290	Independent Study (Active)	1.0-3.0
AUTO 151T	Honda/Toyota Quick Service Lube, Pre-Delivery Inspection Technician (Active)	4.0
AUTO 153G	Introduction to Automotive Technology (Active)	3.0
AUTO 156G	Engine and Related Systems (Active)	4.0
AUTO 156T	Honda/Toyota Engine and Related Systems (Active)	4.0
AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
CBTE 165	Webpage Creation with Dreamweaver (Active)	3.0

CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
EXSC 292A	Yoga Teacher Training Essentials (Active)	3.0
EXSC 242B	Care and Prevention of Injuries (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
REAL 101	Real Estate Principles (Active)	3.0
WORK 272	General Work Experience (Active)	1.0-3.0

ENTREPRENEURSHIP - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Business entrepreneurs plan, start, and operate new businesses or new ventures within existing companies. They generate new business ideas and innovate to produce new products, services, and business processes.

This program helps students understand the elements of successful high growth ventures, what is involved in launching and marketing a startup, and the entrepreneurial process. The experience includes both theoretical courses to help develop the entrepreneurial mindset and learn the fundamentals of entrepreneurship, as well as an optional lab component where students can practice the theory by participating in an incubation program.

The Entrepreneurship degree prepares students to plan, start, and manage a new business. Students also develop competencies needed to work in existing businesses where innovation and high growth are priorities.

Learning Outcome(s): Students who complete the Entrepreneurship Program will be able to:

1. Identify opportunities using ideation and trend-spotting techniques.
2. Describe the process and multiple ways to become an entrepreneur.
3. Evaluate and critique opportunities by assessing the impact and feasibility of ideas by examining critical components of a business model.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

BUSE 100	Introduction to Business (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
		3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
OR		
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
		3.0
BUSE 155	Small Business Management (Active)	3.0
OR		
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0

Complete at least three (3) units from the following supplemental business courses (not already selected above): **Semester Units:** 3.0-4.0

BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
ACCT 102	Basic Accounting (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

Complete at least three (3) units from the following occupational courses (not already selected above): **Semester Units:** 3.0-6.0

BUSE 120	Personal Financial Management (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
BUSE 270	Business Internship / Work Experience (Active)	1.0-4.0
BUSE 290	Independent Study (Active)	1.0-3.0
AUTO 151T	Honda/Toyota Quick Service Lube, Pre-Delivery Inspection Technician (Active)	4.0
AUTO 153G	Introduction to Automotive Technology (Active)	3.0
AUTO 156G	Engine and Related Systems (Active)	4.0
AUTO 156T	Honda/Toyota Engine and Related Systems (Active)	4.0
AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
CBTE 165	Webpage Creation with Dreamweaver (Active)	3.0
CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
EXSC 292A	Yoga Teacher Training Essentials (Active)	3.0
EXSC 242B	Care and Prevention of Injuries (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
REAL 101	Real Estate Principles (Active)	3.0
WORK 272	General Work Experience (Active)	1.0-3.0

ENTRY LEVEL FIREFIGHTER - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for

successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who complete the required Fire Academy Training are eligible to participate in the FIPT 381G Skills Review and Certification exam to meet Firefighter I Exam requirements for State Fire Training. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Entry Level Firefighter Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
4. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
5. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.

Admission Criteria

The Miramar Fire Technology program offers an option for students to earn their State Fire Training Firefighter I Certification required for entry-level employment by attending a "cohort" of courses on campus. Students interested in attending the On Campus Fire Academy option should visit the Fire Technology Program website to review the application process and requirements to attend. The cohort of courses will be offered in sequence during the Fall and Spring Semesters. The courses include: FIPT 150W, 150A, 150B, 150C, 150T, 322A, 322C, 322F, 323B, 324A, 381G, and 322D. The FIPT 381G Skills Review and Certification course includes the State Fire Training Written and Skills Exam for Structure, Wildland and Hazardous Materials meeting the IFSAC and ProBoard Accreditation. Live Fire Control 3B Certification is provided as an accreditation requirement for Firefighter I Certification. The Certification of Completion and course hours are identical to the traditional Regional Accredited Fire Academy. There are three prerequisites that must be completed prior to the start of the Fire Academy: 1. Completion of EMT course 2. FIPT 101, Fire Protection Organization 3. FIPT 100D, Fire Department Testing Procedures.

CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0-38.5

Students complete all of the major requirements as well as one of the two Firefighter I certification options below:		
FIPT 101	Fire Protection Organization (Active)	3.0
FIPT 102	Fire Prevention Technology (Active)	3.0
FIPT 103	Fire Protection Equipment and Systems (Active)	3.0
FIPT 104	Building Construction for Fire Protection (Active)	3.0
FIPT 105	Fire Behavior and Combustion (Active)	3.0
FIPT 120	Firefighter Safety and Survival (Active)	3.0
EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5

Students seeking Firefighter I Certification through a traditional Fire Academy complete one of the following two academy options: **Semester Units:** 0.0

		10.5-13.0
		10.5
FIPT 381F	Regional Firefighter I Academy (Active)	9.0
AND		
FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5
OR		
FIPT 381S	San Diego City Basic Firefighter I Academy (Active)	13.0

Students seeking Firefighter I Certification through the Alternate Fire Academy Delivery option complete all of the following courses: **Semester Units:** 0.0

FIPT 150A	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Beginning) (Active)	1.5
FIPT 150B	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Intermediate) (Active)	1.5
FIPT 150C	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Advanced) (Active)	1.5
FIPT 150T	Truck Operations (Active)	1.5
FIPT 150W	Wildland Firefighter Safety and Survival (Active)	2.5
FIPT 322B	Confined Space Rescue Awareness (Active)	0.2
FIPT 322C	Firefighter Survival (Active)	0.5
FIPT 322D	Behavioral Health and Cancer Awareness 1A (Active)	0.2
FIPT 323B	Hazardous Materials: First Responder Operational (FRO) (Active)	0.5
FIPT 324A	Basic Incident Command System (NIMS ICS 100 & 200) (Active)	0.5
		1.0-1.5
FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5
OR		

ENTRY LEVEL FIREFIGHTER - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who complete the required Fire Academy Training are eligible to participate in the FIPT 381G Skills Review and Certification exam to meet Firefighter I Exam requirements for State Fire Training. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Learning Outcome(s): Students who complete the Entry Level Firefighter Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout “Watch Out ”; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
4. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
5. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.
6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief’s interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
7. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.

Admission Criteria

The Miramar Fire Technology program offers an option for students to earn their State Fire Training Firefighter I Certification required for entry-level employment by attending a “cohort” of courses on campus. Students interested in attending the On Campus Fire Academy option should visit the Fire Technology Program website to review the application process and requirements to attend. The cohort of courses will be offered in sequence during the Fall and Spring Semesters. The courses include: FIPT 150W, 150A, 150B, 150C, 150T, 322A, 322C, 322F, 323B, 324A, 381G, and 322D. The FIPT 381G Skills Review and Certification course includes the State Fire Training Written and Skills Exam for Structure, Wildland and Hazardous Materials meeting the IFSAC and ProBoard Accreditation. Live Fire Control 3B Certification is provided as an accreditation requirement for Firefighter I Certification. The Certification of Completion and course hours are identical to the traditional Regional Accredited Fire Academy. There are three prerequisites that must be completed prior to the start of the Fire Academy: 1.

Completion of EMT course 2. FIPT 101, Fire Protection Organization 3. FIPT 100D, Fire Department Testing Procedures.

CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0-38.5

Students complete all of the major requirements as well as one of the two Firefighter I Certification options below:		
FIPT 101	Fire Protection Organization (Active)	3.0
FIPT 102	Fire Prevention Technology (Active)	3.0
FIPT 103	Fire Protection Equipment and Systems (Active)	3.0
FIPT 104	Building Construction for Fire Protection (Active)	3.0
FIPT 105	Fire Behavior and Combustion (Active)	3.0
FIPT 120	Firefighter Safety and Survival (Active)	3.0
EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5

Students seeking Firefighter I Certification through a traditional Fire Academy complete ONE of the following two academy options: **Semester Units:** 0.0

		10.5-13.0 10.5
FIPT 381F	Regional Firefighter I Academy (Active)	9.0
AND FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5
OR FIPT 381S	San Diego City Basic Firefighter I Academy (Active)	13.0

Students seeking Firefighter I Certification through the Alternate Fire Academy Delivery option complete ALL of the following courses: **Semester Units:** 0.0

FIPT 150A	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Beginning) (Active)	1.5
FIPT 150B	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Intermediate) (Active)	1.5
FIPT 150C	Introduction to Fire Suppression and Maintenance Manipulative Tasks (Advanced) (Active)	1.5
FIPT 150T	Truck Operations (Active)	1.5
FIPT 150W	Wildland Firefighter Safety and Survival (Active)	2.5

FIPT 322B	Confined Space Rescue Awareness (Active)	0.2
FIPT 322C	Firefighter Survival (Active)	0.5
FIPT 322D	Behavioral Health and Cancer Awareness 1A (Active)	0.2
FIPT 323B	Hazardous Materials: First Responder Operational (FRO) (Active)	0.5
FIPT 324A	Basic Incident Command System (NIMS ICS 100 & 200) (Active)	0.5
		1.0-1.5
FIPT 381G	Firefighter I Academy Skills Review and Certification (Active)	1.5
OR		
FIPT 381P	Firefighter I Test Preparation and Fire Control 3 (Active)	1.0

EQUIPMENT MECHANIC APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

A four-year apprenticeship program in equipment mechanic trades at the City of San Diego. Applications accepted at the City Administration Building, Community Concourse, 202 C Street, San Diego, CA 92101.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Equipment Mechanic Apprenticeship Program will be able to:

1. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.
2. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.0

AUTO 156G	Engine and Related Systems (Active)	4.0
AUTO 178G	Suspension, Steering and Handling (Active)	4.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0

EQUIPMENT MECHANIC APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

A four-year apprenticeship program in equipment mechanic trades at the City of San Diego. Applications accepted at the City Administration Building, Community Concourse, 202 C Street, San Diego, CA 92101.

Learning Outcome(s): Students who complete the Equipment Mechanic Apprenticeship Program will be able to:

1. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.0

AUTO 156G	Engine and Related Systems (Active)	4.0
AUTO 178G	Suspension, Steering and Handling (Active)	4.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0

EXERCISE AND NUTRITIONAL SCIENCES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate of Science degree in Exercise and Nutritional Sciences is intended for students who plan to complete a Bachelor's degree at a transfer institution in an exercise science, health, or nutrition related major. Common university majors in this field include: Exercise Science, Health Sciences/Public Health, Kinesiology, Nutrition and Food Science, Occupational Health, Physical Education, Pre-Physical Therapy.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Exercise and Nutritional Sciences Program will be able to:

1. Describe and apply current nutritional guidelines to enhance physical health and well-being.
2. Exhibit theoretical comprehension and competence in all health, exercise science, and nutrition discipline courses.
3. Explain the research-supported physiological and psychological benefits of physical activity.
4. Transfer into a Kinesiology (or related) program of study at a four-year institution.

Requirements

Select at least two courses from the following: **Semester Units:** 6.0

EXSC 241B	Introduction to Kinesiology (Active)	3.0
EXSC 242B	Care and Prevention of Injuries (Active)	3.0
HEAL 101	Health and Lifestyle (Active)	3.0

NUTR 150	Nutrition Science and Global Food Issues (Active)	3.0
NUTR 153	Cultural Foods (Active)	3.0
NUTR 155	Advanced Nutrition (Active)	3.0
NUTR 170	Nutrition and Fitness (Active)	3.0

Select at least one course from the following: **Semester Units:** 4.0

BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0

Select at least one course and the remainder of units needed to meet the minimum of 18 from the following: **Semester Units:** 8.0

EXSC 241B	Introduction to Kinesiology (Active)	3.0
EXSC 242B	Care and Prevention of Injuries (Active)	3.0
HEAL 101	Health and Lifestyle (Active)	3.0
NUTR 150	Nutrition Science and Global Food Issues (Active)	3.0
NUTR 153	Cultural Foods (Active)	3.0
NUTR 155	Advanced Nutrition (Active)	3.0
NUTR 170	Nutrition and Fitness (Active)	3.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 130	Human Heredity (Active)	3.0
BIOL 135	Biology of Human Nutrition (Active)	3.0
BIOL 160	Elements of Human Anatomy and Physiology (Active)	4.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
CHEM 103	General, Organic, and Biological Chemistry (Active)	5.0
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
MATH 116	College and Matrix Algebra (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 141	Precalculus (Active)	5.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
PHYS 125	General Physics (Active)	5.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
EXSC 113A	Swimming I (Active)	0.5-1.0
EXSC 113B	Swimming II (Active)	0.5-1.0
EXSC 113C	Swimming III (Active)	0.5-1.0

EXSC 113D	Swimming IV (Active)	0.5-1.0
EXSC 114A	Aquatic Fitness I (Active)	0.5-1.0
EXSC 114B	Aquatic Fitness II (Active)	0.5-1.0
EXSC 114C	Aquatic Fitness III (Active)	0.5-1.0
EXSC 114D	Aquatic Fitness IV (Active)	0.5-1.0
EXSC 115A	Water Exercise I (Active)	0.5-1.0
EXSC 115B	Water Exercise II (Active)	0.5-1.0
EXSC 115C	Water Exercise III (Active)	0.5-1.0
EXSC 115D	Water Exercise IV (Active)	0.5-1.0
EXSC 124A	Core and Cardio Fitness I (Active)	0.5-1.0
EXSC 124B	Core and Cardio Fitness II (Active)	0.5-1.0
EXSC 124C	Core and Cardio Fitness III (Active)	0.5-1.0
EXSC 124D	Core and Cardio Fitness IV (Active)	0.5-1.0
EXSC 125A	Aerobic Dance I (Active)	0.5-1.0
EXSC 125B	Aerobic Dance II (Active)	0.5-1.0
EXSC 125C	Aerobic Dance III (Active)	0.5-1.0
EXSC 125D	Aerobic Dance IV (Active)	0.5-1.0
EXSC 126A	Cardio Conditioning I (Active)	0.5-1.0
EXSC 126B	Cardio Conditioning II (Active)	0.5-1.0
EXSC 126C	Cardio Conditioning III (Active)	0.5-1.0
EXSC 126D	Cardio Conditioning IV (Active)	0.5-1.0
EXSC 135A	Individual Conditioning I (Active)	0.5-1.0
EXSC 135B	Individual Conditioning II (Active)	0.5-1.0
EXSC 135C	Individual Conditioning III (Active)	0.5-1.0
EXSC 135D	Individual Conditioning IV (Active)	0.5-1.0
EXSC 136A	Off-Season Conditioning for Sport I (Active)	0.5-1.0
EXSC 136B	Off-Season Conditioning for Sport II (Active)	0.5-1.0
EXSC 139A	Weight Training I (Active)	0.5-1.0
EXSC 139B	Weight Training II (Active)	0.5-1.0
EXSC 139C	Weight Training III (Active)	0.5-1.0
EXSC 139D	Weight Training IV (Active)	0.5-1.0
EXSC 145A	Yoga I (Active)	0.5-1.0
EXSC 145B	Yoga II (Active)	0.5-1.0
EXSC 145C	Yoga III (Active)	0.5-1.0
EXSC 145D	Yoga IV (Active)	0.5-1.0
EXSC 147A	Kickboxing I (Active)	0.5-1.0
EXSC 147B	Kickboxing II (Active)	0.5-1.0
EXSC 147C	Kickboxing III (Active)	0.5-1.0
EXSC 147D	Kickboxing IV (Active)	0.5-1.0
EXSC 148A	Mixed Martial Arts I (Active)	0.5-1.0
EXSC 148B	Mixed Martial Arts II (Active)	0.5-1.0
EXSC 148C	Mixed Martial Arts III (Active)	0.5-1.0
EXSC 148D	Mixed Martial Arts IV (Active)	0.5-1.0
EXSC 154A	Badminton I (Active)	0.5-1.0
EXSC 154B	Badminton II (Active)	0.5-1.0
EXSC 154C	Badminton III (Active)	0.5-1.0
EXSC 154D	Badminton IV (Active)	0.5-1.0
EXSC 158A	Basketball I (Active)	0.5-1.0
EXSC 158B	Basketball II (Active)	0.5-1.0
EXSC 158C	Basketball III (Active)	0.5-1.0
EXSC 158D	Basketball IV (Active)	0.5-1.0
EXSC 174A	Soccer I (Active)	0.5-1.0

EXSC 174B	Soccer II (Active)	0.5-1.0
EXSC 174C	Soccer III (Active)	0.5-1.0
EXSC 174D	Soccer IV (Active)	0.5-1.0
EXSC 176A	Softball I (Active)	0.5-1.0
EXSC 176B	Softball II (Active)	0.5-1.0
EXSC 176C	Softball III (Active)	0.5-1.0
EXSC 176D	Softball IV (Active)	0.5-1.0
EXSC 178A	Tennis I (Active)	0.5-1.0
EXSC 178B	Tennis II (Active)	0.5-1.0
EXSC 178C	Tennis III (Active)	0.5-1.0
EXSC 178D	Tennis IV (Active)	0.5-1.0
EXSC 182A	Volleyball I (Active)	0.5-1.0
EXSC 182B	Volleyball II (Active)	0.5-1.0
EXSC 182C	Volleyball III (Active)	0.5-1.0
EXSC 182D	Volleyball IV (Active)	0.5-1.0
EXSC 184A	Water Polo I (Active)	0.5-1.0
EXSC 184B	Water Polo II (Active)	0.5-1.0
EXSC 184C	Water Polo III (Active)	0.5-1.0
EXSC 184D	Water Polo IV (Active)	0.5-1.0
EXSC 204	Intercollegiate Basketball I (Active)	2.0-3.5
EXSC 205	Intercollegiate Basketball II (Active)	2.0-3.5
EXSC 214	Intercollegiate Soccer I (Active)	2.0-3.5
EXSC 215	Intercollegiate Soccer II (Active)	2.0-3.5
EXSC 216	Intercollegiate Softball I (Active)	2.0-3.5
EXSC 220	Intercollegiate Tennis I (Active)	2.0-3.5
EXSC 221	Intercollegiate Tennis II (Active)	2.0-3.5
EXSC 226	Intercollegiate Water Polo I (Active)	2.0-3.5
EXSC 227	Intercollegiate Water Polo II (Active)	2.0-3.5

FILIPINO STUDIES - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

This certificate represents a focused study of Filipino language and culture. It prepares students to pursue an associate or baccalaureate degree related to language studies or ethnic studies.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Filipino Studies Program will be able to:

1. Demonstrate increased appreciation of the target language culture.
2. Utilize skills developed in class to produce the target language.
3. Demonstrate increased comprehension of the target language.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

FILI 100	Filipino American Experience (Active)	3.0

Select at least two of the following courses: **Semester Units:** 10.0

TAGA 101	First Course in Tagalog (Active)	5.0
TAGA 102	Second Course in Tagalog (Active)	5.0
TAGA 201	Third Course in Tagalog (Active)	5.0

FINANCIAL SERVICES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Financial Services Program is designed for students interested in entry-level positions in the banking and financial services industry. Students develop a broad range of abilities that will enable them to be accomplished in their professional career. The program enhances the capabilities of the student to more effectively assist an organization to achieve success in the industry. Focus areas include mortgage banking, real estate, and investments.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Financial Services Program will be able to:

1. Identify the factors that affect interest rates in the banking industry.
2. Understand the principles of real estate and the daily operations in a real estate office.
3. Assess risk and return for assets and an investment portfolio.
4. Understand the operations and structure of different financial institutions in the financial services industry.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 26.0

BANK 100	Introduction to Financial Services (Active)	3.0
BANK 102	Mortgage Brokerage and Banking (Active)	4.0
BANK 103	Introduction to Investments (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0

Select at least three units from the following: **Semester Units:** 3.0

BANK 200	Principles of Insurance (Active)	3.0
ACCT 120	Federal Income Tax (Active)	3.0
ACCT 121	California Income Tax (Active)	1.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0
REAL 101	Real Estate Principles (Active)	3.0
REAL 115	Real Estate Finance (Active)	3.0
REAL 120	Real Estate Practice (Active)	3.0

FINANCIAL SERVICES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Financial Services Program is designed for students interested in entry-level positions in the banking and financial services industry. Students develop a broad range of abilities that will enable them to be accomplished in

their professional career. The program enhances the capabilities of the student to more effectively assist an organization to achieve success in the industry. Focus areas include mortgage banking, real estate, and investments.

Learning Outcome(s): Students who complete the Financial Services Program will be able to:

1. Identify the factors that affect interest rates in the banking industry.
2. Understand the principles of real estate and the daily operations in a real estate office.
3. Assess risk and return for assets and an investment portfolio.
4. Understand the operations and structure of different financial institutions in the financial services industry.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

BANK 100	Introduction to Financial Services (Active)	3.0
BANK 102	Mortgage Brokerage and Banking (Active)	4.0
BANK 103	Introduction to Investments (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0

FIRE PREVENTION - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who complete the required Fire Academy Training are eligible to participate in the FIPT 381G Skills Review and Certification exam to meet Firefighter I Exam requirements for State Fire Training. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Fire Prevention Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout “Watch Out “; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
4. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
5. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.

6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.

Admission Criteria

The Miramar Fire Technology program offers an option for students to earn their State Fire Training Firefighter I Certification required for entry-level employment by attending a "cohort" of courses on campus. Students interested in attending the On Campus Fire Academy option should visit the Fire Technology Program website to review the application process and requirements to attend. The cohort of courses will be offered in sequence during the Fall and Spring Semesters. The courses include: FIPT 150W, 150A, 150B, 150C, 150T, 322A, 322C, 322F, 323B, 324A, 381G, and 322D. The FIPT 381G Skills Review and Certification course includes the State Fire Training Written and Skills Exam for Structure, Wildland and Hazardous Materials meeting the IFSAC and ProBoard Accreditation. Live Fire Control 3B Certification is provided as an accreditation requirement for Firefighter I Certification. The Certification of Completion and course hours are identical to the traditional Regional Accredited Fire Academy. There are three prerequisites that must be completed prior to the start of the Fire Academy: 1. Completion of EMT course 2. FIPT 101, Fire Protection Organization 3. FIPT 100D, Fire Department Testing Procedures.

CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.9-22.2

ENGL C1000	Academic Reading and Writing (Active)	3.0
FIPT 101	Fire Protection Organization (Active)	3.0
FIPT 102	Fire Prevention Technology (Active)	3.0
FIPT 103	Fire Protection Equipment and Systems (Active)	3.0
FIPT 104	Building Construction for Fire Protection (Active)	3.0
FIPT 105	Fire Behavior and Combustion (Active)	3.0
FIPT 125	Report Writing for the Fire Service (Active)	2.0
		0.2-0.5
FIPT 323A	Hazardous Materials: First Responder Awareness (FRA) (Active)	0.2
OR		
FIPT 323B	Hazardous Materials: First Responder Operational (FRO) (Active)	0.5
FIPT 351A	Fire Inspector 1A: Inspection and Code Enforcement (Active)	0.5
FIPT 351B	Fire Inspector 1B: Fire and Life Safety (Active)	0.5
FIPT 351C	Fire Inspector 1C: Field Inspection (Active)	0.5

FIRE PREVENTION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Fire Protection Technology program offers degrees and certificates in a number of fields associated with the technology of fire protection, rescue, and public safety. The program provides theory and training necessary for successful performance in a variety of settings and positions. Emphasis is placed on modern methods of fire prevention, fire suppression, fire service management, open water lifeguarding, and public safety.

It is highly recommended for Entry Level Firefighter students to concentrate on starting with the EMT certification courses, FIPT 101 and FIPT 100. After successfully completing the EMT course, students are eligible to attend the fire academy. Students who complete the required Fire Academy Training are eligible to participate in the FIPT 381G Skills Review and Certification exam to meet Firefighter I Exam requirements for State Fire Training. Students who successfully complete the requirements for the SFT Firefighter I Academy are eligible for the International Fire Service Accreditation Congress (IFSAC) Seal.

Learning Outcome(s): Students who complete the Fire Prevention Program will be able to:

1. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
2. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout “Watch Out “; and common factors associated with injuries and line of duty deaths.
3. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
4. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer
5. Identify and describe the apparatus used in the f ire service, and the equipment and maintenance of fire apparatus and equipment.
6. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief’s interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
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CAL FIRE Hiring Requirements

The Miramar Fire Academy is partnered with CAL FIRE San Diego and meets all requirements for all eligible entry level employment. Students interested in working for CAL FIRE are encouraged to complete the Firefighter 1 Academy to be considered for employment. The courses also prepare the student to enter a fire academy, depending upon the employer.

Safety and Minimum Requirements

Due to safety concerns, as well as minimum requirement by regulatory agencies, potential students should be aware applicable courses may require participants to demonstrate physically demanding skills, along with both verbal and nonverbal communication skills. The Department may impose physical qualifications for participation when a physical ability is validly deemed essential. If you have any concerns as to your ability to safely participate in these courses, please contact the Fire Academy Director at 619-388-7737.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.9-22.2

ENGL C1000	Academic Reading and Writing (Active)	3.0
FIPT 101	Fire Protection Organization (Active)	3.0
FIPT 102	Fire Prevention Technology (Active)	3.0
FIPT 103	Fire Protection Equipment and Systems (Active)	3.0
FIPT 104	Building Construction for Fire Protection (Active)	3.0
FIPT 105	Fire Behavior and Combustion (Active)	3.0
FIPT 125	Report Writing for the Fire Service (Active)	2.0
		0.2-0.5
FIPT 323A	Hazardous Materials: First Responder Awareness (FRA) (Active)	0.2
OR		
FIPT 323B	Hazardous Materials: First Responder Operational (FRO) (Active)	0.5
FIPT 351A	Fire Inspector 1A: Inspection and Code Enforcement (Active)	0.5
FIPT 351B	Fire Inspector 1B: Fire and Life Safety (Active)	0.5
FIPT 351C	Fire Inspector 1C: Field Inspection (Active)	0.5
FIPT 351D	Fire Inspector 1D: Field Inspection - California Specific (Active)	0.2

FLIGHT INSTRUCTOR - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

When passed with a "C" or better, indicates student qualification to take the FAA Fundamentals of Instruction and the Certified Flight Instructor Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses

must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Flight Instructor Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 211	Flight Instructor Ground School (Active)	3.0
		1.0
AVIA 211L	Basic Visual Flight Instructor Lab (Active)	1.0
OR		
AVIA 215L	Basic Instrument Flight Instructor Lab (Active)	1.0

GEOLOGY - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Geology for Transfer is intended for students who plan to complete a bachelor's degree in Geology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to

complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Geology Program will be able to:

1. Demonstrate understanding of a physical phenomenon using scientific theory.
2. Solve problems related to concepts in the physical sciences.
3. Visualize important physical features of given physical phenomenon.
4. Interpret scientific results collected by others and/or assess the validity of results collected in a physical science laboratory.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.0

GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0
GEOL 111	Dinosaurs, Mass Extinctions, and Earth History (Active)	4.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0

HAWTHORNE TECHNICIAN APPRENTICESHIP (HTAP) - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Hawthorne Technician Apprenticeship (HTAP) Program will be able to:

1. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.

2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 122	Diesel Engines B (Active)	7.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0
DIES 210	Brakes, Final Drives and Steering Systems (Active)	3.0
DIES 220	Undercarriage (Active)	3.0

HAWTHORNE TECHNICIAN APPRENTICESHIP (HTAP) - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Hawthorne Technician Apprenticeship program is designed to prepare students for a career as a Heavy Equipment Technician, servicing and repairing off-highway equipment. For more information please contact Hawthorne Machinery Company HR Department: (858)-674-7023, www.hawthornehiring. com.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Hawthorne Technician Apprenticeship (HTAP) Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 122	Diesel Engines B (Active)	7.0

DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0
DIES 210	Brakes, Final Drives and Steering Systems (Active)	3.0
DIES 220	Undercarriage (Active)	3.0

HEAVY DUTY DIESEL AND ADVANCED TRANSPORTATION TECHNOLOGY (HDDAT) (EVENING PROGRAM) - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Heavy Duty Diesel and Advanced Transportation Technology (HDDAT) (Evening Program) Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 25.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 131	Alternative-Fueled Engine Overhaul (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 137	Diesel Fuel Injection Systems (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0

Select one course from: **Semester Units:** 4.0

		4.0
DIES 125	Diesel Engines I (Active)	4.0
OR		
DIES 126	Diesel Engines II (Active)	4.0
OR		
DIES 128	Diesel Engines III (Active)	4.0

Select one course from: **Semester Units:** 3.0

		3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
OR		
DIES 165	Truck Automatic Transmissions (Active)	3.0

HEAVY DUTY TRANSPORTATION TECHNOLOGY (HDTT) (DAY PROGRAM) - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate of Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate of Science degree.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Heavy Duty Transportation Technology (HDTT) (Day Program) Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0
DIES 175	Truck Chassis R&R (Active)	3.0
DIES 180	Steering, Suspension, and Driveline Systems (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0

Select two courses from: **Semester Units:** 14.0

		7.0
DIES 121	Diesel Engines A (Active)	7.0

OR		
DIES 122	Diesel Engines B (Active)	7.0
OR		
DIES 124	Diesel Engines D (Active)	7.0

Select one course from: **Semester Units:** 3.0

		3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
OR		
DIES 165	Truck Automatic Transmissions (Active)	3.0

HEAVY DUTY TRANSPORTATION TECHNOLOGY (HDTT) (DAY PROGRAM) - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Heavy Duty Transportation Technology (HDTT) (Day Program) Program will be able to:

1. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0
DIES 175	Truck Chassis R&R (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0
DIES 180	Steering, Suspension, and Driveline Systems (Active)	3.0

Select Two Courses From: **Semester Units:** 14.0

		7.0
DIES 121	Diesel Engines A (Active)	7.0
OR		
DIES 122	Diesel Engines B (Active)	7.0
OR		
DIES 124	Diesel Engines D (Active)	7.0

Select one course from: **Semester Units:** 3.0

		3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
OR		
DIES 165	Truck Automatic Transmissions (Active)	3.0

HEAVY EQUIPMENT POWERTRAINS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Performance in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Heavy Equipment Powertrains Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

		13.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 210	Brakes, Final Drives and Steering Systems (Active)	3.0
DIES 220	Undercarriage (Active)	3.0
DIES 230	Heavy Equipment Transmissions (Active)	3.0

HEAVY EQUIPMENT TECHNOLOGY (HET) (DAY PROGRAM) - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate of Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate of Science degree.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Heavy Equipment Technology (HET) (Day Program) Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 34.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0
DIES 210	Brakes, Final Drives and Steering Systems (Active)	3.0
DIES 220	Undercarriage (Active)	3.0
DIES 230	Heavy Equipment Transmissions (Active)	3.0
DIES 240	Equipment Chassis R&R (Active)	3.0

Select two courses from: **Semester Units:** 14.0

		7.0
DIES 121	Diesel Engines A (Active)	7.0
OR		
DIES 122	Diesel Engines B (Active)	7.0
OR		
DIES 124	Diesel Engines D (Active)	7.0

HEAVY EQUIPMENT TECHNOLOGY (HET) (DAY PROGRAM) - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Learning Outcome(s): Students who complete the Heavy Equipment Technology (HET) (Day Program) Program will be able to:

1. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 34.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 123	Diesel Engines C (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0
DIES 210	Brakes, Final Drives and Steering Systems (Active)	3.0
DIES 220	Undercarriage (Active)	3.0
DIES 230	Heavy Equipment Transmissions (Active)	3.0
DIES 240	Equipment Chassis R&R (Active)	3.0

Select two courses from: **Semester Units:** 14.0

		7.0
DIES 121	Diesel Engines A (Active)	7.0
OR		
DIES 122	Diesel Engines B (Active)	7.0
OR		
DIES 124	Diesel Engines D (Active)	7.0

HEAVY EQUIPMENT UNDERCARRIAGE SYSTEMS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Performance in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Heavy Equipment Undercarriage Systems Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

		7.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 220	Undercarriage (Active)	3.0

HELICOPTER OPERATIONS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Certificate of Performance Helicopter Operations provides an introduction to helicopter operations and careers.

When passed with a "C" or better indicates student qualification to take the FAA Helicopter Private Pilot Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Helicopter Operations Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 151	Helicopter Ground School (Active)	3.0

HISTORY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in History for Transfer is intended for students who plan to complete a bachelor's degree in Biology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the History Program will be able to:

1. Demonstrate knowledge of key historical facts, values, and ideas that have shaped civilizations throughout history.
2. Critically analyze primary and secondary sources in college-level essays, written assignments, and research papers.
3. Demonstrate historical skills through written and verbal communication of arguments, analysis and conclusions of historical topics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0

Select one of the following courses: **Semester Units:** 3.0-5.0

HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
SPAN 101	First Course in Spanish (Active)	5.0
SPAN 102	Second Course in Spanish (Active)	5.0
SPAN 201	Third Course in Spanish (Active)	5.0
SPAN 202	Fourth Course in Spanish (Active)	5.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university; a Spanish course is strongly recommended for students planning to transfer to San Diego State University)

Select one of the following courses if not selected above: **Semester Units:** 3.0

HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 106	Introduction to Western Civilization II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ARTF 107	Contemporary Art (Active)	3.0
ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
MUSI 103	History of Rock Music (Active)	3.0
MUSI 111	Jazz History (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

HONORS GLOBAL COMPETENCIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Honors Global Competencies Certificate of Achievement provides an interdisciplinary and systemic approach in order to prepare students for the highly diverse, technologically-rich, and multilingual global society in which we live. The certificate offers students the opportunity to gain a global perspective through completion of coursework in intercultural competencies; communication, computational, and analytical skills; technology; and critical thinking. This certificate helps students to transfer to four-year institutions in concert with the Honors designation. It also prepares students for study and work throughout the world in professional fields such as international studies, intercultural studies, language studies, international business, international law, political science, comparative literature, environmental studies, history, technology, social sciences, humanities, teaching, and more.

All coursework except for foreign language must be completed as an honors class or honors contract.

Learning Outcome(s): Students who complete the Honors Global Competencies Program will be able to:

1. Demonstrate integrative and applied learning.
2. Demonstrate critical inquiry, analysis, thinking, writing, and quantitative skills.
3. Demonstrate knowledge of human cultures and the physical and natural world.
4. Demonstrate intellectual and practical skills.
5. Demonstrate personal and social responsibility.

Requirements

CRITICAL THINKING - SELECT 3 UNITS FROM THE FOLLOWING **Semester Units:** 3.0

COMS 135	Interpersonal Communication (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 208	Introduction to Literature (Active)	3.0
		3.0
BUSE 115	Statistics for Business (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0

LANGUAGES - SELECT 5 UNITS FROM THE FOLLOWING **Semester Units:** 5.0

SPAN 101	First Course in Spanish (Active)	5.0
SPAN 102	Second Course in Spanish (Active)	5.0
SPAN 201	Third Course in Spanish (Active)	5.0
SPAN 202	Fourth Course in Spanish (Active)	5.0
TAGA 101	First Course in Tagalog (Active)	5.0
TAGA 102	Second Course in Tagalog (Active)	5.0
TAGA 201	Third Course in Tagalog (Active)	5.0

GLOBAL STUDIES - SELECT A MINIMUM OF 9 UNITS FROM THREE DIFFERENT SUBJECT AREAS **Semester Units:** 9.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ANTH 102	Introduction to Biological Anthropology (Active)	3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
ANTH 107	Introduction to Archaeology (Active)	3.0
ARTF 100	Art Orientation (Active)	3.0
ARTF 107	Contemporary Art (Active)	3.0
ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 115	Aviation Weather (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
BIOL 100	Natural History - Environmental Biology (Active)	4.0
BIOL 115	Marine Biology (Active)	4.0
BIOL 130	Human Heredity (Active)	3.0
BIOL 131	Introduction to Biotechnology (Active)	4.0
BIOL 132	Applied Biotechnology I (Active)	4.0
BIOL 133	Applied Biotechnology II (Active)	4.0
BIOL 135	Biology of Human Nutrition (Active)	3.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
BUSE 100	Introduction to Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
CHEM 111	Chemistry in Society (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 103	Lifespan Growth and Development (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
ENGL 209	Literary Approaches to Film (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
ENGL 230	Asian American Literature (Active)	3.0
FIPT 101	Fire Protection Organization (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 104	Earth Science (Active)	3.0
HEAL 101	Health and Lifestyle (Active)	3.0

HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 115A	History of the Americas I (Active)	3.0
HIST 115B	History of the Americas II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
HIST 141	Women in United States History I (Active)	3.0
HIST 142	Women in United States History II (Active)	3.0
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 106	World Religions (Active)	3.0
HUMA 201	Mythology (Active)	3.0
JOUR 202	Introduction to Mass Communication (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0
MUSI 100	Introduction to Music (Active)	3.0
MUSI 109	World Music (Active)	3.0
NUTR 153	Cultural Foods (Active)	3.0
OCEA 101	The Oceans (Active)	3.0
PARA 100	Introduction to Law and Ethics (Active)	3.0
PARA 105	Legal Research (Active)	3.0
PARA 110	Legal Writing & Communications (Active)	3.0
PARA 115	Civil Litigation - Procedures (Active)	3.0
PARA 120	Tort Law (Active)	3.0
PARA 140	Law Office Technology (Active)	3.0
PARA 180	Contract Law (Active)	3.0
PARA 210	Immigration Law (Active)	3.0
PHIL 104A	History Of Western Philosophy: Ancient to Medieval (Active)	3.0
PHIL 107	Reflections on Human Nature (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
POLI 103	Comparative Politics (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 133	Psychology of Women (Active)	3.0
PSYC 135	Marriage and Family Relations (Active)	3.0
PSYC 137	Human Sexual Behavior (Active)	3.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0

HUMAN DEVELOPMENT STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in Human Development Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a human development-related major. Common university majors in this field include: Child Development, Family and Consumer Studies, Gerontology, and Human Development. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each

transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Human Development Studies Program will be able to:

1. Apply human development growth theories and principles to early childhood settings.
2. Communicate effectively with children, families, staff, and the community.
3. Plan and implement developmentally appropriate curriculum for children.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

CHIL 101	Human Growth and Development (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

Select at least 12 units from the following: **Semester Units:** 12.0-13.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
BIOL 130	Human Heredity (Active)	3.0
BIOL 235	Human Physiology (Active)	4.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
CHIL 103	Lifespan Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 151	Program Planning (Active)	3.0
CHIL 160	Observation and Assessment of Children (Active)	2.0
CHIL 162	Positive Child Guidance (Active)	3.0
CHIL 175	Infant-Toddler Growth and Development (Active)	3.0
CHIL 176	Principles of Infant-Toddler Caregiving (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
NUTR 150	Nutrition Science and Global Food Issues (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PSYC 135	Marriage and Family Relations (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

HUMANITIES STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in Humanities Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a humanities-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Humanities Studies Program will be able to:

1. Distinguish the uniqueness of a variety of cultures to develop an appreciation for these differences.
2. Analyze the impact cultures and subcultures have on societal expectations and behaviors.
3. Analyze historical occurrences and their impact on societal expectations and behaviors.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

		3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
OR		
PHIL 100	Logic and Critical Thinking (Active)	3.0

Select at least 15 units from the following: **Semester Units:** 15.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
ENGL 208	Introduction to Literature (Active)	3.0
ENGL 210	American Literature I (Active)	3.0
ENGL 211	American Literature II (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0
HIST 141	Women in United States History I (Active)	3.0
HIST 142	Women in United States History II (Active)	3.0
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 106	World Religions (Active)	3.0
HUMA 201	Mythology (Active)	3.0
MUSI 100	Introduction to Music (Active)	3.0
MUSI 109	World Music (Active)	3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0

POLS C1000	American Government and Politics (Active)	3.0

HYBRID / ELECTRIC VEHICLES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Automotive Technology program provides both classroom theory and extensive hands on (shop) entry-level employment training as well as professional upgrading to persons in the automotive industry. The program provides training for each of the areas tested for National Institute for Automotive Service Excellence (ASE) certification, and Bureau of Automotive Repair training for state licenses as well. Certificates of Achievement are offered in Automotive Chassis, Automotive Electrical, Automotive Engine Performance, and Automotive Transmissions. A Certificate of Performance is offered for Advanced Emissions Specialist. The program emphasis is on various automotive manufacturer products. Specific ASEEF Certified training in American Honda Motors and Toyota Motor Sales is available in designated courses. Students have the opportunity for internship training when available. If employed, student interns may work for a repair facility while concurrently receiving formal training in Automotive Technology coursework. Upon completion, the student may have the opportunity for full-time employment at that repair facility. While progressing through the training, students are strongly encouraged to obtain at least two Automotive Service Excellence (ASE) Certifications.

Learning Outcome(s): Students who complete the Hybrid / Electric Vehicles Program will be able to:

1. Accurately diagnose and repair light duty automotive systems and components.
2. Identify workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Research automotive repair data, instructions, and specifications using printed material as well as computer database systems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

AUTO 161T	Honda/Toyota Basic Electricity and Electrical Systems Fundamentals (Active)	4.0
AUTO 162T	Honda/Toyota Advanced Electrical (Active)	4.0
AUTO 165T	Honda/Toyota Engine Performance (Active)	4.0
AUTO 167T	Honda/Toyota Advanced Engine Performance (Active)	4.0
AUTO 169T	Honda/Toyota Climate Control Systems (Active)	4.0
AUTO 180T	Hybrid Electric Vehicle (HEV) Systems (Active)	4.0

INDEPENDENT BUSINESS OWNERSHIP - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

Business entrepreneurs plan, start, and operate new businesses or new ventures within existing companies. They generate new business ideas and innovate to produce new products, services, and business processes.

The program helps students understand the elements of successful high growth ventures, what is involved in launching and marketing a startup, and the entrepreneurial process. The experience includes both theoretical courses to help develop the entrepreneurial mindset and learn the fundamentals of entrepreneurship, as well as an optional lab component where students can practice the theory by participating in an incubation program.

The Certificate of Performance in Independent Business Ownership provides students the basic knowledge and skills needed to plan, start, and manage a new business in various occupations.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Independent Business Ownership Program will be able to:

1. Identify opportunities using ideation and trend-spotting techniques.
2. Describe the process and multiple ways to become an entrepreneur.
3. Evaluate and critique opportunities by assessing the impact and feasibility of ideas by examining critical components of a business model.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

BUSE 129	Introduction to Entrepreneurship (Active)	3.0
		3.0
BUSE 155	Small Business Management (Active)	3.0
OR		
BUSE 157	Developing a Plan for the Small Business (Active)	3.0

Select at least two (2) units from the following courses (not already completed above): **Semester Units:** 2.0-6.0

BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 229A	Gazelle Path Business Incubator I (Active)	4.0
BUSE 229B	Gazelle Path Business Incubator II (Active)	4.0
BUSE 229C	Gazelle Path Business Incubator III (Active)	4.0
BUSE 229D	Gazelle Path Business Incubator IV (Active)	4.0
BUSE 270	Business Internship / Work Experience (Active)	1.0-4.0
BUSE 290	Independent Study (Active)	1.0-3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
AUTO 151T	Honda/Toyota Quick Service Lube, Pre-Delivery Inspection Technician (Active)	4.0
AUTO 153G	Introduction to Automotive Technology (Active)	3.0
AUTO 156G	Engine and Related Systems (Active)	4.0
AUTO 156T	Honda/Toyota Engine and Related Systems (Active)	4.0
AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
CHIL 101	Human Growth and Development (Active)	3.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
EXSC 242B	Care and Prevention of Injuries (Active)	3.0
EXSC 292A	Yoga Teacher Training Essentials (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
REAL 101	Real Estate Principles (Active)	3.0
WORK 272	General Work Experience (Active)	1.0-3.0

INSTRUMENT PILOT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

When passed with a "C" or better, indicates student qualification to take the FAA Instrument Rating Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Instrument Pilot Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0-11.0

AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 195	Instrument Ground School (Active)	3.0
AVIA 195L	Basic Instrument Flight Lab (Active)	1.0
AVIA 196L	Advanced Instrument Flight Lab (Active)	1.0

INVESTIGATIONS SPECIALIZATION - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Court Support Services, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon and night classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science Degree or select from a variety of certificates of completion and certificates of achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Investigations Specialization Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 220	Law Enforcement Forensics (Active)	3.0

Select three units from the following: **Semester Units:** 3.0

ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0

INVESTIGATIONS SPECIALIZATION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Court Support Services, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon and night classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate in Science Degree or select from a variety of certificates of completion and certificates of achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.
Learning Outcome(s): Students who complete the Investigations Specialization Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 220	Law Enforcement Forensics (Active)	3.0

Select three units from the following: **Semester Units:** 3.0

ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0

KINESIOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Kinesiology for Transfer is intended for students who plan to complete a bachelor's degree in Kinesiology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation

for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Kinesiology Program will be able to:

1. Transfer into a Kinesiology (or related) program of study at a four-year institution.
2. Explain the research-supported physiological and psychological benefits of physical activity.
3. Describe and apply current nutritional guidelines to enhance physical health and well-being.
4. Exhibit theoretical comprehension and competence in all health, exercise science, and nutrition discipline courses.

Requirements

CORE COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
EXSC 241B	Introduction to Kinesiology (Active)	3.0

Movement-based courses: Select a maximum of one course from any three of the following areas (3 units total) **Semester Units:** 3.0

Aquatics

EXSC 113A	Swimming I (Active)	0.5-1.0
EXSC 113B	Swimming II (Active)	0.5-1.0
EXSC 113C	Swimming III (Active)	0.5-1.0
EXSC 114A	Aquatic Fitness I (Active)	0.5-1.0
EXSC 114B	Aquatic Fitness II (Active)	0.5-1.0
EXSC 114C	Aquatic Fitness III (Active)	0.5-1.0

Fitness

EXSC 124A	Core and Cardio Fitness I (Active)	0.5-1.0
EXSC 124B	Core and Cardio Fitness II (Active)	0.5-1.0
EXSC 124C	Core and Cardio Fitness III (Active)	0.5-1.0
EXSC 126A	Cardio Conditioning I (Active)	1.0
EXSC 126B	Cardio Conditioning II (Active)	1.0
EXSC 126C	Cardio Conditioning III (Active)	1.0
EXSC 135A	Individual Conditioning I (Active)	1.0
EXSC 135B	Individual Conditioning II (Active)	0.5-1.0

EXSC 135C	Individual Conditioning III (Active)	0.5-1.0
EXSC 139A	Weight Training I (Active)	1.0
EXSC 139B	Weight Training II (Active)	1.0
EXSC 139C	Weight Training III (Active)	1.0
EXSC 140A	Boot Camp I (Active)	0.5-1.0
EXSC 140B	Boot Camp II (Active)	0.5-1.0
EXSC 144A	Fitness Walking I (Active)	0.5-1.0
EXSC 145A	Yoga I (Active)	0.5-1.0
EXSC 145B	Yoga II (Active)	0.5-1.0
EXSC 145C	Yoga III (Active)	0.5-1.0

Individual Sports

EXSC 154A	Badminton I (Active)	1.0
EXSC 154B	Badminton II (Active)	0.5-1.0
EXSC 154C	Badminton III (Active)	0.5-1.0
EXSC 178A	Tennis I (Active)	1.0
EXSC 178B	Tennis II (Active)	0.5-1.0
EXSC 178C	Tennis III (Active)	0.5-1.0

Team Sports

EXSC 158A	Basketball I (Active)	0.5-1.0
EXSC 158B	Basketball II (Active)	0.5-1.0
EXSC 158C	Basketball III (Active)	0.5-1.0
EXSC 174A	Soccer I (Active)	1.0
EXSC 174B	Soccer II (Active)	0.5-1.0
EXSC 174C	Soccer III (Active)	0.5-1.0
EXSC 182A	Volleyball I (Active)	1.0
EXSC 182B	Volleyball II (Active)	0.5-1.0
EXSC 182C	Volleyball III (Active)	0.5-1.0
EXSC 184A	Water Polo I (Active)	0.5-1.0
EXSC 184B	Water Polo II (Active)	0.5-1.0
EXSC 184C	Water Polo III (Active)	0.5-1.0

Select two of the following courses (minimum 6 units) **Semester Units:** 8.0-10.0

STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
AND		
PSYC 259	Behavioral Science Statistics Laboratory (Active)	1.0
OR		
CHEM 200	General Chemistry I - Lecture (Active)	3.0
AND		
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
OR		
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
AND		
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0

OR		
PHYS 125	General Physics (Historical)	5.0
OR		
PHYS 195	Mechanics (Active)	5.0
OR		
PSYC C1000	Introduction to Psychology (Active)	3.0
OR		
SOCO 101	Principles of Sociology (Active)	3.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

LAW ENFORCEMENT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Law Enforcement Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0

Select nine units from the following: **Semester Units:** 9.0

ADJU 127A	Physical Conditioning I (Active)	1.0
ADJU 128A	Defensive Tactics I (Active)	1.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0
ADJU 220	Law Enforcement Forensics (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
ADJU 357A	832 PC Laws of Arrest (Active)	1.0

LAW ENFORCEMENT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Learning Outcome(s): Students who complete the Law Enforcement Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0

Select nine units from the following: **Semester Units:** 9.0

ADJU 127A	Physical Conditioning I (Active)	1.0
ADJU 128A	Defensive Tactics I (Active)	1.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 180	Drug Abuse and Law Enforcement (Active)	3.0
ADJU 182	Street Gangs and Law Enforcement (Active)	3.0

ADJU 220	Law Enforcement Forensics (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
ADJU 357A	832 PC Laws of Arrest (Active)	1.0

LAW ENFORCEMENT SUPERVISION - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Learning Outcome(s): Students who complete the Law Enforcement Supervision Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 25.5

ADJU 260	POST Certified Regional Academy (Active)	24.0
ADJU 312A	Basic Supervisory Course (Active)	1.5

LAW ENFORCEMENT TECHNOLOGIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Note: A minimum of three SDCCD courses must be completed to meet the district residency requirement.

Learning Outcome(s): Students who complete the Law Enforcement Technologies Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.

2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ADJU 260	POST Certified Regional Academy (Active)	24.0

Select one of the following courses: **Semester Units:** 0.5-3.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 361R	Regional Officer Training (Active)	0.5

NOTE: A minimum of three SDCCD courses must be completed to meet the district residency requirement.

LAW, PUBLIC POLICY, AND SOCIETY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Law, Public Policy, and Society for Transfer is intended for students who plan to complete a bachelor's degree in Law or Public Policy or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Law, Public Policy, and Society Program will be able to:

1. Describe and compare basic concepts, principles, and terms used in the study of law, public organizations, and public policy.
2. Examine the role of ethics in the management of public organizations.
3. Evaluates various management practices and leadership techniques used in public administration

4. Describe the structure and functions of various U.S. public institutions.
5. Summarize the structure and function of the U.S. legal system at the local, state, and federal levels.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

PADM 200	Introduction to Public Administration (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0

Select one of the following law-related courses **Semester Units:** 3.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0

Select one of the following statistics courses **Semester Units:** 3.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

Select one of the following economics courses **Semester Units:** 3.0

ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select one of the following critical thinking courses **Semester Units:** 3.0

ENGL C1001	Critical Thinking and Writing (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0

Select one of the following U.S. history courses **Semester Units:** 3.0

HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0

LEGAL SECRETARY - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

Paralegals assist attorneys in providing quality legal services to clients. The Paralegal program is designed to provide students with the knowledge and skills needed to assist lawyers in the practice of law.*

The curriculum focuses on building strong research, writing, and analytical skills, while stressing the ethical framework of the law. Upon completion of the program, students will be able to work in a variety of legal settings including law firms, corporations, and government agencies. All paralegal courses have a practical component, allowing students to practice the legal theories taught in the classroom. The Paralegal program is approved by the American Bar Association.

*Paralegals may not provide legal services directly to the public, except as permitted by law. California prohibits the practice of law by non-lawyers.

This certificate prepares the student for an entry level position as a legal secretary.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Legal Secretary Program will be able to:

1. Recognize the ethical implications of diversity, equity, and inclusion (DEI) issues that arise in legal work environments and apply rules of professional conduct to resolve them.
2. Perform legal research using both printed and electronic sources.
3. Use computers and other technology for document production, law office management, and trial preparation.
4. Apply basic principles of legal analysis.
5. Demonstrate written skills that paralegals use on the job.
6. Perform the duties of an entry level paralegal in a law firm or other legal work setting.
7. Recognize the ethical issues that arise in a legal work environment and apply rules of professional conduct to resolve them.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

PARA 221	Legal Secretary Skills and Procedure (Active)	3.0
PARA 140	Law Office Technology (Active)	3.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0

MATHEMATICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Mathematics for Transfer is intended for students who plan to complete a bachelor's degree in Mathematics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

General Education
In addition to the courses listed, students must complete the general education option based on the Cal-GETC pattern accepted by all CSU and UC campuses and majors.

It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.

- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Mathematics Program will be able to:

1. Apply mathematical skills to achieve academic and professional goals.
2. Apply critical thinking in problem solving.
3. Demonstrate sufficient mathematical knowledge for further academic study in mathematics or related disciplines.
4. Analyze and solve mathematical problems in everyday life.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

STAT C1000	Introduction to Statistics (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
MATH 254	Introduction to Linear Algebra (Active)	3.0

MATHEMATICS STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in Mathematics Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a mathematics-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Mathematics Studies Program will be able to:

1. Apply mathematical skills to achieve academic and professional goals.
2. Apply critical thinking in problem solving.
3. Demonstrate sufficient mathematical knowledge for further academic study in mathematics or related disciplines.
4. Analyze and solve mathematical problems in everyday life.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0

Select at least 5 units from the following: **Semester Units:** 5.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0

CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
CISC 181	Principles of Information Systems (Active)	4.0
CISC 186	Visual Basic Programming (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 245	Discrete Mathematics (Active)	3.0
MATH 254	Introduction to Linear Algebra (Active)	3.0
MATH 255	Differential Equations (Active)	3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PHYN 100	Survey of Physical Science (Active)	3.0
PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

MEDICAL LABORATORY TECHNOLOGY - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

National certification agency requires the completion of an accredited Medical Laboratory Technology program certificate and an Associate of Science to be eligible for the MLT examination.

Students are required to complete a series of biology and chemistry prerequisites prior to enrolling in Medical Laboratory Technology Training courses. Please consult the catalog and counselors for more information. Students will need to complete a CA CPT-1 (phlebotomy license) or equivalent in order to sit for state/national licensure exams.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Medical Laboratory Technology Program will be able to:

1. Students will exhibit theoretical comprehension and competence in all MLT courses.
2. Demonstrate professionalism and awareness of their role in the delivery of health care to patients, such as respecting the rights of patients, colleagues and other health professionals as they perform duties within the constraints of legal, moral and ethical conduct.
3. Exhibit positive attitudes in the areas of professionalism and commitment to delivering excellent health care.
4. Demonstrate entry level MLT skills in the following: Clinical Chemistry, Hematology, Urinalysis and Coagulation, Immunology and Immunohematology, and Microbiology.

Accreditation

Accredited by:

- State of California Department of Health Services
- National Association for the Accreditation of Clinical Laboratory Sciences

Admission Criteria

Limited enrollment requires application process. Visit San Diego Miramar's Medical Laboratory Technology website for more information.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

MLTT 210	Clinical Chemistry and Laboratory Operations (Active)	4.0
MLTT 211	Clinical Hematology Urinalysis And Body Fluids (Active)	4.0
MLTT 212	Clinical Microbiology (Active)	4.0
MLTT 213	Blood Bank and Immunology (Active)	4.0
MLTT 61	Directed Clinical Practice in Clinical Chemistry (Active)	3.0
MLTT 62	Directed Clinical Practice in Clinical Hematology, Urinalysis and Coagulation (Active)	3.0
MLTT 63	Directed Clinical Practice in Clinical Immunology and Immunohematology (Active)	3.0
MLTT 64	Directed Clinical Practice in Clinical Microbiology (Active)	3.0

MEDICAL LABORATORY TECHNOLOGY - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

National certification agency requires the completion of an accredited Medical Laboratory Technology program certificate and an Associate of Science to be eligible for the MLT examination.

Students are required to complete a series of biology and chemistry prerequisites prior to enrolling in Medical Laboratory Technology Training courses. Please consult the catalog and counselors for more information

Learning Outcome(s): Students who complete the Medical Laboratory Technology Program will be able to:

1. Students will exhibit theoretical comprehension and competence in all MLT courses.
2. Demonstrate professionalism and awareness of their role in the delivery of health care to patients, such as respecting the rights of patients, colleagues and other health professionals as they perform duties within the constraints of legal, moral and ethical conduct.
3. Exhibit positive attitudes in the areas of professionalism and commitment to delivering excellent health care.
4. Demonstrate entry level MLT skills in the following: Clinical Chemistry, Hematology, Urinalysis and Coagulation, Immunology and Immunohematology, and Microbiology.

Accreditation

Accredited by:

- State of California Department of Health Services
- National Association for the Accreditation of Clinical Laboratory Sciences

Admission Criteria

Limited enrollment requires application process. Visit San Diego Miramar's Medical Laboratory Technology website for more information.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

MLTT 210	Clinical Chemistry and Laboratory Operations (Active)	4.0
MLTT 211	Clinical Hematology Urinalysis And Body Fluids (Active)	4.0
MLTT 212	Clinical Microbiology (Active)	4.0
MLTT 213	Blood Bank and Immunology (Active)	4.0
MLTT 61	Directed Clinical Practice in Clinical Chemistry (Active)	3.0
MLTT 62	Directed Clinical Practice in Clinical Hematology, Urinalysis and Coagulation (Active)	3.0
MLTT 63	Directed Clinical Practice in Clinical Immunology and Immunohematology (Active)	3.0
MLTT 64	Directed Clinical Practice in Clinical Microbiology (Active)	3.0

MOBILE HYDRAULICS TECHNICIAN - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Performance in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Mobile Hydraulics Technician Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

		7.0
DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 200	Mobile Hydraulic Systems (Active)	3.0

MUSIC STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The academic program in Music Studies provides students with basic musical skills required in the discipline in preparation for transfer to a four-year institution.

The Associate of Arts Degree with an area of emphasis in Music Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in an interdisciplinary music-related major. The degree is designed to accommodate the differing requirements of a wide variety of transfer institution and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar Counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Music Studies Program will be able to:

1. Conduct an in depth analysis of contemporary music identifying genres from different periods as well as an analysis of music from historical and theoretical perspectives.
2. Summarize societal issues associated with the production, dissemination, celebration and consumption of Music.
3. Describe the relationship between technology using the technological tools applicable as it relates to music.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

MUSI 100	Introduction to Music (Active)	3.0
MUSI 124A	Piano Class I (Active)	1.0
MUSI 148A	Music Theory I (Active)	3.0
MUSI 150A	Basic Musicianship (Active)	3.0
MUSI 268A	Ear Training I (Active)	1.0

Select one course from the following: **Semester Units:** 3.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 106	World Religions (Active)	3.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

Select 4 units from the following courses (not already selected above): **Semester Units:** 4.0

MUSI 103	History of Rock Music (Active)	3.0
MUSI 108	The Business of Music (Active)	3.0
MUSI 109	World Music (Active)	3.0
MUSI 111	Jazz History (Active)	3.0
MUSI 132A	Classical Guitar I (Active)	1.0
MUSI 132B	Classical Guitar II (Active)	1.0
MUSI 148B	Music Theory II (Active)	3.0
MUSI 190	Introduction to Music Technology (Active)	3.0
MUSI 201	Recording Arts (Active)	3.0
MUSI 202	Computer Music (Active)	3.0
MUSI 124B	Piano Class II (Active)	1.0
MUSI 224A	Piano Class III (Active)	1.0
MUSI 224B	Piano Class IV (Active)	1.0
MUSI 268B	Ear Training II (Active)	1.0
MUSI 261A	World Music Ensemble I (Active)	1.0

MUSI 261B	World Music Ensemble II (Active)	1.0
MUSI 261C	World Music Ensemble III (Active)	1.0
MUSI 261D	World Music Ensemble IV (Active)	1.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 113	Arts of Africa, Oceania, and the Americas (Active)	3.0
ARTF 125	Art History: Arts of the Asian Continent (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 106	World Religions (Active)	3.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

NUTRITION AND DIETETICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Nutrition and Dietetics for Transfer is intended for students who plan to complete a bachelor's degree in Nutrition and Dietetics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Nutrition and Dietetics Program will be able to:

1. Transfer into a Kinesiology (or related) program of study at a four-year institution
2. Explain the research-supported physiological and psychological benefits of physical activity
3. Describe and apply current nutritional guidelines to enhance physical health and well-being
4. Exhibit theoretical comprehension and competence in all health, exercise science, and nutrition discipline courses

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

NUTR 150	Nutrition Science and Global Food Issues (Active)	3.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 230	Human Anatomy (Active)	4.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
PSYC C1000	Introduction to Psychology (Active)	3.0
		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
BUSE 115	Statistics for Business (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0

Select one of the following courses: **Semester Units:** 3.0-5.0

NUTR 153	Cultural Foods (Active)	3.0
NUTR 155	Advanced Nutrition (Active)	3.0
		4.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
OR		
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
OR		
BIOL 210B	Introduction to the Biological Sciences II (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
		4.0
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
AND		
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0
		4.0
CHEM 152	Introduction to General Chemistry (Active)	3.0
AND		
CHEM 152L	Introduction to General Chemistry Laboratory (Active)	1.0
CHEM 160	Introductory Biochemistry (Active)	3.0
		5.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
AND		
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
		5.0
CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
AND		
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0
EXSC 241B	Introduction to Kinesiology (Active)	3.0
MATH 116	College and Matrix Algebra (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

OCCUPATIONAL/TECHNICAL STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate of Science degree with an area of emphasis in Occupational/Technical Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in an occupational- or technical-related major. Common university majors in this field include: Aviation and Aerospace Engineering, Aviation Management, Criminal Justice / Justice Studies, Fire Protection Administration, Industrial Technology, Manufacturing Technology, and Vocational Education.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Occupational/Technical Studies Program will be able to:

1. Demonstrate critical inquiry, analysis, thinking, writing, and quantitative skills.
2. Demonstrate knowledge of human cultures and the physical and natural world.
3. Demonstrate integrative and applied learning.
4. Demonstrate intellectual and practical skills.
5. Demonstrate personal and social responsibility.

Requirements

Select at least one course from the following occupational courses: **Semester Units:** 3.0-4.0

ACCT 120	Federal Income Tax (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 161	Juvenile Procedures (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
BANK 100	Introduction to Financial Services (Active)	3.0
BANK 102	Mortgage Brokerage and Banking (Active)	4.0
BANK 103	Introduction to Investments (Active)	3.0
BUSE 100	Introduction to Business (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0
BUSE 129	Introduction to Entrepreneurship (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0
PADM 200	Introduction to Public Administration (Active)	3.0
PARA 100	Introduction to Law and Ethics (Active)	3.0
PARA 105	Legal Research (Active)	3.0
PARA 110	Legal Writing & Communications (Active)	3.0
PARA 115	Civil Litigation - Procedures (Active)	3.0

PARA 120	Tort Law (Active)	3.0
PARA 180	Contract Law (Active)	3.0
PERG 130	Career - Life Planning (Active)	3.0
REAL 101	Real Estate Principles (Active)	3.0
REAL 115	Real Estate Finance (Active)	3.0

Select at least one course and the remainder of units needed to meet the minimum of 18 from the following technical courses: **Semester Units:** 15.0-14.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 125	Aviation and Airport Management (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 151	Helicopter Ground School (Active)	3.0
AVIA 161	Remote Pilot Ground School (Active)	3.0
AVIA 228	Group Dynamics II (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0
AVIM 102G	General Aviation Maintenance Technology Practices I (Active)	2.0
AVIM 102H	General Aviation Maintenance Technology Practices II (Active)	2.0
AVIM 103B	Aircraft Welding and Sheet Metal Structures (Active)	3.0
AVIM 103D	Aircraft Landing Gear Systems (Active)	3.0
AVIM 104B	Applied Aircraft Welding and Sheet Metal Structures (Active)	1.5
AVIM 104D	Applied Aircraft Landing Gear Systems (Active)	1.0
AVIM 105A	Aircraft Cabin Atmosphere Control (Active)	1.5
AVIM 106A	Aircraft Cabin Atmosphere Control (Active)	0.5
AVIM 109A	Airframe Electrical Systems (Active)	3.0
AVIM 109B	Powerplant Ignition Systems (Active)	2.0
AVIM 110A	Applied Airframe Electrical Systems (Active)	1.0
AVIM 107B	Turbine Engines (Active)	3.0
AVIM 108B	Applied Turbine Engines (Active)	1.0
AVIM 109D	Aircraft Fire Protection and Digital Logic (Active)	1.0
AVIM 111C	Reciprocating Engines I (Active)	3.0
AVIM 111D	Reciprocating Engines II (Active)	3.0
AVIM 112C	Applied Reciprocating Engines I (Active)	2.0
AVIM 112D	Applied Reciprocating Engines II (Active)	1.0
AVIM 120	Basic D.C. Electronics Theory (Active)	3.0
AVIM 121A	Applied Basic D.C. Electronics (Active)	1.5
AVIM 249	Induction and Fuel Metering (Active)	3.0
BIOL 131	Introduction to Biotechnology (Active)	4.0
BIOL 132	Applied Biotechnology I (Active)	4.0
BIOL 133	Applied Biotechnology II (Active)	4.0
BIOL 134	Introduction to the Biotechnology Lab (Active)	1.0
CBTE 114	Introduction to Microsoft Windows (Active)	1.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 122	Intermediate Microsoft Word (Active)	3.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 180	Microsoft Office (Active)	3.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
		7.0
DIES 121	Diesel Engines A (Active)	7.0
OR		
DIES 122	Diesel Engines B (Active)	7.0
OR		
DIES 124	Diesel Engines D (Active)	7.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0
EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5
FIPT 101	Fire Protection Organization (Active)	3.0
FIPT 102	Fire Prevention Technology (Active)	3.0
FIPT 103	Fire Protection Equipment and Systems (Active)	3.0
FIPT 104	Building Construction for Fire Protection (Active)	3.0
FIPT 105	Fire Behavior and Combustion (Active)	3.0
FIPT 107	Fire Fighting Tactics and Strategy (Active)	3.0
FIPT 109	Fire Service Hydraulics (Active)	3.0
LFGD 101	Introduction to Open Water Lifeguarding (Active)	3.0
MLTT 210	Clinical Chemistry and Laboratory Operations (Active)	4.0
MLTT 211	Clinical Hematology Urinalysis And Body Fluids (Active)	4.0
MLTT 212	Clinical Microbiology (Active)	4.0
MLTT 213	Blood Bank and Immunology (Active)	4.0

OPEN WATER LIFEGUARD - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Open Water Lifeguard certificate and degree prepare students for full-time positions as ocean and inland beach lifeguards.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Open Water Lifeguard Program will be able to:

1. Describe proper techniques for observation and detection of distressed swimmers in open water. Describe the common visual scanning patterns for water observation and explain the appropriate application of each. Identify common water rescue adjuncts including swim fins, rescue buoys, and rescue boards; explain their function, care, and maintenance; and demonstrate the ability to use each item to rescue distressed swimmers in open water.
2. Describe basic principles of beach management including communication, personnel deployment, use of vehicles and vessels, use of public address systems, and maintenance of water activity zones. Demonstrate the ability to assess and treat sick and injured patients in the field at the level of an emergency medical technician.
3. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
4. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions,

Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
5. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
6. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.
8. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
9. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.5

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5
LFGD 101	Introduction to Open Water Lifeguarding (Active)	3.0
LFGD 330	All-Terrain Vehicle Operations (Active)	0.5
LFGD 335	Rescue Watercraft Operations (Active)	0.5
ADJU 357A	832 PC Laws of Arrest (Active)	1.0

Select 6 units from the following: **Semester Units:** 6.0

LFGD 101A	Emergency Medical Care of the Sick and Injured (Active)	1.0
LFGD 301	Advanced Open Water Lifeguard Training (Active)	3.5
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 128A	Defensive Tactics I (Active)	1.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
EMGM 50A	CPR for Health Care Providers (Active)	0.1
FIPT 311A	Swiftwater Rescue Technician I (Active)	0.5
FIPT 322F	Low Angle Rope Rescue Operational (Active)	0.5
FIPT 324B	I-300: Intermediate ICS (Active)	0.5
FIPT 324C	I-400: Advanced ICS (Active)	1.0
FIPT 332A	Confined Space Rescue Technician (Active)	0.5
FIPT 332B	Rescue Systems 1: Basic Rescue Skills (Active)	0.5

OPEN WATER LIFEGUARD - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Open Water Lifeguard certificate and degree prepare students for full-time positions as ocean and inland beach lifeguards.

Learning Outcome(s): Students who complete the Open Water Lifeguard Program will be able to:

1. Describe basic principles of beach management including communication, personnel deployment, use of vehicles and vessels, use of public address systems, and maintenance of water activity zones. Demonstrate the ability to assess and treat sick and injured patients in the field at the level of an emergency medical technician.
2. Describe proper techniques for observation and detection of distressed swimmers in open water. Describe the common visual scanning patterns for water observation and explain the appropriate application of each. Identify common water rescue adjuncts including swim fins, rescue buoys, and rescue boards; explain their function, care, and maintenance; and demonstrate the ability to use each item to rescue distressed swimmers in open water.
3. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
4. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
5. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.
6. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer.
7. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.
8. Identify and describe the apparatus used in the fire service, and the equipment and maintenance of fire apparatus and equipment.
9. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.5

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
EMGM 106	Perilaryngeal Airway Adjuncts/Defibrillation Training (Active)	0.5
LFGD 101	Introduction to Open Water Lifeguarding (Active)	3.0
LFGD 330	All-Terrain Vehicle Operations (Active)	0.5
LFGD 335	Rescue Watercraft Operations (Active)	0.5
ADJU 357A	832 PC Laws of Arrest (Active)	1.0

Select 6 units from the following: **Semester Units:** 6.0

LFGD 101A	Emergency Medical Care of the Sick and Injured (Active)	1.0
LFGD 301	Advanced Open Water Lifeguard Training (Active)	3.5
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 128A	Defensive Tactics I (Active)	1.0
ADJU 160	Criminal Law II (Active)	3.0
ADJU 167	Report Writing (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
EMGM 50A	CPR for Health Care Providers (Active)	0.1
FIPT 311A	Swiftwater Rescue Technician I (Active)	0.5

FIPT 322F	Low Angle Rope Rescue Operational (Active)	0.5
FIPT 324B	I-300: Intermediate ICS (Active)	0.5
FIPT 324C	I-400: Advanced ICS (Active)	1.0
FIPT 332A	Confined Space Rescue Technician (Active)	0.5
FIPT 332B	Rescue Systems 1: Basic Rescue Skills (Active)	0.5

P.C. 832 LAWS OF ARREST - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Court Support Services, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon and night classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate in Science Degree or select from a variety of certificates of completion and certificates of achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the P.C. 832 Laws of Arrest Program will be able to:

1. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.
2. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
5. Understand the three components of the criminal justice system and how they interrelate.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 1.0

ADJU 357A	832 PC Laws of Arrest (Active)	1.0

PARALEGAL - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Paralegals assist attorneys in providing quality legal services to clients. The Paralegal program is designed to provide students with the knowledge and skills needed to assist lawyers in the practice of law.*

The curriculum focuses on building strong research, writing, and analytical skills, while stressing the ethical framework of the law. Upon completion of the program, students will be able to work in a variety of legal settings including law firms, corporations, and government agencies. All paralegal courses have a practical component, allowing students to practice the legal theories taught in the classroom.

The Paralegal program is approved by the American Bar Association.

*Paralegals may not provide legal services directly to the public, except as permitted by law. California prohibits the practice of law by non-lawyers.

Campus Residency
The Paralegal Program has been extremely cautious in its acceptance of transfer specialty credit from other institutions. All students must complete 18 units in the major on Miramar's campus. Entering students from accredited paralegal institutions may transfer up to 12 credits towards their major. Legal courses completed more than 6 years may not meet the current curriculum requirements and/or the current laws and procedures and thus may not be accepted as transfer or current credit.

Academic Programs
The Paralegal program offers both an Associate in Science Degree and a Certificate of Achievement in compliance with the American Bar Association (ABA).

In addition to the 30 units of general education and graduation requirements listed in this catalog, the Associate of Science degree as a Paralegal requires completion of the core courses (21 units) and paralegal elective courses (9 units) for a total of 60 units. Up to 3 units of approved law-related courses may be substituted for paralegal electives.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Paralegal Program will be able to:

1. Recognize the ethical implications of diversity, equity, and inclusion (DEI) issues that arise in legal work environments and apply rules of professional conduct to resolve them.
2. Recognize the ethical issues that arise in a legal work environment and apply rules of professional conduct to resolve them.
3. Apply basic principles of legal analysis.
4. Perform legal research using both printed and electronic sources.
5. Perform the duties of an entry level paralegal in a law firm or other legal work setting.
6. Use computer and other technology for document production, law office management, and trial preparation.
7. Demonstrate written skills that paralegals use on the job.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

PARA 100	Introduction to Law and Ethics (Active)	3.0
PARA 105	Legal Research (Active)	3.0
PARA 110	Legal Writing & Communications (Active)	3.0
PARA 115	Civil Litigation - Procedures (Active)	3.0
PARA 120	Tort Law (Active)	3.0
PARA 140	Law Office Technology (Active)	3.0
PARA 180	Contract Law (Active)	3.0

Select 9 units from the following paralegal elective courses: **Semester Units:** 9.0

PARA 145	Federal Court Practices and Procedures (Active)	3.0
PARA 150	Criminal Litigation and Procedure (Active)	3.0
PARA 155	Employment Law (Active)	3.0
PARA 160	Bankruptcy Law (Active)	3.0
PARA 165	Family Law (Active)	3.0
PARA 170	Corporate Law (Active)	3.0
PARA 175	Estates, Trusts, and Wills (Active)	3.0
PARA 200	Elder Law (Active)	3.0
PARA 205	Environmental Law (Active)	3.0
PARA 210	Immigration Law (Active)	3.0
PARA 220	Intellectual Property Law (Active)	3.0

PARA 221	Legal Secretary Skills and Procedure (Active)	3.0
PARA 225	Real Estate Law (Active)	3.0
PARA 230	Consumer Law (Active)	1.0
PARA 270	Paralegal Internship / Work Experience (Active)	1.0-4.0

A maximum of 3 units from the following paralegal-related courses may be substituted for legal elective courses:

ADJU 102	Criminal Law I (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0

PARALEGAL - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

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The curriculum focuses on building strong research, writing, and analytical skills, while stressing the ethical framework of the law. Upon completion of the program, students will be able to work in a variety of legal settings including law firms, corporations, and government agencies. All paralegal courses have a practical component, allowing students to practice the legal theories taught in the classroom.

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The Paralegal Program has been extremely cautious in its acceptance of transfer specialty credit from other institutions. All students must complete 18 units in the major on Miramar's campus. Entering students from accredited paralegal institutions may transfer up to 12 credits towards their major. Legal courses completed more than 6 years may not meet the current curriculum requirements and/or the current laws and procedures and thus may not be accepted as transfer or current credit.

Academic Programs
The Paralegal program offers both an Associate in Science Degree and a Certificate of Achievement in compliance with the American Bar Association (ABA).

The Certificate of Achievement option is available to students entering the program who have completed all general education core requirements through coursework received by either an Associate degree or a Bachelor's degree. The Certificate of Achievement requires completion of the core courses (21 units) and paralegal elective courses (9 units) for a total of 30 units. Up to 3 units of approved law-related courses may be substituted for paralegal electives.

Learning Outcome(s): Students who complete the Paralegal Program will be able to:

1. Recognize the ethical implications of diversity, equity, and inclusion (DEI) issues that arise in legal work environments and apply rules of professional conduct to resolve them.
2. Recognize the ethical issues that arise in a legal work environment and apply rules of professional conduct to resolve them.
3. Apply basic principles of legal analysis.
4. Perform legal research using both printed and electronic sources.
5. Perform the duties of an entry level paralegal in a law firm or other legal work setting.
6. Use computers and other technology for document production, law office management, and trial preparation.

7. Demonstrate written skills that paralegals use on the job.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

PARA 100	Introduction to Law and Ethics (Active)	3.0
PARA 105	Legal Research (Active)	3.0
PARA 110	Legal Writing & Communications (Active)	3.0
PARA 115	Civil Litigation - Procedures (Active)	3.0
PARA 120	Tort Law (Active)	3.0
PARA 140	Law Office Technology (Active)	3.0
PARA 180	Contract Law (Active)	3.0

Select 9 units from the following paralegal elective courses: **Semester Units:** 9.0

PARA 145	Federal Court Practices and Procedures (Active)	3.0
PARA 150	Criminal Litigation and Procedure (Active)	3.0
PARA 155	Employment Law (Active)	3.0
PARA 160	Bankruptcy Law (Active)	3.0
PARA 165	Family Law (Active)	3.0
PARA 170	Corporate Law (Active)	3.0
PARA 175	Estates, Trusts, and Wills (Active)	3.0
PARA 200	Elder Law (Active)	3.0
PARA 205	Environmental Law (Active)	3.0
PARA 210	Immigration Law (Active)	3.0
PARA 220	Intellectual Property Law (Active)	3.0
PARA 221	Legal Secretary Skills and Procedure (Active)	3.0
PARA 225	Real Estate Law (Active)	3.0
PARA 230	Consumer Law (Active)	1.0
PARA 270	Paralegal Internship / Work Experience (Active)	1.0-4.0

A maximum of 3 units from the following paralegal-related courses may be substituted for paralegal elective courses: **Semester Units:** 0.0

ADJU 102	Criminal Law I (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0

PERSONAL TRAINING - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Personal trainers design and deliver exercise programs for both individuals and small groups. With an understanding of anatomy, physiology, and human movement, they ensure a safe and effective exercise experience centered on improving physical health and wellness. Personal trainers must also understand human behavior and how to effectively motivate clients in order to enhance adherence to physical activity. This program prepares students for entry-level positions in the field of health and fitness and provides the necessary knowledge and skills needed to go on to earn a nationally accredited personal trainer certification.

Learning Outcome(s): Students who complete the Personal Training Program will be able to:

1. Describe and apply current nutritional guidelines to enhance physical health and well-being.
2. Exhibit theoretical comprehension and competence in all health, exercise science, and nutrition discipline courses.
3. Explain the research-supported physiological and psychological benefits of physical activity.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0-24.0

EXSC 282	Techniques of Weight Training (Active)	2.0
EXSC 283	Exercise and Fitness Assessment (Active)	2.0
EXSC 285	Exercise for Special Populations (Active)	2.0
EXSC 286	Techniques of Exercise Leadership (Active)	2.0
EXSC 288	Personal Training Professional Preparation (Active)	1.0
EXSC 270	Exercise Science Internship / Work Experience (Active)	1.0-4.0
Select one of the following physiology courses:		2.0-4.0
EXSC 280	Applied Exercise Physiology (Active)	2.0
OR		
BIOL 235	Human Physiology (Active)	4.0
Select one of the following anatomy courses:		2.0-4.0
EXSC 281	Applied Kinesiology (Active)	2.0
OR		
BIOL 230	Human Anatomy (Active)	4.0
Select one of the following nutrition courses:		2.0-3.0
EXSC 284	Fitness and Sports Nutrition (Active)	2.0
OR		
NUTR 170	Nutrition and Fitness (Active)	3.0

PHILOSOPHY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Philosophy for Transfer is intended for students who plan to complete a bachelor's degree in Philosophy or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.

- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Philosophy Program will be able to:

1. Analyze the impact cultures and subcultures have on societal expectations and behaviors.
2. Distinguish the uniqueness of a variety of cultures to develop an appreciation for these differences.
3. Analyze historical occurrences and their impact on societal values.

Requirements

Select 5 courses from the following: **Semester Units:** 15.0

		3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
OR		
PHIL 101	Symbolic Logic (Active)	3.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
PHIL 107	Reflections on Human Nature (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0

Select 1 course (3 units minimum) not already selected above from the following: **Semester Units:** 3.0-5.0

PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
PHIL 107	Reflections on Human Nature (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
ENGL 209	Literary Approaches to Film (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
ENGL 230	Asian American Literature (Active)	3.0
ENGL 237	Women in Literature (Active)	3.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 106	Introduction to Western Civilization II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 106	World Religions (Active)	3.0
HUMA 201	Mythology (Active)	3.0
SPAN 101	First Course in Spanish (Active)	5.0
SPAN 102	Second Course in Spanish (Active)	5.0
SPAN 201	Third Course in Spanish (Active)	5.0
TAGA 101	First Course in Tagalog (Active)	5.0
TAGA 102	Second Course in Tagalog (Active)	5.0
TAGA 201	Third Course in Tagalog (Active)	5.0

PHYSICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Science in Physics for Transfer is intended for students who plan to complete a bachelor's degree in Physics or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Physics Program will be able to:

1. Demonstrate understanding of a physical phenomenon using scientific theory.
2. Solve problems related to concepts in the physical sciences.
3. Visualize important physical features of given physical phenomenon.
4. Interpret scientific results collected by others and/or assess the validity of results collected in a physical science laboratory.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0

* Course also fulfills general education requirements for the CSU GE or IGETC pattern.

PILOT STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Qualifies the student for the FAA Private Pilot exam, with an emphasis on aircraft maintenance as it applies to the pilot.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Pilot Studies Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0

PILOT STUDIES - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Qualifies the student for the FAA Private Pilot exam, with an emphasis on aircraft maintenance as it applies to the pilot.

Learning Outcome(s): Students who complete the Pilot Studies Program will be able to:

1. Possess the knowledge and skills necessary to research, inspect, repair, and maintain airframes in accordance with regulations, policies, and procedures set forth by the Federal Aviation Administration and the aeronautical manufacturers and maintenance organizations of the aviation industry.

Credit for Aviation Maintenance Technician - Airframe or Powerplant Rating

Pending Aviation Department review and approval, students who hold a valid FAA Airframe or Powerplant Rating may apply to the Aviation Maintenance Technology Department for a maximum of 35 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Military Schools and Experience

Pending Aviation Department review and approval, students who have completed military technical schools recognized by the FAA may apply to the Aviation Maintenance Technology Department for a maximum of 15 units.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIM 101G	General Aviation Technology Theory I (Active)	6.0
AVIM 101H	General Aviation Technology Theory II (Active)	6.0

POLITICAL SCIENCE - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Political Science for Transfer is intended for students who plan to complete a bachelor's degree in Political Science or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Political Science Program will be able to:

1. Comprehend information from a variety of sources.
2. Integrate logical thinking, including informed fact and assessment, based upon theories and practices in the field, tying together classical and contemporary ideas of political theory and practice, including international relations, local and national government, interest groups and other modalities of the political landscape.
3. Organize the comprehension of the fields of Political Science as expressed through written and oral sources.
4. Apply appropriate learning and analysis theories within the field, explain these through writing and oral methodologies.
5. Develop skills in problem solving, communication, critical thinking within the interrelationship of Political Science to other fields of the social sciences.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

POLI 101	Introduction to Political Science (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0

POLI 103	Comparative Politics (Active)	3.0
		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0

Select two courses (six units minimum) from the following **Semester Units:** 6.0-7.0

POLI 140	Contemporary International Politics (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
COMS 135	Interpersonal Communication (Active)	3.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 106	Introduction to Western Civilization II (Active)	3.0
HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
HIST 141	Women in United States History I (Active)	3.0
HIST 142	Women in United States History II (Active)	3.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

PRE-ENGINEERING STUDIES - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Associate of Science degree with an area of emphasis in Pre-Engineering Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in an engineering-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer Pre-Engineering institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Pre-Engineering Studies Program will be able to:

1. Demonstrate understanding of a physical phenomenon using scientific theory.
2. Solve problems related to concepts in the physical sciences.
3. Visualize important physical features of given physical phenomenon.
4. Interpret scientific results collected by others and/or assess the validity of results collected in a physical science laboratory.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0

Select at least four (4) units from the following: **Semester Units:** 4.0

PHYS 197	Waves, Optics and Modern Physics (Active)	5.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0

PRIVATE PILOT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

When passed with a "C" or better, indicates student qualification to take the FAA Private Pilot Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Private Pilot Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)

- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0

PROFESSIONAL AERONAUTICS - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

The Professional Aeronautics degree combines the requirements for the Professional Piloting Certificate of Achievement with additional academic coursework in preparation for upper division study in aeronautics or a related field.

FAA-issued Private Pilot certificate satisfies the AVIA 101 and 101L requirements. FAA-issued Remote Pilot certificate satisfies the AVIA 161 and 161L requirements. FAA-issued Instrument Pilot certificate satisfies the AVIA 195, 195L, and 196L requirements. FAA-issued Commercial Pilot certificate satisfies the AVIA 201 requirement.

Students satisfying requirements via FAA certificates may need to complete alternate coursework approved by the department in order to satisfy the requirement for 18 units in the major.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Professional Aeronautics Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)

- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 101L	Private Pilot Flight Lab (Active)	1.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 195	Instrument Ground School (Active)	3.0
AVIA 195L	Basic Instrument Flight Lab (Active)	1.0
AVIA 196L	Advanced Instrument Flight Lab (Active)	1.0
AVIA 201	Commercial Pilot Ground School (Active)	3.0

Select one of the following aviation breadth courses: **Semester Units:** 3.0

AVIA 115	Aviation Weather (Active)	3.0
AVIA 125	Aviation and Airport Management (Active)	3.0
AVIA 151	Helicopter Ground School (Active)	3.0

Select one of the following physical science courses (not selected above): **Semester Units:** 3.0-5.0

AVIA 115	Aviation Weather (Active)	3.0
GEOG 101	Physical Geography (Active)	3.0
GEOL 104	Earth Science (Active)	3.0
PHYS 125	General Physics (Active)	5.0
PHYS 180A	General Physics I (Active)	4.0
PHYS 195	Mechanics (Active)	5.0

Select an additional three units from the following: **Semester Units:** 3.0-5.0

AVIA 115	Aviation Weather (Active)	3.0
AVIA 125	Aviation and Airport Management (Active)	3.0
AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 151	Helicopter Ground School (Active)	3.0
AVIA 161	Remote Pilot Ground School (Active)	3.0
AVIA 161L	Remote Pilot Flight Lab (Active)	1.0
AVIA 211	Flight Instructor Ground School (Active)	3.0
AVIA 211L	Basic Visual Flight Instructor Lab (Active)	1.0
AVIA 215L	Basic Instrument Flight Instructor Lab (Active)	1.0
AVIA 216L	Advanced Instrument Flight Instructor Lab (Active)	1.0
AVIA 228	Group Dynamics II (Active)	3.0
AVIA 270	Aviation Operations Internship / Work Experience (Active)	1.0-4.0
ACCT 116A	Financial Accounting (Active)	4.0
BUSE 201	Business Organization and Management (Active)	3.0

ECON 121	Principles of Microeconomics (Active)	3.0
PHYS 125	General Physics (Active)	5.0
PHYS 180A	General Physics I (Active)	4.0
PHYS 195	Mechanics (Active)	5.0

FAA-issued Private Pilot certificate satisfies the AVIA 101 and 101L requirements. FAA-issued Remote Pilot certificate satisfies the AVIA 161 and 161L requirements. FAA-issued Instrument Pilot certificate satisfies the AVIA 195, 195L, and 196L requirements. FAA-issued Commercial Pilot certificate satisfies the AVIA 201 requirement. Students satisfying requirements via FAA certificates may need to complete alternate coursework approved by the department in order to satisfy the requirement for 18 units in the major.

PROFESSIONAL PILOTING - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Professional Piloting Certificate of Achievement, when combined with in-aircraft flight training, is designed to prepare a student for employment as an entry-level commercial pilot.

FAA-issued Private Pilot certificate satisfies the AVIA 101 and 101L requirements. FAA-issued Instrument Pilot certificate satisfies the AVIA 195, 195L, and 196L requirements. FAA-issued Commercial Pilot certificate satisfies the AVIA 201 requirement.

Students satisfying requirements via FAA certificates must complete alternate coursework approved by the department in order to satisfy the requirement for 18 units in the major.

Learning Outcome(s): Students who complete the Professional Piloting Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who

subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 101L	Private Pilot Flight Lab (Active)	1.0
AVIA 105	Introduction to Aviation and Aerospace (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 195	Instrument Ground School (Active)	3.0
AVIA 195L	Basic Instrument Flight Lab (Active)	1.0
AVIA 196L	Advanced Instrument Flight Lab (Active)	1.0
AVIA 201	Commercial Pilot Ground School (Active)	3.0

FAA-issued Private Pilot certificate satisfies the AVIA 101 and 101L requirements. FAA-issued Instrument Pilot certificate satisfies the AVIA 195, 195L, and 196L requirements. FAA-issued Commercial Pilot certificate satisfies the AVIA 201 requirement. Students satisfying requirements via FAA certificates must complete alternate coursework approved by the department in order to satisfy the requirement for 18 units in the major.

PSYCHOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Psychology for Transfer is intended for students who plan to complete a bachelor's degree in Psychology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Psychology Program will be able to:

1. Demonstrate skills in problem solving, communication, critical thinking, and interpret and discuss classical and contemporary theories of individual and social psychology.
2. Apply appropriate theories and analysis within the field through written and oral methodologies.
3. Express through writing, comprehension of the field of psychology including major principles and ideas.
4. Use psychological theories and practices in the field, integrate logical thinking, including informed fact and assessment.

5. Demonstrate an understanding of the major principles, methods, and theories of psychology and will be assessed through a combination of performance evaluations, written assignments, and written exams, and quizzes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0-10.0

PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 255	Introduction to Psychological Research (Active)	3.0
		3.0-4.0
		4.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
AND		
PSYC 259	Behavioral Science Statistics Laboratory (Active)	1.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0

Select 3-4 units from the following courses: **Semester Units:** 3.0-4.0

PSYC 260	Introduction to Physiological Psychology (Active)	3.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0

Select at least 3 units from the following courses (not already selected above): **Semester Units:** 3.0-5.0

BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
		4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
AND		
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
		4.0
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
AND		
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0
		3.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
OR		
ENGL 105	Composition and Literature (Active)	3.0
		3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
OR		
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
PSYC 201	Academic and Career Opportunities in Psychology (Active)	1.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0
PSYC 283	Introduction to Cognitive Psychology (Active)	3.0

Select at least 3 units from the following courses (not already selected above): **Semester Units:** 3.0-5.0

BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
		4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
AND		
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
		4.0
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
AND		
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0
		3.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
OR		
ENGL 105	Composition and Literature (Active)	3.0
		3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
OR		
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
PSYC 133	Psychology of Women (Active)	3.0
PSYC 135	Marriage and Family Relations (Active)	3.0
PSYC 137	Human Sexual Behavior (Active)	3.0
PSYC 161	Introduction to Counseling (Active)	3.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
PSYC 201	Academic and Career Opportunities in Psychology (Active)	1.0
PSYC 211	Learning (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0
PSYC 283	Introduction to Cognitive Psychology (Active)	3.0

PUBLIC SAFETY MANAGEMENT - BACHELOR OF SCIENCE DEGREE: MIRAMAR

Summary

The Bachelor of Science Degree in Public Safety Management is designed for the public safety professional. The program is designed to expand understanding of the unique aspects of administration of all hazard emergency management and public safety. It equips progressive public safety professionals with the skills necessary to work with people, manage change in an organization, create innovation in organizations, address ethical/legal considerations, and manage an emergency environment utilizing communication skills to solve social and organizational problems. Specializations within the program include understanding of contemporary public safety policies for community risk reduction, modern policing, impact of criminal behavior, emergency medical services, community health and land use with an emphasis on localized needs including tribal relations, border policies and critical infrastructure protection in an emergent environment.

This pathway combines public safety career industry-recognized certifications for Emergency Management Directors, Public Safety Managers, allied partners in public safety which include fire and emergency services, law enforcement, emergency medical services, municipalities, utility companies, transportation security management, border patrol, non-profit organizations, and other key public safety infrastructure partners.

Current topics such as climate change, public health emergencies, and complex cross-border disasters will be examined. Throughout the program, students will have the opportunity to develop strategies that help communities build resilience and mitigate the disproportionate effects of disasters on socially and economically diverse populations. The program analyzes responsibilities to address how public safety organizations develop a response to these problems, the nature of the response, and how resources - budgets and personnel - are obtained, utilized, and evaluated in responding to challenges Emergency Management Directors, Public Safety Managers and first responders face in local communities. Students will have the opportunity to earn the education requirements for California Emergency Manager (CA-EM) through California Emergency Services Association, CA Office of Emergency Services (OES) / California Specialized Training Institute Specialist Certificate in Emergency Management, and/or Federal Emergency Management Agency (FEMA) Advanced Professional Series (APS) or contemporary management practices in Emergency Medical Services Management and Modern Policing concepts.

Learning Outcome(s): Students who complete the Public Safety Management Program will be able to:

1. Identify the roles and recognize the interactions of various emergency management and public safety providers within the context of the communities they serve.
2. Analyze and categorize the historical, economic, psychological, ethical, legal, social, and political forces that influence human behavior and their effects on society.
3. Integrate emergency management principles, regulations, budgeting, and research into managing disasters throughout all phases of the emergency life cycle.
4. Create plans for all-risk emergency preparedness utilizing data analysis based on local, tribal, state, territorial and federal government initiatives that reflect effective risk assessment strategies and consider socio-cultural, economic, international relations and political influences.
5. Integrate equity into all facets of disaster policy, programs, and practice with the goal of increasing cultural competence and mitigating the harmful impacts of bias on underserved groups in local communities.
6. Assess opportunities to strengthen resilience in communities that have been impacted by emergencies through understanding of whole community approach to risk reduction.
7. Design effective leadership, management, and communication strategies to meet the needs of stakeholders throughout a variety of emergency management phases.
8. Assess the impact of critical thinking skills, written and oral communication skills, and technological competencies on the public safety realm in conjunction with the student's career and personal philosophy.
9. Develop a personal and professional philosophy that reflects an ethical obligation to social justice and contributes to self-growth, respect for others, and professional commitment to disaster and emergency management, community crisis and public safety needs in the 21st century.

Baccalaureate Degree Requirements

Applicants must have successfully completed the program prerequisites and lower division general education requirements, each with a grade of "C" (or "P") or better:

One of the following Public Safety recognized Associate Degrees or equivalent, satisfies the program prerequisites required for the Public Safety Management Baccalaureate Degree.

- Associate of Science: Public Safety Management
- Associate of Science: Company Officer Certification
- Associate of Science: Entry Level Firefighter
- Associate of Science: Open Water Lifeguard
- Associate of Science: Administration of Justice
- Associate of Science: Contemporary Police Technologies
- Associate of Science: Fire Prevention
- Associate of Science: Law Enforcement
- Associate of Science: Correctional Technologies
- Associate of Science: Investigations Specialization
- Associate of Science: Emergency Medical Technology and Paramedic

Lower Division General Education Requirement

Completion of one of the approved lower-division general education patterns listed in the *Academic Requirements–Baccalaureate Degree* section of this catalog.

The Baccalaureate Degree

The Bachelor of Science (BS) degree is intended for students interested in a high-level career in technical education.

Minimum 120 Units Required

The following is required for all California community college BS degrees:

- A combination of lower division and upper division coursework totaling a minimum of 120 semester units applicable to a baccalaureate degree.
- Completion of a minimum of 36 semester units of general education that includes lower division general education and upper division general education as outlined below.
- A minimum of 40 semester units of upper-division courses, including a minimum of nine semester units of upper-division general education.

Note: Unit requirements vary by program. See the specific program requirements section of the catalog for details on unit distribution and major requirements.

Grade Point Average (GPA) and Minimum Grade Requirements

- All courses designated as upper division major requirements must be completed with a grade of "C" or better. A 'P" (pass) grade meets this requirement.
- Completion of the requirement for the baccalaureate degree with a minimum grade point average of 2.0 in the degree-applicable courses.

Minimum Units in Residence

- Satisfactory completion of a minimum of 12 degree applicable semester units in residence within the San Diego Community College District.
- The 12-unit in residence requirement is effective regardless of catalog year.
- Courses completed via credit for prior learning, including credit by exam, do not qualify for the 12-unit in residence requirement.

General Education

Lower Division General Education

Select one of the following lower division general education options:

- SDCCD General Education and District Requirements plus six additional units selected from general education Area 1B-Area 6 (1 unit lab excluded).
  See District Requirements and General Education Requirements (Option 1) of this catalog.
- California General Education Transfer Curriculum (Cal-GETC).
  See General Education Requirements in the Transfer Guide of this catalog (Option 6).
- SDCCD General Education plus six additional units selected from Area 1B-Area 6 (1 unit lab excluded).
  See District General Education Requirements (Option 4) of this catalog.
- General Education Completion through an Earned Baccalaureate Degree
  - Students who submit an official transcript showing they have earned a baccalaureate degree from an institutionally accredited institution will have satisfied the SDCCD lower division general education and district requirements upon evaluation of their transcript. (Option 5)
  - Students seeking the Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) degree must complete the California General Education Transfer Curriculum (Cal-GETC) general education pattern.

Courses may fulfill multiple academic requirements, such as general education, major, and additional graduation requirements. However, one course may not be counted in more than one general education area, even if the course is approved in multiple general education areas.

Upper Division General Education

Students must successfully complete a minimum of nine semester units or 13.5 quarter units of upper division general education coursework. Upper division general education courses are integrated into each baccalaureate degree program. Courses must come from at least two disciplines outside the major field of study and at least one of these courses must emphasize written communication, oral communication, or computation skills.

Specific course requirements are detailed within each bachelor's degree program requirements.

Credit for Prior Learning

Students may receive credit for knowledge and skills acquired through the district's procedures for awarding credit for prior learning.

Limitation on Enrollment

Enrollment in upper division courses is restricted to students admitted to a baccalaureate degree program at a California community college.

Requirements

Required Upper Division Public Safety Management Courses		**Semester Units:** 32.0
PSMA 401	Foundations in Public Safety Management Practices (Active)	3.0
PSMA 405	Contemporary Public Safety Practices (Active)	3.0
PSMA 410	Public Safety Finance (Active)	3.0
PSMA 415	Public Safety Legal Issues and Public Policy (Active)	3.0
PSMA 420	Human Resources in Public Safety Management (Active)	3.0
PSMA 425	Strategic Planning in Public Safety Management (Active)	3.0
PSMA 435	Native American Relations for Public Safety (Active)	3.0
PSMA 430	Public Safety Leadership and Communications (Active)	3.0
PSMA 440	Whole Community Approach – Government Partners, Non-Profit and Allied Organizations in Public Safety (Active)	3.0
PSMA 490	Applied Research Project in Public Safety Management (Active)	5.0

Upper Division General Education Requirements		**Semester Units:** 9.0
ENGL 402	Advanced Technical Writing (Active)	3.0
PADM 420	Ethics in Public Service (Active)	3.0
SOCO 410	Sociological Perspectives on Public Safety (Active)	3.0

Complete One of Three Upper Division Public Safety Management Emphasis		**Semester Units:** 9.0
Emergency Management Emphasis		9.0
PSMA 445	Global Perspectives in Emergency Management (Active)	3.0
PSMA 450	Disaster Planning and Control, Recovery in Emergency Management (Active)	3.0
PSMA 455	Community Risk Reduction for Fire and Emergency Services in Emergency Management (Active)	3.0
Emergency Medical Services Management Emphasis		9.0
PSMA 460	Foundations in Emergency Medical Services (Active)	3.0
PSMA 465	Management of Emergency Medical Services (Active)	3.0

PSMA 470	Legal, Political, and Regulatory Environment of Emergency Medical Services (Active)	3.0
Modern Policing Emphasis		9.0
PSMA 475	Administration, Public Policy, and Public Relations in Law Enforcement (Active)	3.0
PSMA 480	Psychology and the Law (Active)	3.0
PSMA 485	Advanced Criminal Investigation for Law Enforcement (Active)	3.0

PUBLIC SAFETY MANAGEMENT - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

Public administrators plan, organize, lead, and control the work of public organizations including governments, regulatory and law enforcement agencies, and public service departments. They implement public policies, set budgets, produce public goods and services, implement laws, and manage public resources like people, money, equipment, information, and work processes. They work throughout government at the federal, state, and local levels as well as in community agencies, private not-for-profit organizations, planning and consulting firms, and private sector organizations. This program prepares students for entry-level positions in the field of public administration or to complete a bachelor's degree in Public Administration or a related major at a four-year university.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Public Safety Management Program will be able to:

1. Examine the role of ethics in decision making.
2. Examine the role of ethics in the management of public organizations.
3. Evaluate various management practices and leadership techniques used in public administration.
4. Describe and compare basic concepts, principles, and terms used in the study of law, public organizations, and public policy.
5. Summarize the structure and function of the U.S. legal system at the local, state, and federal levels.
6. Describe the structure and functions of various U.S. public institutions.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

PADM 200	Introduction to Public Administration (Active)	3.0
		3.0
ADJU 101	Introduction to Administration of Justice (Active)	3.0
OR		
HSEC 100	Introduction to Homeland Security (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
		3.0
CBTE 180	Microsoft Office (Active)	3.0
OR		

CBTE 210	Computers in Business (Active)	3.0

Complete at least three (3) units from the following courses (not selected above) **Semester Units:** 3.0-4.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 270	Work Experience (Active)	1.0-4.0
CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
HSEC 100	Introduction to Homeland Security (Active)	3.0
HSEC 110	Intelligence Analysis and Security Management (Active)	3.0
HSEC 120	Transportation and Border Security (Active)	3.0
PADM 270	Public Administration and/or Law Internship / Work Experience (Active)	1.0-4.0

PUBLIC SAFETY MANAGEMENT - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

Public administrators plan, organize, lead, and control the work of public organizations including governments, regulatory and law enforcement agencies, and public service departments. They implement public policies, set budgets, produce public goods and services, implement laws, and manage public resources like people, money, equipment, information, and work processes. They work throughout government at the federal, state, and local levels as well as in community agencies, private not-for-profit organizations, planning and consulting firms, and private sector organizations. This program prepares students for entry-level positions in the field of public administration or to complete a bachelor's degree in Public Administration or a related major at a four-year university.

Learning Outcome(s): Students who complete the Public Safety Management Program will be able to:

1. Examine the role of ethics in decision making.
2. Evaluate various management practices and leadership techniques used in public administration.
3. Describe and compare basic concepts, principles, and terms used in the study of law, public organizations, and public policy.
4. Summarize the structure and function of the U.S. legal system at the local, state, and federal levels.
5. Describe the structure and functions of various U.S. public institutions.
6. Examine the role of ethics in the management of public organizations.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

PADM 200	Introduction to Public Administration (Active)	3.0
		3.0
ADJU 101	Introduction to Administration of Justice (Active)	3.0
OR		
HSEC 100	Introduction to Homeland Security (Active)	3.0
ADJU 201	Criminal Procedure (Active)	3.0
BUSE 119	Business Communications (Active)	3.0

BUSE 150	Human Relations in Business (Active)	3.0
BUSE 201	Business Organization and Management (Active)	3.0
		3.0
CBTE 180	Microsoft Office (Active)	3.0
OR		
CBTE 210	Computers in Business (Active)	3.0

Complete at least three (3) units from the following courses (not selected above) **Semester Units:** 3.0-4.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 270	Work Experience (Active)	1.0-4.0
CBTE 180	Microsoft Office (Active)	3.0
CBTE 210	Computers in Business (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
HSEC 100	Introduction to Homeland Security (Active)	3.0
HSEC 110	Intelligence Analysis and Security Management (Active)	3.0
HSEC 120	Transportation and Border Security (Active)	3.0
PADM 270	Public Administration and/or Law Internship / Work Experience (Active)	1.0-4.0

REMOTE PILOT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Aviation Operations Program integrates simulator flight training with rigorous academic study, providing a strong foundation for leadership positions within the aviation industry. The program emphasizes a combination of the technical fundamentals of flight, airport operations, human factors, group dynamics, and safety in order to enhance students' development of situational awareness, critical thinking, and problem solving skills. Miramar College's Aviation Operations Program meets all requirements of the Federal Aviation Administration's (FAA) Part 141 Pilot Ground School. Upon completion of the program, students are able to complete the FAA Airmen Knowledge Tests for multiple pilot certificates. Flexible course selection and multiple degree and certificate options are available to prepare the student for a variety of career paths in the aviation industry, including commercial pilot, airport management, unmanned systems, human factors, and many more.

When passed with a "C" or better, indicates student qualification to take the FAA Remote Pilot Knowledge Examination.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Remote Pilot Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The

units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

AVIA 101	Private Pilot Ground School (Active)	3.0
AVIA 101L	Private Pilot Flight Lab (Active)	1.0
AVIA 161	Remote Pilot Ground School (Active)	3.0
AVIA 161L	Remote Pilot Flight Lab (Active)	1.0

SAN DIEGO TRANSIT GENERAL MECHANIC APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

San Diego Transit apprenticeship programs are designed to prepare the student for a career as a bus mechanic or bus body repair technician. For application to the programs, please contact San Diego Transit Corporation, 100 16th Street, San Diego, CA 92101.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Transit General Mechanic Apprenticeship Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 131	Alternative-Fueled Engine Overhaul (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0

SAN DIEGO TRANSIT GENERAL MECHANIC APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

San Diego Transit apprenticeship programs are designed to prepare the student for a career as a bus mechanic or bus body repair technician. For application to the programs, please contact San Diego Transit Corporation, 100 16th Street, San Diego, CA 92101.

Learning Outcome(s): Students who complete the San Diego Transit General Mechanic Apprenticeship Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavyduty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 101	Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections (Active)	2.0
DIES 102	Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 131	Alternative-Fueled Engine Overhaul (Active)	4.0
DIES 135	Applied Failure Analysis (Active)	3.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0
DIES 155	Air Brake Systems (Active)	3.0

SEASONAL OCEAN LIFEGUARD - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Open Water Lifeguard certificate and degree prepare students for full-time positions as ocean and inland beach lifeguards.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Seasonal Ocean Lifeguard Program will be able to:

1. Describe basic principles of beach management including communication, personnel deployment, use of vehicles and vessels, use of public address systems, and maintenance of water activity zones. Demonstrate the ability to assess and treat sick and injured patients in the field at the level of an emergency medical technician.
2. Calculate flow requirements for fire apparatus, diagram a pump and plumbing schematic for fire apparatus, and apply mathematic formulae to hydraulics problems.
3. Identify minimum qualifications and entry level skills for firefighter hiring. The student will be able to describe the following elements: application process; written exam process; physical agility exam, oral interview, chief's interview; background investigation; and fire fighter probationary process. Students will identify fire service history, culture and diversity.
4. Identify and describe the apparatus used in the f ire service, and the equipment and maintenance of fire apparatus and equipment.
5. Analyze the causes of fire, determine extinguishing agents and methods, differentiate the stages of the fire and fire development, and compare methods of heat transfer
6. Identify and describe common types of building construction and conditions associated with structural collapse and firefighter safety. Differentiate between fire detection and fire suppression systems. Student will design and diagram a wet and dry fire protection system, and identify alarm system components and their operations.
7. Demonstrate the ability to analyze, appraise and evaluate fire and emergency incidents and identify components of emergency management and fire fighter safety including: Size-up, report on conditions, Incident Command System; RECEO; 10 Standard Firefighting Orders; 18 Situations that Shout "Watch Out "; and common factors associated with injuries and line of duty deaths.
8. Describe proper techniques for observation and detection of distressed swimmers in open water. Describe the common visual scanning patterns for water observation and explain the appropriate application of each. Identify common water rescue adjuncts including swim fins, rescue buoys, and rescue boards; explain their function, care, and maintenance; and demonstrate the ability to use each item to rescue distressed swimmers in open water.
9. Identify and comprehend laws, regulations, codes and standards that influence fire department operations, and identify regulatory and advisory organizations that create and mandate them, especially in the areas of fire prevention, building codes and ordinances, and firefighter health and safety.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.5

EMGM 105A	Emergency Medical Technician - National Registry (Active)	7.0
LFGD 101	Introduction to Open Water Lifeguarding (Active)	3.0
LFGD 330	All-Terrain Vehicle Operations (Active)	0.5

SITE SUPERVISOR - ASSOCIATE OF SCIENCE DEGREE: MIRAMAR

Summary

This degree prepares students to supervise single site programs, provide instruction to children and coordinate curriculum and staff development Child Development courses must be completed with a grade of "C" or better. Additional general education and graduation requirements are listed in the Academic Requirements section of this catalog. The Associate Degree requires a minimum of 60 units.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Site Supervisor Program will be able to:

1. Communicate effectively with children, families, staff, and the community.
2. Plan and implement developmentally appropriate curriculum for children.
3. Apply human development growth theories and principles to early childhood settings.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

CHIL 101	Human Growth and Development (Active)	3.0
CHIL 111	Curriculum: Music and Movement (Active)	3.0
CHIL 121	Curriculum: Art (Active)	3.0
CHIL 131	Curriculum: Language/Science (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 151	Program Planning (Active)	3.0
CHIL 202	Administration of Early Childhood Programs (Active)	3.0
CHIL 210	Supervision of Early Childhood Programs (Active)	3.0
CHIL 215	Adult Supervision and Mentoring in Early Childhood Settings (Active)	3.0

Concurrent enrollment in (2-4 units total): **Semester Units:** 2.0-4.0

		1.0-4.0
CHIL 270	Work Experience (Active)	1.0-4.0
OR		
CHIL 275	Supervised Field Study (Active)	1.0-3.0

Note: Must select 2-4 units in CHIL 270 or 275.

Select one of the following three options: **Semester Units:** 3.0-4.0

		3.0-4.0
		4.0
CHIL 160	Observation and Assessment of Children (Active)	2.0
AND		
CHIL 161	Observations and Issues in Child Development (Active)	2.0
OR		
CHIL 165	Children With Special Needs (Active)	3.0
OR		
CHIL 175	Infant-Toddler Growth and Development (Active)	3.0

SOCIAL AND BEHAVIORAL SCIENCES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in Social and Behavioral Sciences is intended for students who plan to complete a bachelor's degree at a transfer institution in a social science-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options.

Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Social and Behavioral Sciences Program will be able to:

1. Demonstrate knowledge of key historical facts, values, and ideas that have shaped civilizations throughout history.
2. Critically analyze primary and secondary sources in college-level essays, written assignments, and research papers.
3. Demonstrate historical skills through written and verbal communication of arguments, analysis and conclusions of historical topics.

Requirements

Select at least 12 units from the following Social and Behavioral Sciences core courses: **Semester Units:** 12.0

ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal Law I (Active)	3.0
ADJU 106	Diversity and Community Relations (Active)	3.0
ADJU 162	Criminal Investigation (Active)	3.0
ADJU 210	Rules of Evidence (Active)	3.0
ADJU 230	Constitutional Law I (Active)	3.0
ANTH 102	Introduction to Biological Anthropology (Active)	3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
ANTH 107	Introduction to Archaeology (Active)	3.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
FILI 100	Filipino American Experience (Active)	3.0
GEOG 101	Physical Geography (Active)	3.0
GEOG 101L	Physical Geography Laboratory (Active)	1.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 106	Introduction to Western Civilization II (Active)	3.0
HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0
HIST 115A	History of the Americas I (Active)	3.0
HIST 115B	History of the Americas II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
HIST 141	Women in United States History I (Active)	3.0
HIST 142	Women in United States History II (Active)	3.0
PADM 200	Introduction to Public Administration (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0

POLI 103	Comparative Politics (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 133	Psychology of Women (Active)	3.0
PSYC 135	Marriage and Family Relations (Active)	3.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
		3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
BUSE 115	Statistics for Business (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0

SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0
SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0
SUST 101	Introduction to Sustainability (Active)	3.0

Select at least one course and the remainder of units needed to meet the minimum of 18 from the following: **Semester Units:** 6.0

ACCT 116A	Financial Accounting (Active)	4.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0
CBTE 120	Beginning Microsoft Word (Active)	2.0
CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
CISC 181	Principles of Information Systems (Active)	4.0
CISC 186	Visual Basic Programming (Active)	4.0
CISC 190	Java Programming (Active)	4.0
ENGL 105	Composition and Literature (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 237	Women in Literature (Active)	3.0
HUMA 106	World Religions (Active)	3.0
LIBS 101	Information Literacy and Research Skills (Active)	1.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
PHYN 100	Survey of Physical Science (Active)	3.0

SOCIOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Sociology for Transfer is intended for students who plan to complete a bachelor's degree in Sociology or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to

complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Sociology Program will be able to:

1. Be assessed through a combination of performance evaluations, written assignments, and written exams and quizzes.
2. Integrate logical thinking, including informed fact and assessment, based upon theories and practices in the field, tying together classical and contemporary theories of social groups and modalities and their interrelatedness for both the group and the individual perspective.
3. Organize the comprehension of the fields of Sociology as expressed through written and oral sources.
4. Apply appropriate learning and analyze theories within the field, explaining these through written and oral methodologies.
5. Develop skills in problem solving, communication, and critical thinking within the interrelationship of Sociology to other fields of the social sciences.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0
SOCO 220	Introduction to Research Methods in Sociology (Active)	3.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
		3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0

Select one of the following courses: **Semester Units:** 3.0

It is recommended that students select courses that meet lower division major preparation requirements for their transfer university.

SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

SPANISH - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Spanish for Transfer is intended for students who plan to complete a bachelor's degree in Spanish or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Spanish Program will be able to:

1. Demonstrate increased comprehension of the target language.
2. Utilize skills developed in class to produce the target language.
3. Demonstrate increased appreciation of the target language culture.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

SPAN 101	First Course in Spanish (Active)	5.0
SPAN 102	Second Course in Spanish (Active)	5.0
SPAN 201	Third Course in Spanish (Active)	5.0
SPAN 202	Fourth Course in Spanish (Active)	5.0

Select one course (3 units) from the following: **Semester Units:** 3.0

SPAN 210	Conversation and Composition Spanish I (Active)	3.0
SPAN 211	Conversation and Composition Spanish II (Active)	3.0

(It is recommended that students select courses that meet lower division major preparation requirements for their transfer university)

STEERING, SUSPENSION, AND DRIVELINES - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Steering, Suspension, and Drivelines Program will be able to:

1. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 180	Steering, Suspension, and Driveline Systems (Active)	3.0

STUDIO ARTS - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

Art is the study of the arrangement of forms that affect the senses, communicate political, social, cultural, religious, or emotional ideas that manifest in scenes and through objects produced throughout the world. This field includes the study and design of both two-dimensional and three-dimensional art. The art program is designed to maximize transferable course units and to provide basic skills required for employment in art-related fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Studio Arts Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.
2. Develop a foundation of art skills and a high level of craftsperson ship by utilizing a variety of tools and technologies associated with the visual arts.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.
5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

ARTF 100	Art Orientation (Active)	3.0
ARTF 150A	Two-Dimensional Design (Active)	3.0

ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0

Select six units from the following: **Semester Units:** 6.0

ARTF 109	Modern Art (Active)	3.0
ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0

STUDIO ARTS FOR TRANSFER - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: MIRAMAR

Summary

The Associate in Arts in Studio Arts for Transfer is intended for students who plan to complete a bachelor's degree in Studio Arts or a related major in the California State University (CSU) system. It is accepted by some but not all CSU campuses. Students who complete this degree and transfer to a participating CSU campus will be required to complete no more than 60 units after transfer to earn a bachelor's degree. It may not be appropriate preparation for students transferring to a CSU campus that does not accept the degree. Students who plan to complete this degree should consult a counselor for additional information about participating CSU campuses as well as university admission, degree, and transfer requirements.

NOTE: Students intending to transfer into this major at a CSU should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Award Notes:
The following is required for all AA-T or AS-T degrees:

- Completion of 60 semester units that are eligible for transfer to the California State University
- Completion of a minimum of 18 semester units in an "AA-T" or "AS-T" major.
- Minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some CSU campuses and majors may require a higher GPA. Please see a counselor for more information.
- Minimum grade of "C" or "P" or better for each course in the major. Students should review the Pass/No Pass acceptance policy of the transfer institution prior to requesting this grade option.
- Certified completion of the California General Education Transfer Curriculum (Cal-GETC) pattern.

Learning Outcome(s): Students who complete the Studio Arts for Transfer Program will be able to:

1. Critically analyze, interpret, and evaluate works of art.
2. Develop a foundation of art skills and a high level of craftsperson ship by utilizing a variety of tools and technologies associated with the visual arts.
3. Use a diverse range of global events to express personal ideas and opinions through artwork.
4. Identify the theoretical, cultural and historical contexts of art.
5. Demonstrate appropriate skills needed to articulate their conscious artistic intentions, and express coherent aesthetics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ARTF 110	Art History: Prehistoric to Gothic (Active)	3.0
ARTF 111	Art History: Renaissance to Modern (Active)	3.0

ARTF 150A	Two-Dimensional Design (Active)	3.0
ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0
		3.0
ARTF 155B	Freehand Drawing II (Active)	3.0
OR		
ARTF 210A	Life Drawing I (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
		3.0
ARTF 165B	Composition in Painting II (Active)	3.0
OR		
ARTF 210B	Life Drawing II (Active)	3.0

SUSTAINABILITY - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Sustainability AA provides students with a practical, interdisciplinary understanding of the environmental, social, and economic aspects involved in creating and maintaining sustainable societies. The degree is structured to allow students to direct their studies for transfer into a number of related majors.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Sustainability Program will be able to:

1. Demonstrate integrative and applied learning.
2. Demonstrate critical inquiry, analysis, thinking, writing, and quantitative skills.
3. Demonstrate knowledge of human cultures and the physical and natural world.
4. Demonstrate intellectual and practical skills.
5. Demonstrate personal and social responsibility.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0-14.0

GEOG 101	Physical Geography (Active)	3.0
SUST 101	Introduction to Sustainability (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
		1.0-2.0
SERV 277D	Service Learning on Campus (Active)	2.0
OR		
SERV 277C	Service Learning in the Community (Active)	2.0
OR		
SERV 277E	Service Learning in International Communities (Active)	1.0
		3.0
BUSE 115	Statistics for Business (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0

It is recommended that students planning to transfer to a university select SERV or statistics courses (at the bottom of the list) that are closely related to their university major or emphasis.

Select at least six units from the following: **Semester Units:** 6.0-7.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
BIOL 101	Issues in Environmental Science & Sustainability (Active)	4.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
PADM 200	Introduction to Public Administration (Active)	3.0
PHIL 131	Environmental Ethics (Active)	3.0
		3.0
PHYN 114	Weather and Climate (Active)	3.0
OR		
AVIA 115	Aviation Weather (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
POLI 121	American Political Development (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0

It is recommended that students planning to transfer to a university select courses that are closely related to their university major or emphasis.

SUSTAINABILITY - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Sustainability Certificate offers an interdisciplinary, theoretical, philosophical and practical approach for students to enter into the academic and/or professional fields related to Sustainability. Students gain skills to critically analyze current global affairs including environmental, social, and economic issues in order to offer alternative solutions to create sustainable societies. The Sustainability Certificate also allows students to gain practical experience with Sustainability projects on campus through participation in a required one-unit service learning course.

It is highly recommended to complete a "sustainability emphasis" class section of PHIL 102B.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Sustainability Program will be able to:

1. Demonstrate critical inquiry, analysis, thinking, writing, and quantitative skills.
2. Demonstrate integrative and applied learning.
3. Demonstrate knowledge of human cultures and the physical and natural world.
4. Demonstrate intellectual and practical skills.
5. Demonstrate personal and social responsibility.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.0

SUST 101	Introduction to Sustainability (Active)	3.0
BIOL 100	Natural History - Environmental Biology (Active)	4.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0

Complete one of the following courses: **Semester Units:** 3.0

COMS 160	Argumentation and Critical Thinking (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0

TEAM RESOURCE MANAGEMENT - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The award of this Certificate represents a focused study of the human factors which affect performance in high-risk teams.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Team Resource Management Program will be able to:

1. Demonstrate preparedness to complete, or continued preparation for, the respective Federal Aviation Administration written examination.
2. Demonstrate the knowledge, skills, abilities, and experience for employment in an aviation-related career field.

Credit For FAA-Issued Pilot Certificates and Ratings

Pending Aviation Department review and approval, students who hold a valid FAA Private, Instrument, Commercial, or Remote Pilot certificate may apply to the Aviation Department for a maximum of 19 units. The units granted with a grade of CR will be posted to the student's transcript upon completion of the remaining Associate of Science Degree requirements.

Credit for Work Experience

Students who have valid work experience in the aviation industry may challenge a maximum of 15 units. Refer to the Challenge Procedure section of the catalog.

Pending Aviation Operations Program Department review and approval, students who already possess the associated FAA pilot certificate or rating may challenge up to two of the following courses:

- Private Pilot Ground School (AVIA 101)
- Instrument Ground School (AVIA 195)
- Commercial Pilot Ground School (AVIA 201)
- Flight Instructor Ground School (AVIA 211)

Flight Training

Pending Aviation Operations Program Department review and approval, a student awarded a Miramar College Certificate of Performance for an academic phase of ground instruction (AVIA 101, 195, 201, 211) who subsequently earns the associated FAA certificate or rating can request that 3 units of credit be awarded for that flight training. As a result, it is possible for a student to earn up to 12 units at Miramar College for flight training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

AVIA 128	Group Dynamics for High Risk Teams (Active)	3.0
AVIA 133	Human Factors in Aviation (Active)	3.0
AVIA 228	Group Dynamics II (Active)	3.0

TECHNICAL ACHIEVEMENT FOR FIELD TRAINING OFFICERS - CERTIFICATE OF ACHIEVEMENT: MIRAMAR

Summary

The Administration of Justice program provides professional education and training for students in Law Enforcement, Investigations, Contemporary Police Technologies, and Correctional Technologies. Specialized seminars and intensified course offerings are designed to meet all current training mandated and prescribed by law. The program offers weekend, morning, afternoon, night classes and online classes to accommodate student needs. Students who meet the academic requirements may obtain an Associate of Science degree or select from a variety of Certificates of Performance and Certificates of Achievement. The program is also designed to enhance general knowledge of the Administration of Justice System for the community at large.

Learning Outcome(s): Students who complete the Technical Achievement for Field Training Officers Program will be able to:

1. Understand the three components of the criminal justice system and how they interrelate.
2. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
5. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.5

ADJU 260	POST Certified Regional Academy (Active)	24.0
ADJU 330A	POST Certified Field Training Officer Course (Active)	0.5

TRANSPORTATION SECURITY - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The Certificate of Performance in Transportation Security is intended for students employed or seeking employment with the Department of Homeland Security as well as anyone interested in the field of transportation security.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Transportation Security Program will be able to:

1. Analyze and evaluate the role of criminal sanctions in recidivism rates and the rehabilitation process of offenders.
2. Use information of crime scene management and investigation, forensics analysis and information technology to conduct rudimentary criminal investigations.
3. Relate knowledge from several employment areas such as pre-employment testing, physical requirements, psychological evaluations and social factors.
4. Demonstrate knowledge of the California Penal Code, the California Commission on Peace Officer Standards and Training regulations and appropriate department policies and procedures.
5. Understand the three components of the criminal justice system and how they interrelate.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

HSEC 100	Introduction to Homeland Security (Active)	3.0
HSEC 110	Intelligence Analysis and Security Management (Active)	3.0
HSEC 120	Transportation and Border Security (Active)	3.0

TRUCK & EQUIPMENT ELECTRICAL SYSTEMS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Truck & Equipment Electrical Systems Program will be able to:

1. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 138	Electrical Systems (Active)	3.0
DIES 144	Electronics for Diesel Technology (Active)	3.0

TRUCK AIR BRAKE SYSTEMS - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Truck Air Brake Systems Program will be able to:

1. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 155	Air Brake Systems (Active)	3.0

TRUCK DRIVE AXLES - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Truck Drive Axles Program will be able to:

1. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.
2. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
3. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 170	Truck Drive Axles and Specifications (Active)	3.0

TRUCK TRANSMISSIONS AND CLUTCHES - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

The diesel technology program provides the student with an opportunity to master the skills and knowledge required for success in servicing and maintaining diesel powered highway trucks, off-road heavy equipment, stationary engines, and marine craft. The two-year curriculum has three tracts which lead to a Certificate of Achievement, and three tracts which lead to an Associate in Science degree. In addition, the diesel program offers the Certificate of Completion in ten specialty areas. These certificates can be applied toward the Certificate of Achievement or the Associate in Science degree.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Truck Transmissions and Clutches Program will be able to:

1. Perform the manipulative and critical thinking skills when performing service work on heavy-duty vehicles, systems, and components using a variety of tools, equipment and instruments.
2. Perform service procedures safely and implement workplace health and safety compliance using regulations published by the Occupational Safety and Health Administration, and the Environmental Protection Agency.
3. Perform research, locate, and use heavy-duty service information, special instructions, and specifications with printed or web-based resources.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

DIES 100	Introduction to Diesel Technology (Active)	2.0
DIES 105	Measuring Tools and Applied Mathematics (Active)	2.0
DIES 160	Heavy Duty Manual Transmissions (Active)	3.0
DIES 165	Truck Automatic Transmissions (Active)	3.0
DIES 175	Truck Chassis R&R (Active)	3.0

WEBSITE DESIGNER - CERTIFICATE OF PERFORMANCE: MIRAMAR

Summary

This certificate prepares students for entry-level positions as web page designers.

Award Notes:
A Certificate of Performance is a departmental award that does not appear on the student's transcript. All courses must be completed within the San Diego Community College District.
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Website Designer Program will be able to:

1. Demonstrate proficiency in using software applications to enter data, format and organize data, complete calculations, graph data, create templates, develop professional reports, forms, and queries, and produce professional looking presentations.

2. Identify effective business communications skills.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

CBTE 127	Beginning Microsoft PowerPoint (Active)	2.0
CBTE 152	Beginning Microsoft Access (Active)	2.0
CBTE 165	Webpage Creation with Dreamweaver (Active)	3.0

WORLD LANGUAGE STUDIES - ASSOCIATE OF ARTS DEGREE: MIRAMAR

Summary

The Associate of Arts degree with an area of emphasis in World Language Studies is intended for students who plan to complete a bachelor's degree at a transfer institution in a world language-related major. This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions and major options. Because admission and major preparation requirements vary at each transfer institution, courses used to complete this degree should be selected with the assistance of a Miramar College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the World Language Studies Program will be able to:

1. Demonstrate increased comprehension of the target language.
2. Utilize skills developed in class to produce the target language.
3. Demonstrate increased appreciation of the target language culture.

Requirements

Select one language course sequence: **Semester Units:** 0.0

		15.0-20.0
		20.0
SPAN 101	First Course in Spanish (Active)	5.0
AND		
SPAN 102	Second Course in Spanish (Active)	5.0
AND		
SPAN 201	Third Course in Spanish (Active)	5.0
AND		
SPAN 202	Fourth Course in Spanish (Active)	5.0
OR		
		15.0
TAGA 101	First Course in Tagalog (Active)	5.0
AND		
TAGA 102	Second Course in Tagalog (Active)	5.0
AND		
TAGA 201	Third Course in Tagalog (Active)	5.0

Select the remainder of units needed to meet the minimum of 18 from the following: **Semester Units:** 18.0-20.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0

ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
ENGL 208	Introduction to Literature (Active)	3.0
ENGL 220	Masterpieces of World Literature I: 1500 BCE - 1600 CE (Active)	3.0
ENGL 221	Masterpieces of World Literature II: 1600 - Present (Active)	3.0
ENGL 230	Asian American Literature (Active)	3.0
FILI 100	Filipino American Experience (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
HIST 100	World History I (Active)	3.0
HIST 101	World History II (Active)	3.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
HIST 106	Introduction to Western Civilization II (Active)	3.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
POLI 103	Comparative Politics (Active)	3.0
SPAN 210	Conversation and Composition Spanish I (Active)	3.0
SPAN 211	Conversation and Composition Spanish II (Active)	3.0

Course Descriptions

General Course Information

In accordance with California Education Code, Section 78221.5, students have the right to access transfer-level coursework and academic credit English Language Acquisition (ELAC) coursework. Please refer to Assessment or see a counselor for details.

Students must earn a grade of "C" or better in courses required for the major.

Please note not all courses will be available every semester, and some courses may be canceled if enrollment doesn't meet the minimum requirements set by the San Diego Community College District. The hours listed in the course description indicated the hours the class meets, unless otherwise stated.

Course Numbering System

The course numbering system has meaning with regard to level and transfer. See the description below:

- **1–49** Basic Skills or college preparatory courses. Credit does not apply toward the associate degree and is not intended for transfer to a four-year college or university. Final determination regarding the transfer of credit rests with the receiving institution.
- **50–99** Course credit applies toward the associate degree and is not intended for transfer to a four-year college or university. Final determination regarding the transfer of credit rests with the receiving institution.
- **100–299** Course credit applies toward the associate degree and is intended for transfer to a four-year college or university. (Some courses may be identified as associate degree applicable only. See catalog course description.) Final determination regarding the transfer of credit rests with the receiving institution. Note: Experimental courses numbered 265 may or may not be degree applicable or transferable. Please check the individual course details in the online schedule for more information.
- **300–391** Apprenticeship and in-service courses. See Catalog course description to determine associate degree and/or transfer credit.
- **392–399** Special Topics courses that employ a consistent disciplinary framework as described by a complete course outline of record, but utilize a specific focus area that may change from term to term may be offered in some disciplines. See the class schedule for specific titles and course details. See catalog course description to determine associate degree and/or transfer credit.
- **400-599** Upper division courses. Students must be admitted to a SDCCD college baccalaureate degree program.

Apprenticeship 345, 349, 349-D, DSPS 65, Field Experience/Internship 275, Independent Study 290, Individualized Instruction 296, Experimental Topics 18, 23, 63, 265, Tutoring 44, and Work Experience courses 270, 272 have Districtwide designated numbers.

Common Course Numbering System

The Common Course Numbering (CCN) System is a state-mandated initiative (AB 1111) aimed at simplifying student transfer and ensuring uniformity in course numbers across California Community Colleges.

Starting Fall 2025, SDCCD Colleges will include a new course numbering system. This new system, called the Common Course Numbering (CCN) system, will use the following structure:

- Subject: Four letter abbreviation (e.g., ENGL for English);
- Course Type Identifier: C= Common Course Number; local courses would not have a C; and
- Course Number: Standardized 4- digit course identification

C1000-C1399 100 level course.

C2000-C2399 200 level course.

Courses identified as common will feature a "C" in their catalog numbers (e.g., ENGL 101 will become ENGL C1000). Some subject area prefixes will also change to align with statewide standards (e.g., POLI will become POLS). Revisions, including new course numbers and subject prefixes, will be clearly indicated in the college catalog and class schedules to help students easily identify and navigate these changes.

For the latest information about Common Course Numbering, including an updated list of courses and answers to frequently asked questions, please visit the Common Course Numbering website.

Prerequisites, Corequisites, Limitations on Enrollment, and Advisories

All prerequisites, corequisites, and limitations on enrollment stated in the course descriptions listed in this catalog will be strictly enforced at the time of registration. Students who do not meet the prerequisite, corequisite, or other limitation according to the college's records, will not be permitted to register for the course. Students are strongly advised to have all transcripts of prior college work and other documentation on file well in advance of registration. This will minimize registration delays. For more information refer to the Prerequisites, Corequisites, and Limitations section in the catalog.

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

Challenge Procedures

A student may obtain a petition to Challenge online via the mySDCCD Support Desk and then selecting the Petition to Challenge form.

The completed petition with supporting documentation must be filed in the Admissions Office AT LEAST 10 working days prior to the start of the primary term/semester. Contact the Admissions Office for additional information. For information regarding credit by examination, please refer to the Credit for Prior Learning section in this catalog.

Supervised Tutoring (44)

Noncredit, no-fee, supervised tutoring courses are available in Education (EDUC), English (ENGL), English Language Acquisition (ELAC) and Mathematics (MATH). These courses are designed to help students develop communication/literacy skills, quantitative reasoning skills, and critical thinking skills. To enroll in a supervised tutoring course, a student must be enrolled in a college course in the respective discipline. The courses are designed to prepare the student to succeed in the corequisite or subsequent courses. Supervised tutoring may be repeated as needed. These courses are applicable to the Associate Degree.

Special Topics Courses (392–399)

Special topics courses that employ a consistent disciplinary framework as described by a complete course outline of record, but utilize a specific focus area that may change from term to term may be offered in some disciplines. See the class schedule for specific titles and course details. (See catalog course description to determine credit for Associate Degree or Transfer.)

Work Experience (270)

Program of on-the-job learning experiences for students employed in a job related to the major. Students may earn a maximum of fourteen credit hours for all work experience subject areas during one enrollment period. AA/AS; CSU.

Service Learning

Students gain hands-on experience in project planning, development, implementation and evaluation. Students meet weekly to receive support training and development opportunities regarding best practices in Service Learning. The service-learning options are as follows:

Service Learning—High School Projects (277A)

Students in this course develop and implement service-learning projects to help high school students under the supervision of college faculty and in cooperation with high school teachers, counselors and resource teachers. Projects may include collaboration with high school classes, educational projects for high school students, mentoring and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills or enhancement of communication and planning skills. Course

segments may be taken in any order. The combined credit for all 277A discipline courses may not exceed three units. AA/AS; CSU.

Service Learning—Elementary and Junior High School Projects (277B)

Students in this course develop and implement service learning projects to help elementary and junior high school students under the supervision of college faculty and in cooperation with elementary and junior high school teachers, counselors and resource teachers. Projects may include collaboration with elementary and junior high school classes, educational projects for elementary and junior high school students, mentoring, and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277B discipline courses may not exceed three units. AA/AS; CSU.

Service Learning—Community (277C)

Students in this course develop and implement service-learning projects to help the college's community under the supervision of college faculty and in cooperation with the staff of community organizations and agencies. Projects may include collaboration with off-campus community organizations and educational service oriented projects for the college's community. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277C discipline courses may not exceed three units. AA/AS; CSU.

Service Learning—On Campus (277D)

Students in this course develop and implement service-learning projects to help the college's students under the supervision of college faculty and in cooperation with college counselors and staff. Projects may include collaboration with college classes, educational projects for college students, mentoring, and shadowing. This course is intended for students from any discipline who are interested in project development, development of teaching skills, or enhancement of communication and planning skills. Course segments may be taken in any order. The combined credit for all 277D discipline courses may not exceed three units. AA/AS; CSU.

Independent Study (290)

This course is for students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals. AA/AS; CSU.

Explanation of Terms

Courses in the San Diego Community College District that are associate degree applicable and/or transfer to public four-year universities in California are identified at the end of each course description with the following statements:

AA/AS: Associate Degree Applicable. The course will apply toward the units required for the associate degree at San Diego Community College District colleges. The course is not intended for transfer to a four-year college or university. However, final determination of transfer credit rests with the receiving institution.

CSU: California State University Applicable. The course will apply toward the units required for the baccalaureate degree at the California State University system.

UC: University of California Applicable. The course will apply toward the units required for the baccalaureate degree at the University of California system.

UC Transfer Limitation. See a counselor or reference ASSIST.org: There may be limitations on the number of units that are applied from this course toward the total number of lower division units required for the baccalaureate degree at the University of California. Students should see a counselor or reference ASSIST.org concerning these limitations. The University of California limits the maximum amount of lower division credit that can be applied toward the baccalaureate degree in a variety of disciplines, including Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology) and Library Science.

Field Trip: (FT) A field trip may be required for this course. Detailed information concerning costs incurred will be provided by the instructor.

Private Colleges/Independent/Out-of-State:

Note regarding Private / Independent / Out-of-state institutions: San Diego Community College District courses that are designated as CSU or UC transferable may apply toward the total number of lower division units required for the baccalaureate degree at private, independent, and/or out-of-state colleges and universities; however, the final evaluation of course credit will be determined by the individual private, independent, or out-of-state institution.

Exercise Science Classes/Intercollegiate Sports-disclaimer

Participation in all sports and exercise science activities involves certain inherent risks. Risks may include, but are not limited to, neck and spinal injuries that may result in paralysis or brain injury, injury to bones, joints, ligaments, muscles, tendons and other aspects of the muscular skeleton system; and serious injury, or impairment, to other aspects of the body and general health, including death. The San Diego Community College District, its officers, agents and employees are not responsible for the inherent risks associated with participation in exercise science classes/intercollegiate sports. Students are strongly advised to consult a physician prior to participating in any exercise science activity.

UC Transfer and Physical Education Courses

The University of California divides physical education courses into three categories: 1) Activity; 2) Theory, and 3) Academic/Scholarly. Credit for Activity courses is limited to four (4) units. Credit for Theory courses is limited to eight (8) units. No credit limitation is established for Academic/Scholarly courses. All UC-transferable physical education courses and their associated unit limitations are listed on Web ASSIST.

UC Transfer and Variable Topics Courses

These courses are also called "Independent Studies", "Special Studies", "Experimental Topics", "Field Work", etc. Credit for variable topics courses is given only after a review of the scope and content of the course by the enrolling UC campus. This usually occurs after transfer and may require recommendations from faculty. Information about internships may also be presented for review, but credit for internships rarely transfers to UC. UC does not grant credit for variable topics courses in Journalism, Photography, Health, Business Administration, Architecture, Administration of Justice (Criminology) or Library Departments because of credit restrictions in these areas.

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. The purpose of a C-ID designation is to identify comparable courses within the California community college system and participating four-year institutions. When a C-ID number is listed in the catalog in association with a course, students can be assured that it will be accepted in lieu of a course bearing the same C-ID designation at another California community college. Many universities, including the University of California (UC) do not participate in the C-ID system. Therefore, students should always reference www.assist.org to confirm how each community college's course will be accepted at a specific four-year college or university for transfer credit.

AAPI-Asian American Pacific Islander Studies

AAPI 124 Introduction to Asian American and Pacific Islander Studies

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the interdisciplinary field of Asian American and Pacific Islander (AAPI) Studies. The course explores the diverse histories and contemporary social, cultural, and political experiences of Asian Americans and Pacific Islanders. Emphasis is placed on how settler colonialism, imperialism, racial capitalism, globalization, war, American empire, citizenship, and various aspects of identity such as race, class, gender, and sexuality have shaped AAPI experiences and their social justice movements. Students will explore the topics through the lens of equity, self-determination, decolonization, and anti-racism. This course is intended for all students interested in Asian American and Pacific Islander Studies and Ethnic Studies.

FT; AA/AS; CSU; UC.

ACCT-Accounting

ACCT 102 Basic Accounting

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of the theory and practice of the accounting process. Emphasis is placed on accounting transactions and bookkeeping. Topics include business documents; journals and ledgers; opening, adjusting and closing entries; and payroll. This course is intended for students interested in a practical approach to accounting. It can be used as preparation for the Certified Public Accountant (CPA) exam.

FT; AA/AS; CSU.

ACCT 116A Financial Accounting

64-72 hours lecture; 4 units
Grading: Letter Grade Only
Advisory: ACCT 102 with a Grade of "C" or better, or equivalent
This introductory course is an overview of financial accounting, why it is important, and how it is used by investors and creditors to make decisions. It covers the accounting information system, the recording and reporting of business transactions with a focus on the accounting cycle, the applications of generally accepted accounting principles (GAAP), the classified financial statements, and statement analysis. Other topics include issues related to asset, liability, and equity valuation; revenue and expense recognition; cash flows; internal controls; and ethics. This course is intended for students majoring in accounting or other fields related to business administration.

FT; AA/AS; CSU; UC; C-ID: ACCT 110.

ACCT 116B Managerial Accounting
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Prerequisite: ACCT 116A with a Grade of "C" or better, or equivalent
This course is a study of how managers use accounting information in decision-making, planning, directing operations, and controlling. The course focuses on cost terms and concepts, cost behavior, cost structure, and cost-volume-profit analysis. Other topics include profit planning, standard costs, operations and capital budgeting, cost control, and accounting for costs in manufacturing organizations. This course is intended for students majoring in accounting or other fields related to business administration.

FT; AA/AS; CSU; UC; C-ID: ACCT 120.

ACCT 120 Federal Income Tax
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: ACCT 116A with a Grade of "C" or better, or equivalent
This course introduces tax concepts and tax laws that govern individuals who pay federal income taxes. Emphasis is placed on recognizing the social, economic, and political factors that Congress considers when it creates tax laws. This course relates tax codes to the individual and identifies how tax planning skills can determine economic outcomes. In addition, the course demonstrates and differentiates between tax avoidance and tax evasion. It is intended for students majoring in Accounting or anyone interested in federal income tax concepts and laws.

FT; AA/AS; CSU.

ACCT 121 California Income Tax
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ACCT 120
This course is a study of California personal income taxation and tax planning. Emphasis is placed on tax concepts and related social economic issues rather than tax return preparation. The course distinguishes between California and federal income tax requirements. It is intended for all students interested in California income tax.

FT; AA/AS; CSU.

ACCT 135 Principles of Auditing
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ACCT 116A with a Grade of "C" or better, or equivalent
This is a basic course concerned with financial statement auditing as well as other assurance services provided by professional auditors. All phases of auditing including ethics, standards, planning, fieldwork and reporting are covered. This course is intended for students majoring in Accounting.

FT; AA/AS; CSU.

ACCT 150 Computer Accounting Applications
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: ACCT 102 with a Grade of "C" or better, or equivalent or ACCT 116A with a Grade of "C" or better, or equivalent
This course illustrates how to use accounting computer programs in a commercial business enterprise. The main objective is to provide the student with a complete guide to creating and maintaining a proper accounting system while using a popular accounting software program (QuickBooks Pro) on a personal computer. The full accounting cycle and payroll is evaluated within a typical business environment. Business transactions are identified, labeled, recorded, and processed for both service and merchandise businesses. In addition, financial statements are constructed, evaluated, and reviewed for accuracy and completeness. This course is intended for students majoring in Accounting or those interested in computer accounting programs.

FT; AA/AS; CSU.

ACCT 201A Intermediate Accounting I
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ACCT 116A with a Grade of "C" or better, or equivalent
This course introduces students to intermediate theory, concepts, standards, and principles of financial accounting, with an emphasis on corporate financial statements. Topics include the acquisition, valuation, and disposition of assets as well as the identification and reporting of current liabilities. This course is intended for students majoring in the field of accounting and those interested in upgrading their accounting job/career skills.

FT; AA/AS; CSU.

ACCT 201B Intermediate Accounting II

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ACCT 201A with a Grade of "C" or better, or equivalent
This course is a continuation of intermediate financial accounting standards, theory, and principles. Topics include the valuation and presentation of liabilities and stockholders' equity; revenue recognition; leases; and tax accounting. This course is intended for students majoring in the field of accounting and those interested in upgrading their accounting job/career skills.

FT; AA/AS; CSU.

AUDI-Audio Production & Engineering

AUDI 201 Sound Reinforcement Systems

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
This course focuses on the interconnection and operation of sound reinforcement technology. Students demonstrate techniques and skills necessary for achieving quality sound production and reinforcement in a variety of audio system applications. This course is intended for students majoring in Audio Production and Engineering or anyone interested in the operation of audio systems.

FT; AA/AS; CSU.

ADJU-Administration of Justice

ADJU 101 Introduction to Administration of Justice

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 101A AND/OR ADJU 101B AND/OR ADJU 101C
This course introduces students to the philosophy and history of administration of justice. It provides an overview of crime, police problems, and the organization and jurisdiction of law enforcement agencies. Students survey professional career opportunities and qualifications. This course is intended for students majoring in Administration of Justice.

FT; AA/AS; CSU; UC; C-ID: AJ 110.

ADJU 102 Criminal Law I

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the scope and source of criminal law and classification of crimes against persons, property, morals, and public welfare. Topics include classification and general elements of crime, the definitions of common and statutory law, acceptable evidence, types of intent, capacity to commit crimes, legal defenses, criminal culpability, parties to crime, laws of arrest, and Constitutional background. This course is intended for students majoring in Administration of Justice or anyone interested in criminal law.

FT; AA/AS; CSU; C-ID: AJ 120.

ADJU 106 Diversity and Community Relations
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict. The course emphasizes the challenges and prospects of administering justice within a diverse multicultural population from the perspective of the individual peace officer as well as the broader perspective of the criminal justice system including the police, courts, and corrections. Subject matter emphasizes the major cultural groups in California and the community relations problems facing law enforcement personnel. This course is intended for students majoring in Administration of Justice or anyone interested in law enforcement community relations.

FT; AA/AS; CSU.

ADJU 127A Physical Conditioning I
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 147 or ADJU 147A or CRJU 120A
This course is an introduction to physical conditioning skills and techniques used in public safety occupations. Topics include introductory level stretching, cardiovascular, and strength conditioning exercises to develop physical skills required in criminal justice, fire protection, and other public safety fields. This course is intended for students preparing for employment in a public safety-related field.

AA/AS; CSU.

ADJU 128A Defensive Tactics I
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 148, ADJU 148A, CRJU 121, CRJU 121A
This course provides introductory level skills and practice in protection against persons armed with dangerous weapons. Students are introduced to demonstration and drill in a limited number of control holds and take downs. In addition, related California Penal Code sections are introduced. This course is intended for students majoring in Administration of Justice or practicing peace officers.

FT; AA/AS; CSU.

ADJU 160 Criminal Law II
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to dangerous weapons control laws, homicide, and miscellaneous offenses. Other topics include false imprisonment; kidnapping; sex crimes; public safety and morals; burglary; robbery and extortion; theft and embezzlement; controlled substance and alcohol abuse; forgery; arson; and Alcohol Beverage Control (ABC) laws. This course is intended for students majoring in Administration of Justice or anyone interested in criminal law.

FT; AA/AS; CSU.

ADJU 161 Juvenile Procedures
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides an overview of the history, development, and organization of the juvenile justice system in the U.S. Topics include the organization, functions, and jurisdiction of juvenile agencies; juvenile law; the processing and detention of juveniles; juvenile dispositions, statutes, and court procedures; and the Constitutional protections extended to juveniles. This course is intended for students majoring in Administration of Justice or others interested in the juvenile justice system.

FT; AA/AS; CSU; C-ID: AJ 220.

ADJU 162 Criminal Investigation
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to the techniques, procedures, and ethical issues in crime scene investigations. Topics include the organization of the investigative process; crime scene searches; interviewing and interrogating; surveillance; sources of information; utility of evidence; scientific analysis of evidence; and the role of the investigator in the case development and trial processes. Students also learn how to collect and preserve physical evidence, gather information, and identify, collect, and preserve fingerprints. This course is intended for students majoring in Administration of Justice or anyone interested in the criminal investigations process.

FT; AA/AS; CSU; C-ID: AJ 140.

ADJU 167 Report Writing
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course covers forms and formats of written communications in both civil and criminal areas of law enforcement. Students prepare written reports related to crime scene investigation, evidence preservation, chain of evidence continuity, case history, case prosecution, data processing preparation, criminal records, and other types of law enforcement statistical material utilized in case preparation. This course is intended for students majoring in Administration of Justice or preparing for employment in a public safety-related occupation.

FT; AA/AS; CSU.

ADJU 180 Drug Abuse and Law Enforcement
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 265: Drug Abuse and Law Enforcement
This course offers students the opportunity to analyze and effectively address drug abuse issues that are encountered in law enforcement. Topics include drug laws and major drug categories, their effects, and associated types of paraphernalia. This course is intended for students majoring in Administration of Justice or anyone interested in drug abuse issues.

FT; AA/AS; CSU.

ADJU 182 Street Gangs and Law Enforcement
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 265: Street Gangs and Law Enforcement
This course presents an overview of street gang issues. Topics include the history of gangs, gang dynamics, criminal activities, differences among gangs, narcotics involvement, and gang philosophy. The course emphasizes the law enforcement perspective for involvement, intervention, prosecution, and intelligence gathering. It is intended for students majoring in Administration of Justice or anyone interested in law enforcement.

FT; AA/AS; CSU.

ADJU 201 Criminal Procedure
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the origin, development, philosophy, and legal basis of rules of criminal procedure. Students examine procedural statutory law, case law, the court systems, the grand jury system, pretrial court procedures, adult trial procedures, juvenile court procedures, sentencing, and the appellate process. Topics include laws governing arrest, use of force, motions, rules of discovery, and applicable rules of evidence. This course is intended for students majoring in Administration of Justice or anyone interested in the criminal court process.

FT; AA/AS; CSU; C-ID: AJ 122.

ADJU 210 Rules of Evidence
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course covers the origin, development, philosophy, categories, and legal basis of evidence. Topics include judicial decisions and statutory rules of evidence that govern the admissibility of testimony, writings, and material objects at a criminal trial. Students also learn how constitutional and procedural considerations affect searches and seizures; admissions; confessions; and methods of identification. This course is intended for students majoring in Administration of Justice or anyone interested in criminal legal processes.

FT; AA/AS; CSU; C-ID: AJ 124.

ADJU 220 Law Enforcement Forensics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides an introduction to the role of forensics in criminal investigations. It examines the methods utilized in the forensic analysis of crime scenes, pattern evidence, instruments, firearms, questioned documents, and controlled substances. Other topics include law enforcement/crime laboratory involvement in the documentation, collection, and analysis of evidence including blood spatter, blood typing, DNA typing, drug/alcohol effects, wounds, trace evidence, documents, footprints, fingerprints, missile trajectory, and scene reconstruction. This course is intended for students majoring in Administration of Justice or anyone interested in law enforcement forensics.

FT; AA/AS; CSU; C-ID: AJ 150.

ADJU 230 Constitutional Law I
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces the sources and limitations of government power contained in the U.S. Constitution. Students examine the contemporary interpretation and application of the Constitution as well as the historical underpinnings. The course explores how the U.S. Supreme Court has interpreted and applied the Constitution in the ongoing effort to balance power in the following arenas: among branches of the federal government, between the federal government and states, and between the government and individual citizen. This course is intended for students majoring in Administration of Justice or anyone interested in U.S. law or law enforcement.

FT; AA/AS; CSU; UC.

ADJU 260 POST Certified Regional Academy
144 - 168 hours lecture/720 - 816 hours lab; 24 units
Grading: Letter Grade Only
Advisory: ADJU 101 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for the combination of ADJU 381, 382, 383, and 384.
This Peace Officer Standards and Training (POST) certified course provides students with the law enforcement skills and concepts necessary for initial employment as peace officers. Major topics include the role of law enforcement in society; identifying and classifying crimes; laws of arrest; evidence; report writing; vehicle operations; traffic enforcement; preliminary investigations; fitness; defensive tactics and combat situations; officer survival; first aid; controlled substances; civil crisis management; arrest, control, and custody techniques; hazardous materials; information systems; Welfare and Institutions (W&I) classifications; Alcoholic Beverage Control (ABC) laws; unusual occurrences; missing persons; weapons violations; and crimes in progress. The course exceeds the minimum peace officer training requirements of Section 832 of the California Penal Code.

FT; AA/AS; CSU.

ADJU 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

AA/AS; CSU.

ADJU 300A First Aid
1 hours lecture/7 - 15 hours lab; 0.2 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 300
This course provides first aid training with an emphasis on emergency situations. Topics include communication, terminology, situation assessment, environmental emergencies, cardiopulmonary resuscitation (CPR), and medical emergency childbirth.

FT; AA/AS.

ADJU 304A Intermediate Traffic Accident Investigation
24 - 48 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 304
This Peace Officer Standards and Training (POST) certified course provides students with the skills and knowledge to identify and analyze tire marks at traffic accident scenes. Topics include tire mark documentation, measurements, and terms; definitions relating to tire mark investigations; case preparation; courtroom testimony; and the determination of coefficient of friction, drag factor, and speed estimates using various equations.

FT; AA/AS.

ADJU 305A Advanced Traffic Accident Investigation

72 - 88 hours lab; 1.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 304A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 305
This Peace Officer Standards & Training (POST) certified course provides students with advanced traffic accident investigative skills and knowledge. Students learn how to determine the sequence of events that results in a traffic collision and how to document a collision. This course is intended for practicing law enforcement officers.

FT; AA/AS.

ADJU 307A Traffic Enforcement Radar Certification

24 - 48 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 307
This Peace Officer Standards and Training (POST) certified course covers the legal and technical use of radar equipment. Topics include radar history and theory; moving and stationary radar; equipment setup and calibration; target identification; and the detection of anomalous and spurious readings.

FT; AA/AS.

ADJU 312A Basic Supervisory Course

72 - 88 hours lab; 1.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 312
This course introduces students to the duties and responsibilities of the first-line law enforcement supervisor. Topics include theories of supervision as well as practical skills and techniques.

FT; AA/AS.

ADJU 313A Public Safety Dispatcher's Basic Course

120-135 hours lab; 2.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 313
This course provides students with entry-level skills and knowledge relevant to public safety dispatchers. Topics include the California legal system; telephone and radio procedures; emergency medical dispatch functions; stress awareness; and critical incident response.

FT; AA/AS.

ADJU 322A Basic Traffic Accident Investigation

8 hours lecture/24 - 40 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 322
This Peace Officer Standards and Training (POST) certified course provides the skills and knowledge to properly investigate and document traffic collisions. Students learn to write traffic collision-related notices of violations based on reasonable cause per California Vehicle Code Section 40600. Other topics include collision-related traffic laws, traffic accident investigation procedures, and court presentations.

FT; AA/AS.

ADJU 323A S.T.C. Certified Corrections Officer Core Course

552-621 hours lab; 11.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 323
This course provides entry-level training for correctional officers. It exceeds the minimum mandates of the California State Board of Corrections and is designed to introduce the student to the role of corrections in today's society. Topics include facility operations, criminal law, ethics, inmate supervision, defensive tactics, and physical training. This course is intended for students entering initial employment as corrections officers.

FT; AA/AS.

ADJU 324A BSCC Certified Supplemental Core Course

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certification
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 324
This Board of State and Community Corrections (BSCC) certified course provides entry level corrections training. Topics include facility operations; inmate supervision and management; facility security; booking and releasing inmates; and emergency procedures.

FT; AA/AS.

ADJU 330A POST Certified Field Training Officer Course

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 330
This course introduces students to the field training program and provides them with the knowledge, skills, and abilities to function as Field Training Officers (FTOs). Topics include FTO roles; ethics; civil liability; instructional techniques; sexual harassment; leadership; documentation; officer safety; override and intervention; adult learning theory; and other related subjects.

AA/AS.

ADJU 332A POST Certified Driving Under the Influence Course

24-27 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 332
This Peace Officer Standards and Training (POST) certified course provides instruction on technical and legal issues involved in the detection, apprehension and prosecution of the "Driving Under the Influence" (DUI) driver. Emphasis is placed on the physical symptoms of drivers under the influence, including testing using current standardized sobriety tests. Other topics include legal considerations, officer safety, and California Department of Motor Vehicles requirements concerning legal sanctions of DUI drivers.

FT; AA/AS.

ADJU 333B POST Certified Firearms Instructors Course

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 333 or ADJU 333A
This course provides training for peace officer firearms instructors in the skills and knowledge to identify and assist peace officers with deficient firearms skills. Topics include firearms safety, liability encountered during training, basic firearms knowledge, course design, methods of instruction, lesson plans, and presentation strategies. Students also receive a special weapons orientation and preview new firearms accessories and equipment.

FT; AA/AS.

ADJU 345 Forensic Evidence Technician (FET)

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent
This course provides knowledge and applied skills needed to identify, document, collect, and preserve physical evidence. Topics include types of physical evidence; crime scene preservation and processing; fingerprint processing; deoxyribonucleic acid (DNA) recognition and collection; firearm-related evidence; and photography basics.

FT; AA/AS.

ADJU 348A Essentials of Investigation

24 - 48 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy
Limitation on Enrollment: This course is not open to students with previous credit for ADJU 348
This course refines and enhances students' investigation skills to prepare them for future positions as investigators. Emphasis is on investigative techniques, legal issues affecting investigation, and officer safety.

FT; AA/AS.

ADJU 351A Chemical Agents Training for Peace Officers

1 hours lecture/7 - 15 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 351

This course covers the use of liquid aerosol chemical agents. Topics include dispersement; effects; use of force; tactics; liability; and policies and procedures. This course addresses all Peace Officer Standards & Training (POST)-mandated performance objectives.

FT; AA/AS.

ADJU 357A 832 PC Laws of Arrest

4-4.5 hours lecture/36-40.5 hours lab; 1 unit

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 356A

This course meets the Peace Officer Standards and Training (POST) requirements for the Laws of Arrest portion of Section 832 of the California Penal Code. Topics include professional orientation, ethics, administration of justice components, California court system, discretionary decision making, community relations, introduction to law, laws of arrest, laws of evidence, communications, investigations, arrest, and control. This course is intended for students preparing for employment as peace officers.

AA/AS.

ADJU 359 Field Training Officer Update

4 hours lecture/12 - 20 hours lab; 0.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy

This course develops instructional skills and techniques for current police officers assigned as Field Training Officers (FTOs) who provide standardized training to newly assigned patrol officers. Topics include techniques of training; application of knowledge and skills in the field; methods of trainee feedback and evaluation; learning styles; and communication skills.

FT.

ADJU 361D Defensive Tactics Building Searches

1 hours lecture/7 - 15 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy

This course develops skills and techniques used to search buildings for persons armed with dangerous weapons. Topics include officer mindset, approach to the target, types of entries, partner communication, officer responsibilities, and equipment considerations.

FT.

ADJU 361E Less-Lethal/Taser Training

48 - 64 hours lab; 1 unit

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 361M

This Peace Officer Standards and Training (POST) certified course familiarizes students with a variety of less-lethal weapons and tactics, including the Pepperball Launcher, BeanBag shotgun munition, and Taser. Course content includes nomenclature, maintenance, safety, application, and use of force guidelines for each less-lethal option. Other topics include the integration of less-lethal force options with defensive tactics, firearms, and tactical communications.

FT.

ADJU 361L Less-Lethal Munitions Training (LLMT)

1 hours lecture/7 - 15 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

This course provides training on the use of less-lethal munitions. Topics include safety guidelines; history and development; terminology; legal issues; use of force guidelines; employment techniques; and documentation.

FT.

ADJU 361R Regional Officer Training

24 - 40 hours lab; 0.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy. or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy.

This course trains students on new legislation and legal updates; emergency medical techniques; skill proficiency training in vehicle operations, firearms, and defensive tactics; and the application of law enforcement policy to typical public safety situations. Other topics related to the continued proficiency of law enforcement personnel may also be addressed. This course meets the requirements of the California Commission on Peace Officer Standards and Training (POST), Title 15, Minimum Standards of Training for Local Corrections and Probation Officers (STC), and the California Legislature requiring special technical and skill proficiency training as specified in Section 13510, 6030-6043 of the California Penal Code and SB-924.

FT.

ADJU 361S Continuing Professional Training for Sheriff Deputies

24 - 40 hours lab; 0.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent STC Certified Correctional Officer Core Course Academy

This course provides students with advanced technical skill and proficiency training related to the duties of sheriff's deputies, including detention supervisors and correctional officers. Topics include the use of force, less-lethal munitions, driving techniques, and firearms. This course meets the requirements of Peace Officer Standards and Training (POST), Title 15, Minimum Standards of Training for Local Corrections and Probation Officers (STC) and the California Legislature requiring special technical and skill proficiency training as specified in Section 13510, 6030-6043 of the California Penal Code and SB-924.

FT.

ADJU 366 Radar-Laser Operator (LIDAR)

1 hours lecture/7 - 15 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy

This course prepares current law enforcement officers to operate radar- and laser-based vehicle speed measurement devices. Topics include scientific principles, operational considerations, device operation, and legal considerations.

FT.

ADJU 369 Drug Influence: 11550

1 hours lecture/7 - 15 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy

This course provides an overview of illegal drug characteristics, effects, and detection from a law enforcement perspective. Topics include drug categories, characteristics, history, effects, packaging, and detection. Students also practice conducting drug test evaluations including standardized field sobriety tests.

FT.

ADJU 378 Defensive Tactics Instructor

72 - 88 hours lab; 1.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent POST Certified Basic Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course prepares students to serve as instructors for defensive tactics courses. Topics include presentation skills, civil liability, close quarters defensive tactics, restraint techniques, searches, takedown techniques, handgun retention, disarming techniques, use of the police baton, force option transitions, and edged weapon defense.

FT.

ADJU 379 Academy Instructor Certification Course (AICC)

32 - 40 hours lab; 0.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy

This course prepares current peace officers to serve as instructors for Peace Officer Standards and Training (POST)-certified courses in a law enforcement academy environment. Topics include instructor roles and responsibilities; adult learning fundamentals; lesson planning; instructional design; lesson delivery; instructional resources; presentation and facilitation skills; POST requirements, policies, procedures, and resources; and evaluation and testing protocol.

FT; AA/AS.

ADJU 392L Special Topics in Instructor Development

24-243 hours lab; 0.5-4.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy.

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 392

This course prepares students to be instructors in a law enforcement-related subject area. Instructional theory, principles, and techniques are taught from a variety of different focus areas that may vary from term to term. Focus areas may include defensive tactics instruction, field training officer instruction, firearms instruction, police baton instruction, non-lethal chemical agents instruction, or emergency vehicle instruction, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 392S Special Topics in Instructor Development

1 hours lecture/7 - 20.5 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy.

This course prepares students to be instructors in a law enforcement-related subject area. Instructional theory, principles, and techniques are taught from a variety of different focus areas that may vary from term to term. Focus areas may include defensive tactics instruction, field training officer instruction, firearms instruction, police baton instruction, non-lethal chemical agents instruction, or emergency vehicle instruction, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 393L Special Topics in Field Tactics

24-243 hours lab; 0.5-4.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 393

This course provides specialized instruction in public safety field tactics. Fundamental skills and techniques used by law enforcement officers in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include defensive tactics, weapons proficiency training, vehicle or equipment operation, arrest procedures, investigation techniques, organized crime enforcement, or prisoner control, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 393S Special Topics in Field Tactics

1 hours lecture/7 - 20.5 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 393x

This course provides specialized instruction in public safety field tactics. Fundamental skills and techniques used by law enforcement officers in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include defensive tactics, weapons proficiency training, vehicle or equipment operation, arrest procedures, investigation techniques, organized crime enforcement, or prisoner control, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 394L Special Topics in Law Enforcement Policy and Procedure

24-243 hours lab; 0.5-4.5 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 394

This course provides instruction in law enforcement policies and procedures. Current laws, policies, processes, and other guidance pertinent to decisions made by law enforcement officers are taught from a variety of different focus areas that may vary from term to term. Focus areas may include new legislation and legal updates; social issues; special investigations; domestic violence intervention; hate crimes; sexual harassment; or cultural diversity, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 394S Special Topics in Law Enforcement Policy and Procedure

1 hours lecture/7 - 20.5 hours lab; 0.2 units

Grading: Letter Grade Only

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent Basic POST Certified Academy or ADJU 323A with a Grade of "C" or better, or equivalent S.T.C. Certified Correctional Officer Core Course Academy

Limitation on Enrollment: This course is not open to students with previous credit for ADJU 394x

This course provides instruction in law enforcement policies and procedures. Current laws, policies, processes, and other guidance pertinent to decisions made by law enforcement officers are taught from a variety of different focus areas that may vary from term to term. Focus areas may include new legislation and legal updates; social issues; special investigations; domestic violence intervention; hate crimes; sexual harassment; or cultural diversity, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

ADJU 395A Arrest and Control

8 hours lab; 0.1 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

The course will provide the student with the minimum topics of Arrest and Control required in the POST Perishable Skills Training Program (PSP). The student will develop the necessary tactical knowledge and skills to safely and effectively arrest and control a suspect. The course consists of hands-on/practical skills as well as policies and legal issues on the topic of arrest and control training.

FT.

ADJU 395B Driver Training/Awareness

4 hours lab; 0.1 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

The course will provide the student with the minimum topics of Driver Training/Awareness required in the POST Perishable Skills Training Program including: Basic Driving Principles, Legal and Moral Aspects, Defensive Driving and Maneuvering Course Exercises.

FT.

ADJU 395C Strategic Communications/De-Escalation

8 hours lab; 0.1 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

The purpose of this training is to provide the student with the knowledge, skills and abilities to communicate effectively during a critical incident to de-escalate the situation to limit the injury to the officer and/or the subject they are dealing with. The course will provide the student with information, techniques, and methods to successfully de-escalate critical incidents and high stress situations through effective De-Escalation techniques and Strategical Communication skills required in the POST Perishable Skills Training Program (PSP). This course provides updated legislative content of Penal Code Section 835a PC. The course will also allow for Deputies/Officers to understand how the principles of de-escalation can provide effective tools during contacts with the public and result in improved decision-making, reduction in situational intensity, and outcomes with greater voluntary compliance. The course consists of lecture, group discussion, and hands-on/practical strategic communications and de-escalation training.

FT.

ADJU 395D Tactical Firearms

8 hours lab; 0.1 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

This course is designed to update skills in the use of the handgun, shotgun and rifle. Emphasis is placed on safety, teamwork marksmanship, and movement in tactical situations. Involves significant student participation. This course provides updated legislative content of Penal Code section 835a.

FT.

ADJU 395E Use of Force

4 hours lab; 0.1 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ADJU 260 with a Grade of "C" or better, or equivalent

The course will provide the student with the minimum topics of Use of Force required in the POST Perishable Skills Training Program (PSP). The intent of the course is to improve the student's knowledge of Use of Force laws and policies as well as critical decision-making skills. The course consists of facilitated discussion, case study analysis, and scenarios.

FT.

AMSL-American Sign Language/Interpreting

AMSL 120 American Sign Language Level I

80-90 hours lecture; 5 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 100 or AMSL 115.

This is an entry-level course designed to introduce students to American Sign Language (ASL) and Fingerspelled Signs as they are used within Deaf Culture. Students are taught to use ASL by signing, fingerspelled signing, and using facial grammar at the novice level. Emphasis is placed on the development of ASL expressive and receptive skills via applying their ASL skills through individualized program, small groups and large group environment. Students utilize interactive media to express their comprehension of basic ASL sentences and stories as well as their signing skills. Students have the opportunity to practice vocabulary and syntax. The course is designed for students who want to explore the basic language structure of ASL and Deaf Culture.

FT; AA/AS; CSU; UC.

AMSL 121 American Sign Language Level II

80-90 hours lecture; 5 units

Grading: Letter Grade Only

Prerequisite: AMSL 120 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 101 or AMSL 116.

This course is a continuation of the study of American Sign Language (ASL) at the beginning intermediate level. Emphasis is placed on increasing development of students' receptive and expressive skills through ASL vocabulary, fingerspelled signs and knowledge of Deaf Culture. Instruction includes a natural approach to teaching a second language by exposing students to authentic conversations in the classroom. Active learning provides students with the opportunity to apply their ASL skills through an individualized program, small groups and large group environment. Students utilize interactive media to express their comprehension of basic to intermediate ASL sentences and stories as well as to hone their signing skills. Activities are designed to provide students the opportunity to practice vocabulary and syntax at the intermediate level. This course is designed for students and/or professionals interested in working and interacting with Deaf people.

FT; AA/AS; CSU; UC.

ANTH-Anthropology

ANTH 102 Introduction to Biological Anthropology

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course is a survey of human evolution, variation, and adaptation. Topics include the study of primates, human heredity, variability of modern populations, and fossil records of early hominins and hominoids. This course is intended for anthropology majors and all students interested in life and/or behavioral sciences.

FT; AA/AS; CSU; UC; C-ID: ANTH 110.

ANTH 103 Introduction to Cultural Anthropology

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course is a survey of cultural anthropology using a comparative, cross-cultural approach. Emphasis is placed on the study of how various peoples around the world have adapted to their environments and developed behaviors to meet their biological, economic, psychological, social and political needs. This course is intended for anthropology majors and all students interested in life and/or behavioral sciences.

FT; AA/AS; CSU; UC; C-ID: ANTH 120.

ANTH 104 Laboratory in Biological Anthropology
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: ANTH 102 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a practical study of biological anthropology. Students perform field and laboratory studies in genetics, human variation, human osteology, anthropometry, hominid/hominin evolution, comparative primate anatomy, primate behavior, and forensic anthropology. This course is intended for anthropology majors and all students interested in life and/or behavioral sciences.

FT; AA/AS; CSU; UC.

ANTH 107 Introduction to Archaeology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introductory study of the history, methods, and theory of archaeology. Emphasis is placed on the techniques of archaeological data collection and analysis; cultural innovations, reconstruction, and interpretation of the past; and Cultural Resource Management (CRM) work. This course is intended for students planning to major in anthropology and/or continue the study of archaeology at a university.

FT; AA/AS; CSU; UC; C-ID: ANTH 150.

ANTH 270 Anthropology Internship / Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course provides on-the-job learning experiences for students employed in an Anthropology-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in Anthropology or those interested in the field of Anthropology.

AA/AS; CSU.

ANTH 290 Independent Study
48-162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of anthropology. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals

FT; AA/AS; CSU.

ARTF-Art-Fine Art

ARTF 100 Art Orientation
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the visual arts. Emphasis is placed on the various aesthetic approaches, philosophies, and artistic orientations around the world in historical and contemporary perspective. This course is intended for humanities majors and all students interested in art and/or art history.

FT; AA/AS; CSU; UC.

ARTF 107 Contemporary Art
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides a survey of contemporary art and architecture examining theoretical and cultural influences on art from the late 20th century to present. The course is designed for students interested in contemporary art history, as well as for art majors who are focusing on contemporary design, painting, sculpture or ceramics.

FT; AA/AS; CSU; UC.

ARTF 109 Modern Art
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 110 with a Grade of "C" or better, or equivalent and ARTF 111 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides a survey of modern art and architecture examining theoretical and cultural influences on art from the 19th century to mid 20th century. The course is designed for students interested in modern art history, as well as for art majors who are focusing on modern design, painting, sculpture or ceramics.

FT; AA/AS; CSU; UC.

ARTF 110 Art History: Prehistoric to Gothic
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the visual arts in western civilization from prehistory through the Gothic period. Emphasis is placed on representative art and architecture from Mesopotamia, Iran, Egypt, the Aegean, Etruscan, Rome and Greece. This course is intended for art majors and all students interested in art history, the humanities and culture.

FT; AA/AS; CSU; UC.

ARTF 111 Art History: Renaissance to Modern
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the visual arts in western civilization from the Renaissance to the Modern era. Emphasis is placed on representative art and architecture from the Renaissance, Mannerism, Baroque, Rococo, Neo-Classicism, Romanticism, Impressionism, Post-Impressionism, and Modernism eras. This course is intended for art majors and all students interested in art history, the humanities, and culture.

FT; AA/AS; CSU; UC; C-ID: ARTH 120.

ARTF 113 Arts of Africa, Oceania, and the Americas
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the visual arts produced by selected peoples of Africa, Oceania, and the Americas from the prehistoric to contemporary periods. Topics include art and architecture produced by groups from Africa, Oceania, and the Americas and emphasize how art is representative of the cultural, religious, social, or political orientation of each region. This course is designed for art and art history majors as well as others interested in the humanities.

FT; AA/AS; CSU; UC; C-ID: ARTH 140.

ARTF 125 Art History: Arts of the Asian Continent
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides a survey of paintings, sculpture, architecture, and associated fine arts from India, China, Japan, Korea, Southeast Asia, and other countries throughout the Asian continent. It emphasizes the social, religious, and political highlights of each culture and their effects on art forms from prehistoric to modern times. This course is designed not only for art students, but also for those who are interested in history, religion, philosophy, humanities, and cultural enrichment.

FT; AA/AS; CSU; UC; C-ID: ARTH 130.

ARTF 150A Two-Dimensional Design
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to two-dimensional space and form. Emphasis is placed on ways of organizing visual space into vivid and coherent images. This course is designed for students beginning a study of art and/or related disciplines.

FT; AA/AS; CSU; UC; C-ID: ARTS 100.

ARTF 151 Three-Dimensional Design
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: ARTF 150A with a Grade of "C" or better, or equivalent
This course is an introduction to three-dimensional space and form. Emphasis is placed on organizing visual space into valid and coherent structures. This course is designed for students beginning the study of art and/or related disciplines.

FT; AA/AS; CSU; UC; C-ID: ARTS 101.

ARTF 155A Freehand Drawing I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This is an introductory course designed to develop the student's ability to perceive and translate visual relationships from 3-dimensional (3-D) space into 2-dimensional (2-D) drawings. Emphasis is placed on the use of art theory, basic art elements and compositional strategies to create pictorial space and compose original images based on observation. This course is intended for art majors and all students interested in learning freehand drawing whether or not they have previous art experience.

FT; AA/AS; CSU; UC; C-ID: ARTS 110.

ARTF 155B Freehand Drawing II
24 - 27 hours lecture/72 - 81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 155A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an intermediate course in which students apply art principles and theory to create solutions to particular problems of graphic representation and expression. Emphasis is placed on visual analysis and inquiry in creating pictorial space and applying drawing media. Students are introduced to the use of interdisciplinary art forms and image making and explore New Genres as a means of continued intellectual and artistic development. This course is intended for art and graphic art students.

FT; AA/AS; CSU; UC; C-ID: ARTS 205.

ARTF 165A Composition in Painting I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 155A with a Grade of "C" or better, or equivalent
Advisory: ARTF 152 with a Grade of "C" or better, or equivalent and ARTF 150A with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to oil and acrylic painting methods and techniques. Emphasis is placed on composition, color, and application of general design principles. A variety of subject matter, such as still-life, landscape, portrait and non-objective subjects, and a variety of stylistic approaches such as cubism, collage, realism and expressionism are explored. This course is designed to develop students' creative abilities and critical thinking in visual terms. This course is intended for students majoring in Art and those who wish to improve their artistic skills.

FT; AA/AS; CSU; UC; C-ID: ARTS 210.

ARTF 165B Composition in Painting II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 165A with a Grade of "C" or better, or equivalent
This course is the second semester of introduction to oil and acrylic painting methods and techniques. Emphasis is placed on the concepts of pictorial space, composition, and color. The course is designed to further develop students' creative abilities and critical thinking through the construction of images designed to address specific pictorial problems and goals. This course is intended for students majoring in Art and those who wish to improve their artistic skills.

FT; AA/AS; CSU; UC.

ARTF 165C Composition in Painting III
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 165B with a Grade of "C" or better, or equivalent
This course is the third semester of introduction to oil and acrylic painting methods and techniques. Emphasis is placed on composition, color, and application of general design principles at a more advanced level of creativity and sophistication. This course is designed to develop students' creative abilities and critical thinking in visual terms through the use of individual assignments tailored to students' skills. This course is intended for students majoring in Art and those who wish to improve their artistic skills.

FT; AA/AS; CSU; UC.

ARTF 165D Composition in Painting IV
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 165C with a Grade of "C" or better, or equivalent
This course is the fourth and final semester of introduction to oil and acrylic painting methods and techniques. Emphasis is placed on contemporary methods and theories related to conceptualism and new genre. Students produce large format and mural scale paintings. This course is designed to develop students' creative abilities and critical thinking in visual terms through the use of individual assignments tailored to students' skills. This course is intended for students majoring in Art and those who wish to improve their artistic skills.

FT; AA/AS; CSU; UC.

ARTF 170A Contemporary Crafts I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and ARTF 150A with a Grade of "C" or better, or equivalent
This is a course exploring techniques, methods, and processes to produce a variety of crafts. Topics include developing projects using various media including ceramics, wood, fibers, glass, plastic, and metal. Students explore design principles, expressive quality, and individual ideas. This course is intended for students pursuing careers or future studies in studio arts, applied design, or industrial arts.

FT; AA/AS; CSU; C-ID: ARTS 280.

ARTF 170B Contemporary Crafts II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 170A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course continues the study of various crafts media at an intermediate level. Emphasis is placed on individual exploration and expression. This course is intended for students pursuing careers or future studies in Studio Art, Applied Design, or Industrial Design.

FT; AA/AS; CSU.

ARTF 170C Contemporary Crafts III
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 170B with a Grade of "C" or better, or equivalent
This course continues the study of various crafts media at an advanced level. Emphasis is placed on structured development of media and preparation of work for public exhibition. This course is intended for students pursuing careers or future studies in Studio Art, Applied Design, or Industrial Design.

FT; AA/AS; CSU.

ARTF 195A Ceramics I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This is an introductory ceramics course. Emphasis is placed on the design and construction of hand-built and wheel-thrown ceramic forms. This course is designed for art majors and all students interested in developing ceramic skills.

FT; AA/AS; CSU; UC.

ARTF 195B Ceramics II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 195A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an intermediate level ceramics course in which students design and construct wheel thrown and hand-built ceramic objects. Emphasis is placed on form and surface enrichment. This course is designed for art majors and for students interested in developing ceramic skills.

FT; AA/AS; CSU; UC.

ARTF 195C Ceramics III
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 195B with a Grade of "C" or better, or equivalent
This is an advanced-level ceramics course in which students design and construct wheel-thrown and handbuilt ceramic forms. Students select an area of focus emphasizing form and surface enrichment. Students develop, mix, and use clay and glazes, as well as load and fire both gas and electric kilns. This course is intended for art majors and all students interested in developing ceramics skills.

FT; AA/AS; CSU; UC.

ARTF 210A Life Drawing I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 155A with a Grade of "C" or better, or equivalent
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This is a basic course in drawing the human form as a sequence of studies from live models. Accurate and expressive translations of the mass as two-dimensional drawings are refined in a variety of achromatic media. This course is designed for students who are majoring in fine art and is also a relevant foundation for those that are interested in disciplines that use the human form, such as animation and fashion design.

FT; AA/AS; CSU; UC; C-ID: ARTS 200.

ARTF 210B Life Drawing II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: ARTF 210A with a Grade of "C" or better, or equivalent
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This is an intermediate course in drawing the human form as a sequence of studies from live models. Students work with color and experiment with concepts related to figure drawing. This course is designed for students who are majoring in fine art and is also a relevant foundation for study in disciplines that use the human form, such as animation and fashion design.

FT; AA/AS; CSU; UC.

ARTF 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
This course provides on-the-job learning experiences for students employed in an art-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring or interested in the field of fine art.

FT; AA/AS; CSU.

ASTR-Astronomy

ASTR 101 Descriptive Astronomy
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introductory survey of contemporary astronomy. Topics covered include the solar system, stars and stellar evolution, the Milky Way galaxy and cosmology. This course is intended for students with a general interest in astronomy.

FT; AA/AS; CSU; UC.

ASTR 102 Exploring The Solar System And Life Beyond The Earth
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course investigates the origin of our Solar System and how its contents changed with time. Analysis of the physical properties of planets, moons, rings, comets, asteroids are explored. This course surveys the history of space exploration and recent discoveries of exoplanets. Additionally, it explores potential for life elsewhere in Solar System and beyond. Challenges of space travel are also examined. This course is designed for students interested in exploring Astronomy.

FT; AA/AS; CSU; UC.

ASTR 109 Practice in Observing
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: ASTR 101 with a Grade of "C" or better, or equivalent or ASTR 102 with a Grade of "C" or better, or equivalent
This is a laboratory field experience course in general astronomy. Emphasis is placed on the constellations, celestial cycle interpretation, and descriptive observations of astronomical objects and events with and without the use of telescopes. This course is for all students interested in field experience in general astronomy.

FT; AA/AS; CSU; UC.

ASTR 111 Astronomy Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: ASTR 101 with a Grade of "C" or better, or equivalent or ASTR 102 with a Grade of "C" or better, or equivalent
This laboratory course features exercises and experiments covering the range of topics in astronomy. The course deals with the foundations of astronomy, and may include telescopes, planetary astronomy, stellar astronomy and galactic astronomy. Indoor exercises may involve computer simulations. Outdoor exercises may be required. This course is designed for students interested in astronomy.

FT; AA/AS; CSU; UC.

ASTR 290 Independent Study
48-162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of astronomy. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analyses, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

AUTO-Automotive Technology

AUTO 151T Honda/Toyota Quick Service Lube, Pre-Delivery Inspection Technician
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Pass/No Pass Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 051T
This course provides an overview of Honda- and Toyota-specific automotive quick services and new/used vehicle preparation. Topics include vehicle inspections, estimate preparation, fluid and filter changes, proper hazardous waste disposal, minor electrical repairs, and road-testing techniques using Honda/Toyota information systems, forms, and maintenance/repair procedures. Students learn how to inspect and evaluate vehicle systems to determine if advanced levels of repairs are needed. They also learn how to identify and operate necessary equipment and tools. This course is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 153G Introduction to Automotive Technology
28-31.5 hours lecture/60-67.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 112 or AUTO 053 or the combination of AUTO 053A+053B+053C
This course provides an overview of the automotive industry, a basic understanding of how each system within an automobile works, and an introduction to automotive safety procedures. Topics include the use of basic automotive hand, power, and lifting tools, major measuring instruments, automobile diagnostics, and other devices and procedures used by automotive technicians. This course is intended for beginning automotive technology students or anyone interested in the automotive industry.

FT; AA/AS; CSU.

AUTO 156G Engine and Related Systems
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 056
This course provides a detailed study of the internal combustion engine. Students learn how to disassemble engines, identify and measure parts, and reassemble engines properly. Other topics include fuel, electrical, cooling, and lubrication systems reviews. This course is designed to prepare students for the Automotive Service Excellence (ASE) A1 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 156T Honda/Toyota Engine and Related Systems
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 151T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 056T
This course provides a detailed study of Honda- and Toyota-specific internal combustion engines and related systems. Students learn how to disassemble Honda/Toyota engines, identify and measure parts, and reassemble engines properly. Other topics include fuel, electrical, cooling, and lubrication systems. This course is designed to prepare students for the Automotive Service Excellence (ASE) A1 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 161G Basic Electricity and Electrical Systems Fundamentals
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 061
This course covers basic automotive electrical principles, body wiring, and starting and charging systems. Topics include the construction, operation, and function of automotive electrical components. This course is intended for students majoring in automotive technology or others interested in automotive electrical systems.

FT; AA/AS; CSU.

AUTO 161T Honda/Toyota Basic Electricity and Electrical Systems Fundamentals
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 151T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 061T
This course covers basic electrical principles and Honda- and Toyota-specific body wiring, starting, and charging systems. Topics include the construction, operation, and function of electrical components for Honda and Toyota vehicles. This course is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 162G Advanced Electrical
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 062
This course prepares students to diagnose and repair complex electrical/electronic systems used in modern automobiles. Topics include a review of the principles of electrical circuits, the study of electrical devices, the use of test equipment to diagnose malfunctions, and the examination of various computerized control systems. The course emphasizes the development of a systematic diagnostic and repair procedure. Also included is an introduction to hybrid vehicle operation, safety, service, and emergency response. This course prepares students for the Automotive Service Excellence (ASE) A6 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 162T Honda/Toyota Advanced Electrical
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: AUTO 161T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 062T
This course prepares students to diagnose and repair complex electrical/electronic systems used in Honda and Toyota automobiles. Topics include a review of the principles of electrical circuits, electrical devices, the use of test equipment to diagnose malfunctions, and the examination of various Honda/Toyota computerized control systems. The course emphasizes the development of a systematic diagnostic and repair procedure. Also included is an introduction to Honda/Toyota hybrid vehicle operation, safety, service, and emergency response. This course prepares students for the Automotive Service Excellence (ASE) A6 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 165G Engine Performance
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 156G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 162G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 65
This course covers engine management basics, including an overview of common sensors and their functions; ignition systems; fuel systems; and air induction and exhaust systems. Students are also introduced to engine diagnosis procedures. This course prepares students for the Automotive Service Excellence (ASE) A8 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 165T Honda/Toyota Engine Performance
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 156T with a Grade of "C" or better, or equivalent and AUTO 161T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 162T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 065T
This course covers Honda/Toyota engine management basics. Topics include an overview of sensors and their functions, ignition systems, fuel systems, and air induction and exhaust systems. Students are also introduced to Honda/Toyota-specific engine diagnosis procedures. This course prepares students for the Automotive Service Excellence (ASE) A8 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 167G Advanced Engine Performance
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 162G with a Grade of "C" or better, or equivalent and AUTO 165G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 067
This course builds on skills learned in the Engine Performance course, with an emphasis on engine diagnostics. Topics include an in-depth study of system monitors, engine misfire, oxygen (O2) and Air Fuel (A/F) sensors, fuel systems, and emission control systems. This course prepares students for the Automotive Service Excellence (ASE) L-1 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 167T Honda/Toyota Advanced Engine Performance

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 162T with a Grade of "C" or better, or equivalent and AUTO 165T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 067T
This course builds on skills learned in the Honda/Toyota Engine Performance course with an emphasis on engine diagnostics. Topics include an in-depth study of Honda/Toyota system monitors, engine misfire, oxygen (O2) and Air Fuel (A/F) sensors, fuel systems, and emission control systems. This course prepares students for the Automotive Service Excellence (ASE) L-1 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 169G Climate Control Systems

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 162G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 69
This course introduces students to automotive climate control systems. Topics include heating, ventilation, and air conditioning (HVAC) systems and related components. Students diagnose and repair common problems with climate control systems including manual, electronic, and vacuum controls; evacuation and recharging of air conditioning; and component replacement. Other topics include safety, environmental concerns, and Environmental Protection Agency (EPA) 609 Refrigerant Handling License requirements. This course prepares students for the Automotive Service Excellence (ASE) A7 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 169T Honda/Toyota Climate Control Systems

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 161T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 162T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 069T
This course introduces students to Honda- and Toyota-specific climate control systems, including heating, ventilation, and air conditioning (HVAC) systems and related components. Students diagnose and repair common problems with climate control systems, including manual, electronic and vacuum controls; evacuation and recharging of air conditioning; and component replacement. Other topics include safety and environmental concerns, Environmental Protection Agency (EPA) 609 Refrigerant Handling License requirements, and Honda/Toyota hybrid vehicle climate control systems. This course prepares students for the Automotive Service Excellence (ASE) A7 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 172G Manual Drive Train and Axles

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 162G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 72
This course familiarizes students with manual transmissions, final drives, and transaxles. Topics include clutch assemblies, manual transmissions, manual transaxles, transfer cases, and rear-wheel, 4-wheel, and all-wheel drive systems. This course prepares students for the Automotive Service Excellence (ASE) A3 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 172T Honda/Toyota Manual Drive Train and Axles

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 161T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 162T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 072T
This course familiarizes students with Honda- and Toyota-specific manual transmissions, final drives, and transaxles. Topics include clutch assemblies, manual transmissions, manual transaxles, transfer cases, and rear-wheel, 4-wheel, and all-wheel drive systems. This course prepares students for the Automotive Service Excellence (ASE) A3 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 174G Automatic Transmissions/Axles

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 161G with a Grade of "C" or better, or equivalent and AUTO 162G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 167G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 074
This course covers the principles and operation of hydraulically and electronically controlled transmissions and transaxles. Topics include hydraulics, components, power flow, and the development of a systematic approach to diagnosis and repair. This course prepares students for the Automotive Service Excellence (ASE) A2 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 174T Honda/Toyota Automatic Transmissions/Axles

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 165T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 167T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 074T
This course covers the principles and operation of Honda- and Toyota-specific hydraulically and electronically controlled transmissions and transaxles. Topics include hydraulics, components, power flow, and the development of a systematic approach to diagnosis and repair. This course prepares students for the Automotive Service Excellence (ASE) A2 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 176G Automotive Brake Systems

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent and AUTO 161G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 162G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 76
This course covers brake system diagnosis and replacement procedures. Topics include inspection and measurement of brake components; resurfacing of brake drums and disc rotors; hydraulics, wheel cylinders, disc calipers, and master cylinders; brake bleeding; adjustment and repair of drum/disc brakes; and diagnosis of power assist units and computer-controlled brake systems. This course prepares students for the Automotive Service Excellence (ASE) A5 certification and is intended for students majoring in automotive technology.

FT; AA/AS; CSU.

AUTO 176T Honda/Toyota Automotive Brake Systems

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 161T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 162T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 076T
This course teaches students Honda- and Toyota-specific brake system diagnosing and replacement procedures. Topics include inspection and measurement of Honda/Toyota brake components; resurfacing of brake drums and disc rotors; hydraulics, wheel cylinders, disc calipers, and master cylinders; brake bleeding; adjustment and repair of drum/disc brakes; and diagnosis of power assist units and computer-controlled brake systems. This course prepares students for the Automotive Service Excellence (ASE) A5 certification and California Brake Adjuster C license and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 178G Suspension, Steering and Handling

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: AUTO 153G with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AUTO 161G with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 78
This course covers the theory and repair of automotive suspension, steering, and handling systems. Topics include the design and operation of all components of suspension, steering, four-wheel steering, tires and wheels, and four-wheel alignment of late-model automobiles and light-duty trucks. This course prepares students for Automotive Service Excellence (ASE) A4 certification.

FT; AA/AS; CSU.

AUTO 178T Honda/Toyota Suspension, Steering and Handling

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: AUTO 151T with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AUTO 161T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AUTO 078T
This course covers the theory and repair of automotive suspension, steering, and handling systems. Topics include the design and operation of all components of suspension, steering, four-wheel steering, tire and wheel, and four-wheel alignment of Honda/Toyota automobiles and light-duty trucks. This course prepares students for Automotive Service Excellence (ASE) A4 certification and is intended for automotive technology students seeking Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 180T Hybrid Electric Vehicle (HEV) Systems

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AUTO 162G with a Grade of "C" or better, or equivalent or AUTO 162T with a Grade of "C" or better, or equivalent or AUTO 167G with a Grade of "C" or better, or equivalent or AUTO 167T with a Grade of "C" or better, or equivalent
This course provides technical information and practices required to diagnose and service Honda, Toyota, and other manufacturer hybrid electric vehicles (HEVs). Topics include the diagnosis and repair of hybrid engine systems, high voltage (HV) systems, electric power steering, and engine control systems. This course prepares students for Toyota Hybrid certification and is intended for automotive technology students seeking training in HEV systems, including those pursuing Honda Professional Automotive Career Training (PACT) or Toyota Technician (T-TEN) certification.

FT; AA/AS; CSU.

AUTO 186 BAR Specified Diagnostic, Repair, and Level 2 Inspection Training

32-36 hours lecture/96-108 hours lab; 4 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for AUTO 085 or AUTO 086
This course provides Bureau of Automotive Repair (BAR) Specified Diagnostic and Repair training and Level 2 Procedures training. Students develop a high level of competency in the diagnosis and repair of Smog Check failures, including electrical/electronic systems and engine and emission control performance. Students with at least two years of engine performance repair experience who successfully complete this course may apply to the BAR for approval to take the state Smog Check Repair Technician License examination. Students also develop the knowledge, skills, and abilities needed to perform Smog Check inspections. Students who successfully complete this course meet the BAR training requirements to take the Smog Check Inspector state licensing examination. This course is intended for current or future automotive technicians.

FT; AA/AS; CSU.

AUTO 270 Work Experience

54 - 216 hours other; 1-4 units

Grading: Letter Grade Only

A program of on-the-job learning experiences for students employed in a job related to their major or their educational goal. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

AA/AS.

AVIA-Aviation

AVIA 101 Private Pilot Ground School

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: Concurrent enrollment in: AVIA 101L and AVIA 133

Limitation on Enrollment: This course is not open to students with previous credit for AVIA 140.
This course provides an introduction to basic aeronautical science and the field of aviation. Topics include aerodynamics and the principles of flight; airplane instruments, engines, and systems; airports; air traffic control and airspace; Federal Aviation Regulations (FARs); aircraft performance; aeromedical factors and decision making; weather and weather services; navigation; and cross country flight planning. This course, combined with AVIA 133 (Human Factors in Aviation), fulfills all requirements for the Federal Aviation Administration (FAA) Private Pilot Knowledge Test. This course is intended for students majoring in Aviation Operations or those pursuing a private pilot's license.

FT; AA/AS; CSU.

AVIA 101L Private Pilot Flight Lab

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIA 101 with a Grade of "C" or better, or equivalent or FAA-issued Private Pilot Certificate

Advisory: Completion of or concurrent enrollment in: AVIA 133 with a Grade of "C" or better, or equivalent
Designed for the beginning pilot, this lab provides a hands-on introduction to basic airplane operations, procedures, regulations, and techniques using an Aviation Training Device (flight simulator). Topics include ground operations, flight maneuvers, airplane control, flight by reference to instruments, navigation, emergency procedures, and communications. This course is intended for students majoring in Aviation Operations or those pursuing a private pilot's license.

FT; AA/AS; CSU.

AVIA 105 Introduction to Aviation and Aerospace

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course provides an introduction to the aviation and aerospace industry. Topics include an overview of aviation history, regulation, and legislation; U.S. air carriers; aviation operations; aviation employment and career paths; and future developments. This course is intended for students majoring in Aviation Operations or anyone interested in the aviation industry.

FT; AA/AS; CSU.

AVIA 115 Aviation Weather
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to atmospheric science, including applications to flight. Topics include the composition and structure of the atmosphere, atmospheric pressure, air circulation, winds, turbulence, precipitation, air masses, severe weather, clouds, air stability, and climate. Through examination of these topics, students gain an understanding of the scientific method and the methodologies of scientific investigation used to explain and predict weather phenomena. Other topics include the relationships between meteorology, technology, and economics; global climate change; and the interpretation and use of aviation weather charts, briefs, reports, and forecasts. This course is intended for students majoring in Aviation Operations or anyone interested in weather phenomena.

FT; AA/AS; CSU; UC.

AVIA 125 Aviation and Airport Management
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for AVIA 120
This course introduces students to the major aspects of aviation and airport management. Topics include the airport-airway system; airport planning and development; aviation operations and management; community relations; governing regulations; security; and careers. This course is intended for students majoring in Aviation Operations or those interested in the aviation industry.

FT; AA/AS; CSU.

AVIA 128 Group Dynamics for High Risk Teams
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the fundamentals of Team Resource Management (TRM), an error management strategy now applied in a wide array of high-risk industries that is designed for technical teams operating in high-stress environments. In this course, students become familiar with TRM processes as a way to expose and manage team errors as they shape authority relations in a dynamic context thereby honing skills of observation, analytic problem solving, and critical thinking. This course is intended for students majoring in Aviation Operations or anyone interested in leadership and group dynamics.

FT; AA/AS; CSU.

AVIA 133 Human Factors in Aviation
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: AVIA 101 with a Grade of "C" or better, or equivalent
This course is about decision-making and the causes of human error. Students learn to identify, assess, and mitigate potential hazards by analyzing the physiological, psychological, and sociological factors contributing to accidents in aviation and other high-risk fields. Topics include human factors theories and models; Crew Resource Management (CRM); flight physiology; health and lifestyle choices; hazardous attitudes, mental, and emotional states; cognitive processes; communication; group dynamics; social norms; organizational culture; leadership; and decision-making. Students integrate these concepts into strategies designed to reduce errors, manage risk, develop safe habits, and make effective decisions throughout their professional and personal lives. This course is intended for students majoring in Aviation Operations or anyone interested in the field of aviation safety.

FT; AA/AS; CSU.

AVIA 151 Helicopter Ground School
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIA 101 with a Grade of "C" or better, or equivalent
This course provides an introduction to helicopter operations and careers. Topics include the aerodynamic principles of helicopter flight; helicopter instruments, engines, and systems; helicopter performance and operating characteristics; airports, airspace, weather, weather services, and navigation as they pertain to helicopter operations; and additional aeronautical knowledge. This course, combined with AVIA 101 (Private Pilot Ground School) and AVIA 133 (Human Factors in Aviation), fulfills all requirements for the FAA Helicopter Private Pilot Knowledge Test. It is intended for students majoring in Aviation Operations or those seeking helicopter pilot qualification.

FT; AA/AS; CSU.

AVIA 161 Remote Pilot Ground School

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: AVIA 161L
Advisory: Completion of or concurrent enrollment in: AVIA 101 with a Grade of "C" or better, or equivalent
This course prepares students to meet the Federal Aviation Administration (FAA) requirements for certification to operate Small Unmanned Aircraft Systems (sUAS) under 55 pounds for commercial purposes. Emphasis is placed on the safety, legal, and ethical requirements of operation in the National Airspace System. Other topics include the core technologies of Unmanned Aircraft Systems (UAS) such as optics, sensors, powerplants, control systems, and communications. This course is intended for students majoring in Aviation Operations or anyone interested in unmanned aircraft flight.

FT; AA/AS; CSU.

AVIA 161L Remote Pilot Flight Lab

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIA 161 with a Grade of "C" or better, or equivalent FAA-issued Remote Pilot Certificate
Advisory: AVIA 101L with a Grade of "C" or better, or equivalent
This lab course provides a hands-on introduction to basic Unmanned Aircraft Vehicles/Unmanned Aircraft Systems (UAV/UAS) flight activities. Students practice and optimize essential UAS pilot flight skills by planning and flying simulated for-hire commercial small UAS (sUAS) operations. Flight time in the approved UAV/UAS may be applied toward requirements for both attaining and maintaining Federal Aviation Administration (FAA) flight ratings. This course is intended for students majoring in Aviation Operations or anyone interested in unmanned aircraft flight.

FT; AA/AS; CSU.

AVIA 195 Instrument Ground School

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIA 101 with a Grade of "C" or better, or equivalent or FAA-issued Private Pilot Certificate
Advisory: AVIA 101L with a Grade of "C" or better, or equivalent or FAA-issued Private Pilot Certificate and
Advisory: Concurrent enrollment in: AVIA 195L and
Advisory: Completion of or concurrent enrollment in: AVIA 133 with a Grade of "C" or better, or equivalent
This course provides an introduction to basic Instrument Flight Rules (IFR) procedures, regulations, and techniques. Topics include airplane instruments and instrument flying techniques, IFR airspace and air traffic control procedures, pertinent Federal Aviation Regulations (FAR), IFR weather and weather services, aeromedical factors and decision making in instrument conditions, and IFR flight planning. This course is intended for students majoring in Aviation Operations or anyone interested in flight training.

FT; AA/AS; CSU.

AVIA 195L Basic Instrument Flight Lab

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: AVIA 101 with a Grade of "C" or better, or equivalent or FAA-issued Private Pilot Certificate and AVIA 101L with a Grade of "C" or better, or equivalent or FAA-issued Private Pilot Certificate
Corequisite: Completion of or concurrent enrollment in: AVIA 195 with a Grade of "C" or better, or equivalent or FAA-issued Instrument Pilot Certificate
Advisory: AVIA 133 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Aviation 196
This laboratory course provides an introduction to basic Instrument Flight Rules (IFR) procedures, regulations, and techniques through the use of an Aviation Training Device (flight simulator). Designed for the private pilot, this course provides an introduction to airplane instruments and instrument flying techniques; flight into IFR airspace and air traffic control procedures; pertinent Federal Aviation Regulations (FARs); IFR weather and weather services; aeromedical factors and decision making in instrument conditions; and IFR flight planning. It is intended for students majoring in Aviation Operations or anyone interested in flight training.

FT; AA/AS; CSU.

AVIA 196L Advanced Instrument Flight Lab
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: AVIA 195 with a Grade of "C" or better, or equivalent or FAA-issued Instrument Pilot Certificate and AVIA 195L with a Grade of "C" or better, or equivalent or FAA-issued Instrument Pilot Certificate
Advisory: AVIA 133 with a Grade of "C" or better, or equivalent
This laboratory course provides advanced study and practice in Instrument Flight Rules (IFR) procedures, regulations, and techniques through the use of an Aviation Training Device (flight simulator). Designed for students seeking instrument flight certification, this course provides advanced practice in airplane instruments and instrument flying techniques, flight into IFR airspace, instrument navigation, and instrument approach procedures. It is intended for students majoring in Aviation Operations or anyone interested in flight training.

FT; AA/AS; CSU.

AVIA 201 Commercial Pilot Ground School
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIA 101 with a Grade of "C" or better, or equivalent FAA-issued Private Pilot Certificate
Advisory: AVIA 133 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AVIA 200.
This course provides an overview of the aeronautical knowledge and job requirements for a commercial pilot. Topics include advanced study of aerodynamics; large and multi-engine aircraft systems; performance and weight and balance; air traffic control and airspace; Federal Aviation Regulations (FARs); aeromedical factors and decision making; weather and weather services; and international flight planning, navigation, and procedures. This course, combined with AVIA 133 (Human Factors in Aviation), fulfills all requirements for the Federal Aviation Administration (FAA) Commercial Pilot Knowledge Test. This course is intended for students majoring in Aviation Operations or those seeking commercial pilot qualification.

FT; AA/AS; CSU.

AVIA 211 Flight Instructor Ground School
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIA 195 with a Grade of "C" or better, or equivalent , or FAA-issued Instrument Pilot Certificate
AVIA 201 with a Grade of "C" or better, or equivalent , or FAA-issued Commercial Pilot Certificate
Advisory: Concurrent enrollment in: AVIA 211L or AVIA 215L
Advisory: Completion of or concurrent enrollment in: AVIA 133 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AVIA 212
This course provides an introduction to methods of flight instruction by integrating learning theory with an in-depth study of aeronautical science. Topics include optimum adult learning environments and instructional techniques pertaining to the principles of flight; aircraft systems and performance; Federal Aviation Regulations (FARs); aeromedical factors; weather; and navigation. When combined with AVIA 133 (Human Factors in Aviation) and AVIA 211L (Basic Visual Flight Instructor Lab) or AVIA 215L (Basic Instrument Flight Instructor Lab), this course fulfills all requirements for the Federal Aviation Administration (FAA) Fundamentals Of Instruction (FOI), Certified Flight Instructor (CFI), and/or Advanced Ground Instructor (AGI) pilot knowledge tests. It is intended for students majoring in Aviation Operations or prospective flight instructors.

FT; AA/AS; CSU.

AVIA 211L Basic Visual Flight Instructor Lab
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIA 211 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AVIA 133 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AVIA 212
This course provides an introduction to applied methods of Visual Flight Rules (VFR) flight instruction. The course utilizes an Aviation Training Device (flight simulator) lab in which students practice applied flight instruction techniques under the direct supervision of a Certified Flight Instructor (CFI). When combined with AVIA 133 (Human Factors in Aviation) and AVIA 211 (Flight Instructor Ground School), this course fulfills all requirements for the Federal Aviation Administration (FAA) Fundamentals Of Instruction (FOI), Certified Flight Instructor (CFI), and/or Advanced Ground Instructor (AGI) pilot knowledge tests. It is intended for students majoring in Aviation Operations or prospective flight instructors.

FT; AA/AS; CSU.

AVIA 215L Basic Instrument Flight Instructor Lab

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: AVIA 196L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: AVIA 211 with a Grade of "C" or better, or equivalent
Advisory: AVIA 128 with a Grade of "C" or better, or equivalent and AVIA 201 with a Grade of "C" or better, or equivalent
This course provides an introduction to applied methods of Instrument Flight Rules (IFR) flight instruction. The course utilizes an Aviation Training Device (flight simulator) lab in which students practice applied flight instruction techniques under the direct supervision of a Certified Flight Instructor - Instrument (CFII). It is intended for students majoring in Aviation Operations or those seeking qualification as a flight instructor.

FT; AA/AS; CSU.

AVIA 216L Advanced Instrument Flight Instructor Lab

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: AVIA 215L with a Grade of "C" or better, or equivalent
Advisory: AVIA 128 with a Grade of "C" or better, or equivalent
AVIA 201 with a Grade of "C" or better, or equivalent
This course provides advanced study of applied methods of Instrument Flight Rules (IFR) flight instruction. The course utilizes an Aviation Training Device (flight simulator) lab in which students practice applied flight instruction techniques under the direct supervision of a Certified Flight Instructor - Instrument (CFII). It is intended for students majoring in Aviation Operations or those seeking qualification as a flight instructor.

FT; AA/AS; CSU.

AVIA 228 Group Dynamics II

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIA 128 with a Grade of "C" or better, or equivalent
This aviation course offers students the opportunity to continue developing "reflective-practitioner" skills, building on learning experienced in Group Dynamics I. Emphasizing an error management strategy called Team Resource Management, students explore further the nature of "roles" and the impact of group processes as a way to expose and manage team errors. The course also addresses how professionals in high-risk fields such as aviation might increase their awareness of the dynamics of authority relations, factors affecting the act of authorizing, and the interdependent nature of leadership in aviation while assisting participants to learn how to manage anxiety and continue to think and function in stressful situations. This course is intended for students majoring in Aviation Operations or anyone interested in leadership and group dynamics.

FT; AA/AS; CSU.

AVIA 270 Aviation Operations Internship / Work Experience

54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course provides on-the-job learning experiences for students employed in an aviation-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in Aviation Operations or those interested in the aviation field.

FT; AA/AS; CSU.

AVIM-Aviation Maintenance Technology

AVIM 101G General Aviation Technology Theory I

96-108 hours lecture; 6 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 100, 101A, or 101B

This course introduces the theory of basic aerodynamics. Students learn about aircraft nomenclature and structure; stability; primary and secondary flight controls; and fixed and rotary wing principles of operation. Other topics include Federal Aviation Administration (FAA) and manufacturers' aircraft specifications; data sheets; manuals; publications; and related Federal Aviation Regulations (FARs), forms, and records. The course also covers weight and balance theory and ground operation and servicing. It is intended for students majoring in Aviation Maintenance.

FT; AA/AS; CSU.

AVIM 101H General Aviation Technology Theory II

96-108 hours lecture; 6 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 101G with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 100, 101C, 101D

This course introduces students to the theory of aircraft fuel systems and components; instrumentation; and aircraft materials and processes. Topics include fuel management; fueling and defueling systems; dump systems; fluid lines and fittings; airframe instrument systems; corrosion control; aircraft hardware identification; materials and processes; precision measuring; and non-destructive testing. Students also practice documenting aircraft inspections and repairs. This course is intended for students majoring in Aviation Maintenance.

FT; AA/AS; CSU.

AVIM 102G General Aviation Maintenance Technology Practices I

96-108 hours lab; 2 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 101G with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 050,100L,100S,102A,102B, or 102E

This course provides practical training in the use of basic aviation maintenance hand and power tools. Students learn about safety wiring, twist drills, torque methods, Federal Aviation Administration (FAA) forms and publications, ground handling, and aircraft weight and balance. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147; Appendix B; Subjects C, F, H, I, J, K, and L. This course is intended for students majoring in Aviation Maintenance.

FT; AA/AS; CSU.

AVIM 102H General Aviation Maintenance Technology Practices II

96-108 hours lab; 2 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 050,100L,100S,102C,102D, or 102E

This course provides practical training in aircraft fuel and instrument systems, materials, and blueprints. Topics include materials and processes; precision measuring; aircraft hardware; corrosion control; drafting; and blueprint reading. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147; Appendix B; Subjects B, D, E, and G and Part 147; Appendix C, Section II, Subjects D and F. This course is intended for students majoring in Aviation Maintenance.

FT; AA/AS; CSU.

AVIM 103A Aircraft Wood, Fabric, Finishing and Composite Structures

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of the design, inspection, servicing, testing, and repair of aircraft wood, composite, plastic enclosures, interior furnishings, and seatbelts. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 103B Aircraft Welding and Sheet Metal Structures

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of the design, inspection, servicing, testing, and repair of aircraft sheet metal and welded structures. Topics include identifying and selecting specific aluminum and steel alloys; selecting appropriate fasteners; and using gas and electric arc welding equipment. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 103C Aircraft Hydraulic Systems

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of the design, inspection, servicing, testing, and repair of aircraft hydraulic and pneumatic components and systems. Topics include safety considerations, fluid types, seal types, component parts, and troubleshooting issues. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 103D Aircraft Landing Gear Systems

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of landing gear systems including retraction systems, shock struts, brakes, wheels, tires, and steering systems. Topics include the inspection, check, service, and repair of speed and take-off warning systems; electrical brake controls; anti-skid systems; and landing gear position indicating and warning systems. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 104A Applied Aircraft Wood, Fabric, Finishing and Composite Structures

72-81 hours lab; 1.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 103A with a Grade of "C" or better, or equivalent

This applied course is a study of the design, inspection, servicing, testing, and repair of aircraft wood, composite, plastic enclosures, interior furnishings, and seatbelts. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section I: Subjects A, B, C, D: 11, 12, 13. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 104B Applied Aircraft Welding and Sheet Metal Structures

72-81 hours lab; 1.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 103B with a Grade of "C" or better, or equivalent

This applied course is a study of the design, inspection, servicing, testing, and repair of aircraft sheet metal and welded structures. Topics include gas and electric arc welding; sheet metal layout, bending, and assembly techniques; and conventional and special fasteners. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section I: Subjects D: 14, 15, 16; E. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 104C Applied Aircraft Hydraulic Systems

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 103C with a Grade of "C" or better, or equivalent

This applied course is a study of the design, inspection, servicing, testing, and repair of aircraft hydraulic and pneumatic components and systems. Topics include safety considerations, fluid types, seal types, component parts, and troubleshooting issues. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section II: Subject B. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 104D Applied Aircraft Landing Gear Systems

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 103D with a Grade of "C" or better, or equivalent

This applied course teaches students to operate, inspect, check, service, and repair landing gear retraction systems, shock struts, brakes, wheels, tires, and steering systems. Other topics include the inspection, check, service, and repair of speed and take-off warning systems and components; electrical brake controls; anti-skid systems; and landing gear position and warning systems. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section II: Subjects A, H. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 105A Aircraft Cabin Atmosphere Control

24-27 hours lecture; 1.5 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of the design, inspection, maintenance, and repair of cabin atmosphere control systems and aircraft protection systems. Topics include heating, cooling, pressurization, oxygen, and ice and rain systems and components. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 105B Aircraft Assembly, Rigging and Inspection

24-27 hours lecture; 1.5 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This course is a study of fixed and rotary wing aircraft assembly techniques. Topics include aircraft alignment; balance and rigging of movable surfaces; jacking of aircraft; and aircraft inspections for conformity and airworthiness. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 106A Aircraft Cabin Atmosphere Control

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 105A with a Grade of "C" or better, or equivalent

This applied course teaches students how to operate, maintain, and repair heating; cooling; air conditioning; pressurization; oxygen; and ice and rain control systems and components. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section II: Subjects C., I. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 106B Applied Aircraft Assembly, Rigging and Inspection

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 105B with a Grade of "C" or better, or equivalent

This applied course teaches students the techniques used to assemble fixed and rotary wing aircraft in an aircraft maintenance shop environment. Topics include aircraft alignment; balance and rigging of movable surfaces; aircraft jacking procedures; and aircraft inspections for conformity and airworthiness. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147 Appendix C; Section I: Subjects F., G. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 107B Turbine Engines
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent
This course is a study of the theory of operation, design, overhaul, inspection, servicing, repair, and troubleshooting of turbine engines. Topics include turbojet, turbofan, turboprop, and turboshaft aircraft powerplants and their related subsystems. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 108B Applied Turbine Engines
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIM 107B with a Grade of "C" or better, or equivalent
This course covers the practical application of the theory of operation, design, overhaul, inspection, servicing, repair, and troubleshooting of turbine engines. Topics include turbojet, turbofan, turboprop, and turboshaft aircraft powerplants and their related subsystems. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section 2: Subjects F. 20 and 22; G. 24 and 25; H 26, 27, and 28; L; and M. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 109A Airframe Electrical Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent and AVIM 120 with a Grade of "C" or better, or equivalent and AVIM 121A with a Grade of "C" or better, or equivalent
This course is a study of the design, installation, and operation of alternating and direct current systems. Topics include communication and navigation systems; wiring; control circuits; switches; indicators; electrical power generation and control; circuit protection devices; and other electronic systems likely to be encountered by an aircraft technician. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 109B Powerplant Ignition Systems
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent
This course is a study of the design, installation, and operation of powerplant ignition systems. Topics include magnetos, spark plug harnesses, spark plugs, solid-state exciters, turbine igniters, and other ignition systems likely to be encountered by an aircraft maintenance technician. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 109C Powerplant Electrical Systems

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent and AVIM 120 with a Grade of "C" or better, or equivalent and AVIM 121A with a Grade of "C" or better, or equivalent

This course is a study of the design, installation, and operation of both direct and alternating powerplant electrical current systems. Topics include lead acid and nickel cadmium batteries; wiring; control circuits; switches; indicators; electrical power generation and control; circuit protection devices; and other electrical systems likely to be encountered by an aircraft maintenance technician. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 109D Aircraft Fire Protection and Digital Logic

16-18 hours lecture; 1 unit

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

This airframe and powerplant course covers all aspects of fire protection systems. Topics include system design, maintenance practices, extinguishing systems, digital logic systems, and basic computer applications used in the aircraft industry. This course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix C, Section II: Subject J; and Appendix D, Section II: Subject B. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe and/or Powerplant rating.

FT; AA/AS; CSU.

AVIM 110A Applied Airframe Electrical Systems

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 109A with a Grade of "C" or better, or equivalent

This course is an applied study of the design, installation, troubleshooting, repair, and operation of both direct and alternating current systems. Topics include communication and navigation systems; wiring; control circuits; switches; indicators; electrical power generation and control; circuit protection devices; and other electronic systems likely encountered by an aircraft maintenance technician. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147 Appendix C; Section II: Subjects E and G. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe rating.

FT; AA/AS; CSU.

AVIM 110B Applied Powerplant Ignition Systems

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 109B with a Grade of "C" or better, or equivalent

This course is an applied study of the design, installation, servicing, troubleshooting, repair, and operation of powerplant ignition systems. Topics include magnetos, spark plug harnesses, spark plugs, solid-state exciters, turbine igniters, and other ignition systems likely encountered by an aircraft maintenance technician. This course meets the requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D; Section II: Subject E. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 110C Applied Powerplant Electrical Systems
24-27 hours lab; 0.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIM 109C with a Grade of "C" or better, or equivalent
This course is an applied study of the design, installation, troubleshooting, repair, and operation of both direct and alternating current systems. Topics include lead acid and nickel cadmium battery maintenance; wiring; control circuits; switches; indicators; electrical power generation and control; circuit protection devices; and other electrical systems likely to be encountered by an aircraft maintenance technician. This course meets the requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D; Section II: Subjects A & C. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 111C Reciprocating Engines I
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent
This course is a study of the theory of operation, design, overhaul, inspection, and repair of aircraft reciprocating powerplants. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 111D Reciprocating Engines II
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent
This course is a study of aircraft reciprocating powerplant systems and operations. Topics include the check, repair, servicing, installation, removal, and inspection of aircraft reciprocating powerplants. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 112C Applied Reciprocating Engines I
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIM 111C with a Grade of "C" or better, or equivalent
This course is an applied study of the theory of operation, overhaul, inspection, and repair of aircraft reciprocating powerplants. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section I: Subjects A: 1, 2. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 112D Applied Reciprocating Engines II
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIM 111D with a Grade of "C" or better, or equivalent
This course is an applied study of powerplant systems and operations. Topics include the operation, installation, removal, inspection, repair, servicing, check, and troubleshooting of powerplant installations. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section I: Subjects A: 3, 4; C: 8. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 120 Basic D.C. Electronics Theory
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for Electronic Systems (ELDT) 124 or 124L or Electronics (ELRN) 120 or 120A or Electricity (ELCT) 111 or 111L.
This course provides instruction in direct current electronics theory. Topics include atomic theory; direct current concepts; series, parallel, and circuit analysis; magnetism; and electromagnetism. The course emphasizes the theoretical application of Ohm's and Kirchhoff's laws. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe or Powerplant rating.

FT; AA/AS; CSU.

AVIM 121A Applied Basic D.C. Electronics

72-81 hours lab; 1.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 120 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for Electronic Systems (ELDT) 124 or 124L, or Electronics (ELRN) 121 or 121A or 123, or Electricity (ELCT) 111 or 111L.

This course provides instruction in practical applications of direct current electronics theory. Topics include atomic theory; direct current concepts; series, parallel, and circuit analysis; magnetism; and electromagnetism. The course emphasizes the proper use of multimeters and the troubleshooting of direct current circuits. It meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix B, Subject A. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Airframe or Powerplant rating.

FT; AA/AS; CSU.

AVIM 203 Advanced Composites

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 102G with a Grade of "C" or better, or equivalent FAA Airframe or Powerplant Certificate. and AVIM 102H with a Grade of "C" or better, or equivalent FAA Airframe or Powerplant Certificate.

Corequisite: Completion of or concurrent enrollment in: AVIM 204 with a Grade of "C" or better, or equivalent

This course focuses on advanced aircraft composite structures, maintenance, and fabrication. Topics include reinforcements, resins, and core materials used in bonded structures. Students also learn about repair strategies and post-cure inspection. This course is intended for students seeking knowledge and skills in aircraft composites.

FT; AA/AS; CSU.

AVIM 204 Advanced Composites Laboratory

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Prerequisite: AVIM 102G with a Grade of "C" or better, or equivalent FAA Airframe or Powerplant Certificate. and AVIM 102H with a Grade of "C" or better, or equivalent FAA Airframe or Powerplant Certificate.

Corequisite: Completion of or concurrent enrollment in: AVIM 203 with a Grade of "C" or better, or equivalent

This course covers applications of advanced aircraft composite structures, maintenance, and fabrication techniques. Topics include reinforcements, resins, and core materials used in bonded structures. Students also perform post-cure inspection and use approved fasteners. This course is intended for students seeking knowledge and skills in aircraft composites.

FT; AA/AS; CSU.

AVIM 205 Advanced Aircraft Metal Forming and Welding Lecture

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 206 with a Grade of "C" or better, or equivalent

This course focuses on traditional hand- and machine-forming of aircraft sheet metal. Topics include welding of various aircraft metals using traditional and modern welding techniques and strategies. This course is intended for students seeking advanced knowledge and skills in aircraft fabrication and repair.

FT; AA/AS; CSU.

AVIM 206 Advanced Aircraft Metal Forming and Welding Laboratory

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 205 with a Grade of "C" or better, or equivalent

This course provides a practical application of traditional hand- and machine-forming of aircraft sheet metal. It encompasses the application of various welding techniques based on different aircraft metals. Students also learn to perform post-weld inspections. This course is intended for students seeking advanced knowledge and skills in aircraft fabrication and repair.

AA/AS; CSU.

AVIM 241 Aircraft Propeller Systems

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 107A

This course is a study of aircraft propellers. Topics include the aerodynamics, theory of operation, inspection, checks, troubleshooting, and maintenance of reciprocating and turboprop controllable-pitch propellers and propeller components. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 242 Applied Aircraft Propeller Systems

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 241 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 108A

The course is an applied study of the installation, removal, inspection, repair, service, and troubleshooting of propellers and propeller system components. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section II: Subject K. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 249 Induction and Fuel Metering

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 111A

This course is a study of aircraft induction systems. Topics include the theory of operation, design, overhaul, inspection, servicing, repair, and troubleshooting of normally aspirated, turbo-charged, and supercharged induction systems, fuel metering systems, anti-detonation systems, and fuel controls in aircraft powerplants. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 250 Applied Induction and Fuel Metering

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AVIM 249 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AVIM 112A

This applied course covers aircraft induction systems. Topics include the theory of operation, design, overhaul, inspection, servicing, repair, and troubleshooting of normally aspirated, turbo-charged, and supercharged induction systems, fuel metering systems, anti-detonation systems, and fuel controls in aircraft powerplants. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section II: Subjects F: 20, 21, 22; G: 24, 25; and H: 26, 27, 28. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 253 Lubrication, Cooling, and Exhaust
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: AVIM 101G with a Grade of "C" or better, or equivalent and AVIM 101H with a Grade of "C" or better, or equivalent and AVIM 102G with a Grade of "C" or better, or equivalent and AVIM 102H with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AVIM 111B
This course is a study of aircraft lubrication, cooling, and exhaust systems. Topics include inspection, checks, service, repair, and maintenance of aircraft wet and dry sump oil systems; liquid and air powerplant cooling systems; open and collected exhaust powerplant systems; and the identification and selection of lubricants. This course is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 254 Applied Lubrication, Cooling, and Exhaust
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AVIM 253 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AVIM 112B
This applied course covers aircraft lubrication, cooling, and exhaust systems theory. Topics include inspection, checks, service, repair, and maintenance of aircraft wet and dry sump oil systems; liquid and air powerplant cooling systems; open and collected exhaust powerplant systems; and the identification and selection of lubricants. The content of this course meets the minimum requirements of Federal Aviation Regulation (FAR) Part 147, Appendix D, Section II: Subjects D: 14, 15, 16; I: 29, 30; and J: 31, 32a, 32b. It is intended for students majoring in Aviation Maintenance Technology or those seeking a Federal Aviation Administration (FAA) Mechanics Certificate with Powerplant rating.

FT; AA/AS; CSU.

AVIM 270 Aviation Maintenance Technology Internship / Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course provides on-the-job learning experiences for students employed in an aviation maintenance technology-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in Aviation Maintenance Technology or those interested in the aeronautics field.

FT; AA/AS; CSU.

AVIM 290 Independent Study
48-162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of aviation maintenance technology. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

BANK-Banking and Finance

BANK 100 Introduction to Financial Services
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an overview of the fundamental role and function of financial services and the financial services industry. Topics include commercial and investment banking; insurance; mutual funds; money, financial, bond, stock, mortgage, and foreign exchange markets; financial institutions; the deposit and payment functions; the Federal Reserve System; and financial regulatory functions. This course is intended for students majoring in Financial Services or Business or anyone interested in the financial services industry.

FT; AA/AS; CSU.

BANK 102 Mortgage Brokerage and Banking
64-72 hours lecture; 4 units
Grading: Letter Grade Only
This course is an introduction to the mortgage brokerage and banking industry. Students learn the history, concepts, vocabulary, loan products and product flow of the mortgage banking industry as well as the functions of the many participants in a loan transaction. Other topics include information on the state of the economy and its effects on real estate lending and the secondary markets. In addition, the legal and financial impacts of fraud within the industry are discussed. Throughout the course, emphasis is placed on the importance of follow-through, quality customer service, and ethics as they relate to the mortgage brokerage and banking industry. Course content relates specifically to California regulations. This course is intended for students interested in real estate, banking, and finance.

FT; AA/AS; CSU.

BANK 103 Introduction to Investments
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: BUSE 101 with a Grade of "C" or better, or equivalent and BUSE 120 with a Grade of "C" or better, or equivalent
This course presents basic investment concepts such as investment markets, transactions, planning, information, risk, and return. Other topics include the role and scope of various investment vehicles, including common stock, fixed-income securities, derivative securities, and mutual funds. This course is intended for students majoring in Financial Services or Business or anyone interested in investments.

FT; AA/AS; CSU.

BANK 200 Principles of Insurance
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: BUSE 120 with a Grade of "C" or better, or equivalent
This course is an introduction to the field of property and liability insurance to meet the risk management needs of individuals and organizations. Topics include life, health, home, automobile, property damage, and liability insurance, as well as the legal environment of insurance products. Other topics include the basic concepts of indemnity, frequency and severity, types of insurance, underwriting, government regulation, and analysis of insurance contracts. This course is intended for students majoring in Financial Services or Business or anyone interested in the financial services industry.

FT; AA/AS; CSU.

BIOL-Biology

BIOL 48 Pre-biology and Study Skills
4 - 6 hours lecture/12 - 18 hours lab; 0.5 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for BIOL 107 or 210A.
This course covers fundamental concepts and skills for success in introductory biology courses. Topics include language and terms for comprehending biology textbooks; mathematical concepts and units of measurement; chemistry concepts; the process of science; basic biologic themes; and effective habits of self-awareness and effective learning. This course is intended for students who plan to enroll in general or introductory biology and have not previously taken high school biology and/or chemistry; students who have previously taken biology and need to refresh and review basic concepts and skills; or students who have unsuccessfully attempted general or introductory biology and wish to review prior to re-enrolling.

FT.

BIOL 100 Natural History - Environmental Biology
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to the basic principles of ecology. Emphasis is placed on the biological systems, plants, and animals of Southern California through lecture, laboratory, and field trips. Topics include the nature of the physical environment, terrestrial and aquatic ecosystems, evolution and biodiversity, species interactions, and human impacts on natural systems. This course is intended for students interested in environmental biology.

FT; AA/AS; CSU; UC.

BIOL 101 Issues in Environmental Science & Sustainability

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BIOL 100
This is a course in contemporary issues in environmental science and sustainability. Topics include basic ecological principles; biological, chemical, and physical ecosystem dynamics; biodiversity; human population dynamics; human resource management; and pollution. These are viewed within the context of their environmental, economic, and social settings. Issues are examined utilizing the process of scientific inquiry. The laboratory is coordinated with lectures, and emphasizes the environmental issues of Southern California. This course is intended for students majoring in sustainability, business and peace studies, as well as all students interested in environmental science.

FT; AA/AS; CSU; UC.

BIOL 107 General Biology-Lecture and Laboratory

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BIOL 105 & 106, 210A, or 210B
This course is an examination of living organisms and their environment. The lecture and laboratory are intended for students in the Allied Health Track or students majoring in Education or related areas. Topics include the fundamental chemical and physical processes common to all living organisms, the interactions between organisms and their environment, classical and molecular genetics, metabolism, plant and animal anatomy and physiology, animal behavior, evolution, cellular and molecular biology, and the experimental and cognitive processes used to examine these fields.

FT; AA/AS; CSU; UC.

BIOL 115 Marine Biology

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of marine biology. Emphasis is placed on marine organisms, their ecology and their evolutionary adaptations to marine habitats of the ocean environment. Topics include the marine environment and its organisms: plankton, plants, invertebrates, fishes, birds, reptiles, and mammals. Field trips include local marine habitats, aquaria and museums. This course is intended for all students interested in marine biology.

FT; AA/AS; CSU; UC.

BIOL 130 Human Heredity

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course introduces students to the concepts and applications of human heredity. It deals with both classical Mendelian genetics and modern molecular genetics. Topics include gamete formation, human karyotypes, genetic crosses, sex-linked inheritance, structure and function of DNA and RNA, gene expression, transcription and translation, genetic engineering, and population genetics. This course is designed for students interested in biology and human heredity.

FT; AA/AS; CSU; UC.

BIOL 131 Introduction to Biotechnology

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and MATH 116 with a Grade of "C" or better, or equivalent
This course is a general examination of biology as it relates to the field of biotechnology. Topics include the fundamental chemical processes common in prokaryotic and eukaryotic biology; chemistry of bio-molecules (proteins, enzymes, nucleic acids, and lipids); cellular and molecular biology; basic immunology; and classical and molecular genetics with an emphasis on gene expression and genetic engineering. The laboratory addresses basic skills and techniques common to the biotechnology industry. Topics include the measurement of activity and quantity of proteins; growth and manipulation of bacteria; genetic engineering; and antibody methods. This course is intended for students majoring in applied biology and as a general education option for all students.

FT; AA/AS; CSU; UC.

BIOL 132 Applied Biotechnology I
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: BIOL 131 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent and MATH 116 with a Grade of "C" or better, or equivalent and CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent or CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent
This course provides students with entry-level skills common to the biotechnology industry, such as aseptic techniques, laboratory safety, and biological media and solution preparation. Other topics include microbial growth, solutions, buffers, separation of cellular components, and macromolecules. This course is intended for students preparing for a career in biotechnology.

FT; AA/AS; CSU.

BIOL 133 Applied Biotechnology II
32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Advisory: BIOL 132 with a Grade of "C" or better, or equivalent or BIOL 210A with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent and MATH 116 with a Grade of "C" or better, or equivalent and CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent or CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent
This advanced biotechnology training course covers transformation, restriction analysis of Deoxyribonucleic Acid (DNA), protein analysis, and immunological applications. In the lab, students practice mastering current techniques used in the biotechnology industry. This course is intended for students preparing for a career in biotechnology.

FT; AA/AS; CSU.

BIOL 134 Introduction to the Biotechnology Lab
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for Biology 131 Introduction to Biotechnology
This course examines biology laboratory technology as it relates to the field of biotechnology. The laboratory addresses basic skills and techniques common to the biotechnology industry including the measurement of activity and quantity of proteins; growth and manipulation of bacteria; genetic engineering; polymerase chain reaction; and antibody methods. In addition to hands-on skills, the course provides context for how and why these techniques are used in the industry. This course is intended for students majoring in Applied Biology or Allied Health, or those seeking careers in the biotechnology industry.

FT; AA/AS; CSU.

BIOL 135 Biology of Human Nutrition
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This introductory course relates the biological principles of human nutrition to the psychological, cultural, and social aspects of food, eating patterns, and human health. This course integrates concepts from biology, physiology, biochemistry, microbiology, sustainability, agriculture, sociology, and psychology to understand the relationships among food, nutrients, and human wellness over a lifetime. The cultural, economic, and emotional aspects of food selection, access, quality, and preparation are also addressed. Students explore scientific principles and methods to develop skills necessary for critical evaluation of nutritional research, news, and policies, as well as to recognize that the dynamic nature of science encourages a lifelong pursuit of relevant knowledge. This course is intended for all students who want to learn about how nutrition impacts their health, the health of their family, and the health of society, as well as how human activities related to diet and health impact the environment.

FT; AA/AS; CSU; UC.

BIOL 136 Quality and Regulatory Practices in Biotechnology

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is an introduction to basic quality principles and tools with an emphasis on their application in biotechnology. Topics include quality control, quality assurance, validation, documentation, and regulatory compliance within the biotechnology industry. The course prepares students for the Certified Quality Improvement Associate (CQIA) examination through the American Society for Quality. It is intended for future or current biotechnology technicians.

FT; AA/AS; CSU.

BIOL 160 Elements of Human Anatomy and Physiology

48-54 hours lecture/48-54 hours lab; 4 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for BIOL 230 or 235

This course is an introduction to the structure and functions of the human body. Emphasis is placed on the human body systems including the integumentary, skeletal, muscular, nervous, endocrine, reproductive, cardiovascular, lymphatic and immune, respiratory, urinary, and digestive systems. This course is designed for students preparing for allied health occupations such as radiological technician, physical therapist assistant, and medical laboratory technician, as well as students interested in learning about the human body.

AA/AS; CSU.

BIOL 180 Plants and People

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This is an introductory course that examines the interdependence of humans and plants. This course is intended for all that want to learn about the uses of plants, especially those students with an interest in biology, anthropology, environmental sciences, and/or agriculture. Emphasis is on plant ecology as well as the basic biology of plant groups that provide us with food, medicine, recreation, decoration, and material goods, as well as those that produce stimulating, intoxicating, or harmful effects. Basic principles of taxonomy, cell structure, plant physiology, plant anatomy, ecology, and genetics are explored as they relate to these plants. Current environmental and economic issues and the role of molecular genetics in future plant development and the importance of genetic diversity are also examined.

FT; AA/AS; CSU; UC.

BIOL 200 Biological Statistics

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 210A with a Grade of "C" or better, or equivalent and MATH 116 with a Grade of "C" or better, or equivalent

BIOL 107, BIOL 210A and MATH 116 completed within five years of enrollment in BIOL 200

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This is an introductory course in statistics using biological examples and experimental design. Students learn methods and gain experience in defining and solving quantitative problems in biology. Descriptive and inferential statistics, basic probability and normal distributions are introduced. Students learn to estimate population parameters, test hypotheses, linear regression and correlation using clinical and biological data and experiments. This course is intended for students majoring in biological science.

FT; AA/AS; CSU; UC; C-ID: SOCI 125.

BIOL 205 General Microbiology

48-54 hours lecture/96-108 hours lab; 5 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 210A with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 103 with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent

This introductory course covers fundamental aspects of microbiology including taxonomy, structure, physiology, reproduction, genetics, control, immunology, diversity, and host-symbiont relationships. Lab work emphasizes basic techniques for culturing, staining, counting, and identifying microorganisms. This course is intended for students pursuing careers in allied health fields and may meet entry requirements for these allied health fields.

FT; AA/AS; CSU; UC.

BIOL 210A Introduction to the Biological Sciences I

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent and Successful completion of Intermediate Algebra with a "C" or better or appropriate placement based on California title 5 regulations. All prerequisites must be completed within five years of enrollment in BIOL 210A.
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and **Advisory: Concurrent enrollment in:** CHEM 200 and CHEM 200L
This course covers biological chemistry, cell structure and function, cellular metabolism, classical and molecular genetics, and the molecular basis of evolutionary biology. This is the first semester of a two-semester sequence designed for biological science and pre-professional majors.

FT; AA/AS; CSU; UC.

BIOL 210B Introduction to the Biological Sciences II

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: BIOL 210A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers the three domains of life, including the phylogenetic relationships of major groups of organisms. Topics include adaptive radiation, anatomy, physiology, development, behavior, and ecology. This is the second semester of a two-semester sequence designed for biological science and pre-professional majors.

FT; AA/AS; CSU; UC; C-ID: BIOL 140.

BIOL 230 Human Anatomy

32-36 hours lecture/96-108 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 160 with a Grade of "C" or better, or equivalent or BIOL 210A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a systems approach to the study of human body structure from the microscopic level of organization to the gross level. Students relate body structures to their functions by studying histological slides and photomicrographs, anatomical models and charts, and mammalian dissection, which may include using prosected cadavers for studying and testing. This course is intended for students majoring in nursing, allied health (e.g. physical therapy, occupational therapy, chiropractic, etc.), psychology, athletic training, physical education, and biology, or those who wish to extend their knowledge of the human body beyond the scope of introductory biology.

FT; AA/AS; CSU; UC.

BIOL 231 Media Experiences in Human Anatomy

16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: BIOL 230
This course is self-paced study of anatomy through the use of computer software, microscope slides, anatomical models, and graphics. It is intended to meet the requirements of students in the fields of nursing, physical therapy, recreational therapy, occupational therapy, athletic training, chiropractic, psychology, physical education, and biology or those who wish to extend their knowledge of the human body beyond the scope of introductory biology.

AA/AS; CSU.

BIOL 232 Experience in Human Dissection

48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: BIOL 230 with a Grade of "C" or better, or equivalent
This course provides a supervised study and actual experience in human dissection. Topics include dissection techniques and human anatomy. This course is intended for students pursuing careers in nursing, medicine, and other allied health professions.

FT; AA/AS; CSU.

BIOL 235 Human Physiology
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 210A with a Grade of "C" or better, or equivalent
Advisory: BIOL 230 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent
This course is an introductory study of human body functions. Emphasis is placed on the nervous, endocrine, muscular, cardiovascular, immune, digestive, respiratory, urinary and reproductive systems. The laboratory component focuses on investigating and applying the scientific method to the understanding the function of bodily systems. This course is intended for students majoring in nursing, allied health, psychology, biology and physical education.

FT; AA/AS; CSU; UC; C-ID: BIOL 120B.

BIOL 277L Service Learning in Biotechnology
48-108 hours lab; 1-2 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is not open to students with previous credit for Biology 277D
This course provides students with the opportunity for conducting biotechnology-related service learning projects to help the college's community under the direct supervision of college faculty. Projects may include assisting with college classes, creating educational materials for college or prospective college students, mentoring, or other related activities. Students gain hands-on experience in project planning, development, implementation, and evaluation. This course is intended for students who are interested in biotechnology-related project development, development of teaching skills, or enhancement of communication and planning skills.

FT; AA/AS; CSU.

BIOL 290 Independent Study
48-162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is designed for students who wish to conduct additional research, a special project, or learning activities in the field of biology. It is not intended to replace an existing course in the discipline. In this course students have a written contract with their instructor for activities such as: preparing problem analyses, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

BLAS-Black Studies

BLAS 100 Introduction to Black Studies
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an overview of the Black Studies discipline including its social and academic origins, goals and development. Emphasis is placed on providing students with an understanding of the fundamental areas of study within the field and of the interdisciplinary approach to studying the African experience in America and the world. This course is intended for students majoring in Black Studies and Ethnic Studies; and all students interested in general knowledge of the Black experience.

AA/AS; CSU; UC.

BLAS 104 Black Psychology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to psychological concepts and principles as they relate to African American behaviors, perspectives and lifestyles. Emphasis is placed on comparing Euro-American theories as they have been traditionally applied to African Americans with contemporary Afri-centric theories and the ways in which they may be applied to create a greater understanding of the behaviors, lifestyles and psychological needs of African Americans. This course is intended for students majoring Black Studies and students interested in the Ethnic Studies aspects of psychology.

FT; AA/AS; CSU; UC.

BLAS 140A African American History to Reconstruction

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This survey course examines United States History from an African American lens from the Colonial period to 1877. The course content centers on the contributions, impact, and significance of African American experiences and focuses on the political, social, economic, and cultural development of the country. This course is intended for all students interested in Black Studies, Ethnic Studies, and the history of the U.S. from an African American perspective.

FT; AA/AS; CSU; UC.

BLAS 140B African American History since Reconstruction to the Present

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This survey course examines United States History from an African American lens from Reconstruction to the present. The course content centers the contributions, impact and significance of African American experiences and focuses on political, social, economic, cultural, and intellectual trends, the persistence of racism, and the struggle for full equality affecting all Americans. This course is intended for all students interested in Black Studies, Ethnic Studies, and the history of the U.S. from an African American perspective.

AA/AS; CSU; UC.

BLAS 150 Black Women in Literature, Film and the Media

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course analyzes stereotypical, contemporary and self images of Africana women in literature, film and media. This course is designed for Black Studies and Ethnic Studies majors, and all students interested in literature, film and media.

FT; AA/AS; CSU; UC.

BLAS 155 African American Literature

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a survey of African American cultural expression through language and literature in historical perspective. Emphasis is placed on the cultural, ethnic, and political dynamics that influence literary, musical and theoretical texts. Topics include African praise songs, slave narratives, African American folktales, poetry, lyrics, spirituals, raps, short stories, novels, speeches and essays. This course is for students majoring in Black Studies and Ethnic Studies; and all students interested in literature from an African American perspective.

FT; AA/AS; CSU; UC.

BUSE-Business

BUSE 100 Introduction to Business

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: BUSE 92 with a Grade of "C" or better, or equivalent

This introductory course for both business and non-business majors provides a broad understanding of the business community, including how culture; society; economic systems; legal, international, political, and financial institutions; and human behavior interact to affect a business organization's policies and practices within the U.S. and a global society. Topics include business functions and terminology; organizational structure and design; leadership; human resource management; organized labor practices; marketing; organizational communication; technology; entrepreneurship; legal, accounting, and financial practices; the stock and securities market; and business career planning. This course is intended for students majoring in Business or anyone interested in the function and role of the business community.

FT; AA/AS; CSU; UC.

BUSE 101 Business Mathematics

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course provides a comprehensive study of mathematical concepts and computational techniques used in business. Topics include the mathematics of bank services; payroll; buying and selling; interest and loans; taxes; insurance; depreciation; and annuities, stocks, and bonds. Students also use descriptive statistics to evaluate business-related data and quantitative reasoning skills to select among different options in business-related decisions. This course is intended for students majoring in business or others who work or intend to work in a business setting such as managers, supervisors, or work team members.

FT; AA/AS; CSU.

BUSE 102 Introduction to Customer Service
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides students with basic knowledge of customer service by examining customer service from the provider's and customer's perspectives. It takes a pragmatic approach to applying the principles of service within an organization. Topics include leadership in customer service, customer retention and satisfaction, classifications of service organizations, and principles and practices of internal service. This course is intended for students majoring in business or others interested in business.

FT; AA/AS; CSU.

BUSE 115 Statistics for Business
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: Successful completion of Intermediate Algebra with a "C" or better or appropriate placement based on California title 5 regulations.
Advisory: CBTE 140 with a Grade of "C" or better, or equivalent or CBTE 143 with a Grade of "C" or better, or equivalent
This course is a study of statistical analysis. Topics include descriptive statistics, probability, sampling and sampling distributions, confidence intervals, hypothesis testing, analysis of variance (ANOVA), and regression and correlation analyses as aids for business decision making. This course is designed for students majoring in business, economics, information technology, social science, or related fields.

FT; AA/AS; CSU; UC; C-ID: MATH 110.

BUSE 119 Business Communications
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent
This course applies the principles of effective and ethical communication to the creation of letters, memos, emails, and written and oral reports for a variety of business situations. The course emphasizes the development, analysis, organization, and composition of various types of professionally written messages, analytical reports, and business presentations using word processing and presentation-graphics software. Other topics include interpersonal communication, electronic media, and international/cross-cultural communication. This course is intended for students majoring in business and for others working in a business environment.

FT; AA/AS; CSU; C-ID: BUS 115.

BUSE 120 Personal Financial Management
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for CONF 110
This course is an introduction to the principles of personal finance and money management. Students examine their personal relationships with money and explore the psychological, sociological, and physiological factors that influence financial decisions. Emphasis is placed on financial goal setting, culminating in the development of a personal budget and financial plan. Other topics include income generation and career planning; effective spending decisions including major consumer purchases and real estate; savings strategies; credit building; insurance; retirement and estate planning; investment options; and the interrelationships among financial, social, physical, and mental health. This course is intended for all students interested in personal finance and money management.

FT; AA/AS; CSU; UC.

BUSE 129 Introduction to Entrepreneurship
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Students in this course develop an understanding of the complex tasks faced by individuals engaged in entrepreneurial activities. Emphasis is placed on understanding and identifying the psychological traits and behaviors of the entrepreneurial mindset, the ideation process, feasibility planning, financial projections and startup budgets, resource acquisition, pitching a business idea, and the conceptual steps for launching a new business venture. This course is designed for all students interested in understanding entrepreneurship and how small businesses prepare to launch.

FT; AA/AS; CSU.

BUSE 140 Business Law and the Legal Environment
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or BUSE 92 with a Grade of "C" or better, or equivalent
This course introduces students to the legal system, the laws that govern business in America, and the principles underlying fundamental legal concepts. Topics include judicial and administrative systems; ethics; contracts; torts; bankruptcy; agency; business organizations and ownership types; government agencies and regulation; protection of intellectual property interest; and the international business environment. This course is intended for students majoring in business and for others interested in business law.

FT; AA/AS; CSU; UC; C-ID: BUS 120, BUS 125.

BUSE 150 Human Relations in Business

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course introduces students to human behavior as it relates to business. Topics include leadership, communication, status, decision making, motivation, and personnel problems. This course is intended for students majoring in business and others who work or intend to work in a business setting such as managers, supervisors, and work team members.

FT; AA/AS; CSU.

BUSE 155 Small Business Management

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: BUSE 101 with a Grade of "C" or better, or equivalent and BUSE 100 with a Grade of "C" or better, or equivalent

This course is a study of the elements involved in successfully operating a small business. Topics include human resource management, marketing for small business, and legal issues. This course is intended for students majoring in Business or anyone interested in owning or operating a small business.

FT; AA/AS; CSU.

BUSE 157 Developing a Plan for the Small Business

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent and BUSE 101 with a Grade of "C" or better, or equivalent

This course prepares students to create an effective plan for developing a new business. Emphasis is placed on the key decisions facing the entrepreneur, including financing, marketing, and business location. This course is designed for students majoring in Business or planning to start their own business.

FT; AA/AS; CSU.

BUSE 201 Business Organization and Management

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course covers business organization and management fundamentals with a focus on the managerial functions of planning, organizing, leading, and controlling. Other topics include managerial ethics, corporate social responsibility, and personal management skills and techniques. This course is intended for students majoring in business and for others who work or intend to work in a position of organizational responsibility such as managers and supervisors.

FT; AA/AS; CSU.

BUSE 229A Gazelle Path Business Incubator I

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: BUSE 129 with a Grade of "C" or better, or equivalent

This course is intended for students who have a high-growth, high-value business idea and are ready to immediately start or expand their company. It is the first in a series of four courses teaching the "gazelle path" method of ideation and development for high-growth, high-value companies. Throughout the series students learn to apply entrepreneurship concepts and lean methodology to turn their business ideas into startups that use technology and innovation to solve business problems. Topics include local business development resources, introductory-level business pitches, problem testing, offer testing, and the creation and implementation of marketing messages and channels. The course emphasizes experiential learning and utilizes resources from the Miramar College Regional Entrepreneurship Center (REC), including volunteer mentors and subject matter experts, virtual and augmented reality training, and access to co-working space, prototyping tools, and business equipment.

FT; AA/AS; CSU.

BUSE 229B Gazelle Path Business Incubator II

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: BUSE 129 with a Grade of "C" or better, or equivalent

Advisory: BUSE 229A with a Grade of "C" or better, or equivalent

This course is intended for students who have a high-growth, high-value business idea and are ready to immediately start or expand their company. It is the second in a series of four courses teaching the "gazelle path" method of ideation and development for high-growth, high-value companies. Throughout the series students learn to apply entrepreneurship concepts and lean methodology to turn their business ideas into startups that use technology and innovation to solve business problems. Topics include local business development resources, beginning level business pitches, and payment testing, including payment forms, methods, measurement, and evaluation. The course emphasizes experiential learning and utilizes resources from the Miramar College Regional Entrepreneurship Center (REC), including volunteer mentors and subject matter experts, virtual and augmented reality training, and access to co-working space, prototyping tools, and business equipment.

FT; AA/AS; CSU.

BUSE 229C Gazelle Path Business Incubator III

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: BUSE 129 with a Grade of "C" or better, or equivalent

Advisory: BUSE 229A with a Grade of "C" or better, or equivalent and BUSE 229B with a Grade of "C" or better, or equivalent

This course is intended for students who have a high-growth, high-value business idea and are ready to immediately start or expand their company. It is the third in a series of four courses teaching the "gazelle path" method of ideation and development for high-growth, high-value companies. Throughout the series students learn to apply entrepreneurship concepts and lean methodology to turn their business ideas into startups that use technology and innovation to solve business problems. Topics include local business development resources, intermediate-level business pitches, and solution testing, including solution methods, measurement, and evaluation. The course emphasizes experiential learning and utilizes resources from the Miramar College Regional Entrepreneurship Center (REC), including volunteer mentors and subject matter experts, virtual and augmented reality training, and access to co-working space, prototyping tools, and business equipment.

FT; AA/AS; CSU.

BUSE 229D Gazelle Path Business Incubator IV

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: BUSE 129 with a Grade of "C" or better, or equivalent

Advisory: BUSE 229A with a Grade of "C" or better, or equivalent and BUSE 229B with a Grade of "C" or better, or equivalent and BUSE 229C with a Grade of "C" or better, or equivalent

This course is intended for students who have a high-growth, high-value business idea and are ready to immediately start or expand their company. It is the last in a series of four courses teaching the "gazelle path" method of ideation and development for high-growth, high-value companies. Throughout the series students learn to apply entrepreneurship concepts and lean methodology to turn their business ideas into startups that use technology and innovation to solve business problems. Topics include local business development resources, advanced-level business pitches, scaling business ventures, and profitability testing. The course emphasizes experiential learning and utilizes resources from the Miramar College Regional Entrepreneurship Center (REC), including volunteer mentors and subject matter experts, virtual and augmented reality training, and access to co-working space, prototyping tools, and business equipment.

FT; AA/AS; CSU.

BUSE 270 Business Internship / Work Experience

54 - 216 hours other; 1-4 units

Grading: Letter Grade Only

Limitation on Enrollment: Obtain Permission Number from Instructor

This course provides on-the-job learning experiences for students employed in a business-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in Business or those interested in the business field.

FT; AA/AS; CSU.

BUSE 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of business. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

CBTE-Computer Business Technology

CBTE 114 Introduction to Microsoft Windows
12-13.5 hours lecture/12-13.5 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: CBTE 101 with a Grade of "C" or better, or equivalent
This course is an overview of the features of the Microsoft Windows operating system and environment. Students learn to use and customize the start menu; work with Windows accessory programs; manage storage drives; work with folders and files; create shortcuts; and customize the desktop. This course is designed for students intending to use Microsoft Windows for academic, professional and/or personal purposes.

FT; AA/AS; CSU.

CBTE 120 Beginning Microsoft Word
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only

Advisory: CBTE 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: CBTE 120A OR CBTE 120B
This course is an introduction to document formatting using Microsoft Word. Students create fliers, letters, memos, reports and office documents. Topics include mail merge and table basics. This course is designed for students intending to use Microsoft Word for academic, professional and/or personal purposes.

FT; AA/AS; CSU.

CBTE 122 Intermediate Microsoft Word
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: CBTE 101 with a Grade of "C" or better, or equivalent and CBTE 120 with a Grade of "C" or better, or equivalent
This intermediate-level course introduces advanced features and text editing tools of Microsoft Word. Students create reference documents, online forms and newsletters. Topics include the use of macros and collaboration and integration tools. This course is designed for students intending to use Microsoft Word for academic, professional and/or personal purposes.

FT; AA/AS; CSU.

CBTE 127 Beginning Microsoft PowerPoint
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: CBTE 101 with a Grade of "C" or better, or equivalent and CBTE 114 with a Grade of "C" or better, or equivalent
This course provides students with the basic knowledge of how to create, modify, and present PowerPoint slide shows. Students add and modify both text and graphics; insert and modify information graphics and multimedia; apply, modify, and create master pages; apply, modify, and create templates. Students integrate other Microsoft programs with PowerPoint. This course is designed for students and professionals acquiring or updating basic skills in creating and editing professional presentations.

FT; AA/AS; CSU.

CBTE 140 Beginning Microsoft Excel
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: CBTE 114 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CBTE 140A or CBTE 143
This course is intended for students, office support personnel, and business owners who require a competency in performing tasks in Microsoft Excel. Students receive hands-on instruction on how to create, modify, and enhance workbooks, charts, and formulas.

FT; AA/AS; CSU.

CBTE 143 Intermediate Microsoft Excel
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: CBTE 114 with a Grade of "C" or better, or equivalent
This course is designed for students preparing for a career or job in which a competency in intermediate-to-advanced Excel functions is required to perform daily tasks. Students receive hands-on instruction on charts, PivotTables, PivotCharts, functions, formulas, data validation, autofilters, what-if analyses, templates, macros, Visual Basic for applications, and integration of Excel with other programs.

FT; AA/AS; CSU.

CBTE 152 Beginning Microsoft Access
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: CBTE 101 with a Grade of "C" or better, or equivalent and CBTE 114 with a Grade of "C" or better, or equivalent
This course introduces students to the fundamentals of Microsoft Access. Topics include creating, modifying, and sorting database tables; creating queries; creating and enhancing custom forms and reports; modifying the database structure; and importing and exporting data to other programs. This course is intended for students majoring in a computer business technology field, professionals acquiring or updating basic skills in creating and editing professional databases, or anyone interested in learning the fundamental functions of Access.

FT; AA/AS; CSU.

CBTE 165 Webpage Creation with Dreamweaver
40-45 hours lecture/24-27 hours lab; 3 units
Grading: Letter Grade Only
Advisory: CBTE 114 with a Grade of "C" or better, or equivalent
This course is a hands-on study of webpage creation. Students use a HyperText Markup Language (HTML) editor to create HTML and Cascading Style Sheets (CSS). Other topics include adding behaviors; using templates and library items; and embedding hypertext links, video, graphics, and multimedia files. This course is designed for students and professionals acquiring or updating skills in creating and editing simple webpages.

FT; AA/AS; CSU.

CBTE 180 Microsoft Office
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: CBTE 114 with a Grade of "C" or better, or equivalent
This course is designed for students interested in an overview and basic working knowledge of Microsoft Office Professional suite for personal and/or professional purposes. Emphasis is placed on word processing, spreadsheet, database, and presentations, and the integration of data within and between the programs.

FT; AA/AS; CSU.

CBTE 210 Computers in Business
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course in an introduction to the role and use of computers, computer technology, and electronic communication in business environments. Emphasis is placed on privacy, security, information management, and ethical issues. This course is designed for students and professionals interested in the use and role of technology in business environments.

FT; AA/AS; CSU.

CHEM-Chemistry

CHEM 100 Fundamentals of Chemistry

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.

Corequisite: Completion of or concurrent enrollment in: CHEM 100L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for Chemistry 152 or concurrent enrollment in CHEM 200

This course is an introductory study of the language and tools of chemistry. Basic concepts of the structure, properties, interactions of matter and energy are studied, both qualitatively and quantitatively. Emphasis is placed on matter, chemical changes, chemical conversions, chemical bonding, and acid-base chemistry. This course is intended for students majoring in nursing, nutrition, or animal health technology and provides a foundation for further coursework in chemistry, in particular for introductory organic chemistry.

FT; AA/AS; CSU; UC; C-ID: CHEM 101 (CHEM 100, CHEM 100L).

CHEM 100L Fundamentals of Chemistry Laboratory

48-54 hours lab; 1 unit

Grading: Letter Grade or Pass/No Pass

Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.

Corequisite: Completion of or concurrent enrollment in: CHEM 100 with a Grade of "C" or better, or equivalent

This laboratory course is designed to illustrate the principles of inorganic and physical chemistry and to familiarize students with scientific reasoning, basic laboratory equipment and safe practices, scientific data collection methods and interpretation. This laboratory course is intended for students majoring in nursing, nutrition and allied health sciences, and provides a foundation for future lab work in chemistry.

FT; AA/AS; CSU; UC; C-ID: CHEM 101 (CHEM 100, CHEM 100L).

CHEM 103 General, Organic, and Biological Chemistry

64-72 hours lecture/48-54 hours lab; 5 units

Grading: Letter Grade Only

Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.

Limitation on Enrollment: This course is not open to students with previous credit for the combination of CHEM 100, CHEM 100L, CHEM 130, CHEM 130L.

This course is a one-semester survey of general, organic, and biological chemistry for nursing and other health-related fields. Topics include general chemistry, organic chemistry, and biological chemistry as they apply to the human body. The laboratory component includes qualitative and quantitative experiments as well as analysis of data. This course is intended for students majoring in nursing, nutrition, or allied health fields.

FT; AA/AS; CSU; UC.

CHEM 111 Chemistry in Society

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course emphasizes conceptual, not mathematical, topics in chemistry and scientific thinking. Current issues in environmental chemistry such as energy resources, air and water pollution are explored. Students discuss the effects and controversy surrounding the use of different forms of energy. In addition, current issues in organic and biochemistry are examined including trends in diets, certain medicines and drugs, and household items. Students analyze current trends or news involving chemistry. Topics include a basic understanding of matter and energy, physical and chemical changes, the atom, nuclear chemistry, bonding, acids and bases, organic chemistry, and biochemistry. This course is intended for non-science majors.

FT; AA/AS; CSU; UC.

CHEM 130 Introduction to Organic and Biological Chemistry

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent

Corequisite: Completion of or concurrent enrollment in: CHEM 130L with a Grade of "C" or better, or equivalent

This is a one-semester course that introduces the basic physical, chemical and structural features of organic and biological compounds. Topics such as bonding, saturated and unsaturated hydrocarbons, the chemistry of organic functional groups, and the properties of important biological compounds such as carbohydrates, fats, and proteins are covered. The importance of these compounds in our daily lives is emphasized. This course is designed for nursing, nutrition, and allied health majors.

FT; AA/AS; CSU; UC.

CHEM 130L Introduction to Organic and Biological Chemistry Laboratory

48-54 hours lab; 1 unit

Grading: Letter Grade or Pass/No Pass

Prerequisite: CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent

Corequisite: Completion of or concurrent enrollment in: CHEM 130 with a Grade of "C" or better, or equivalent

This is a one-semester laboratory course that illustrates the principles presented in introductory organic chemistry. Students are introduced to common organic chemistry laboratory equipment, fundamental organic and biochemical reactions, tests and techniques. Techniques covered include chromatography, recrystallization, and distillation. Tests and reactions of common organic functional groups, carbohydrates, fats, and amino acids are covered. Synthesis of a medicinal compound such as aspirin or a nitrogen-based analgesic is also covered. This course is designed for nursing, nutrition, and allied health majors.

FT; AA/AS; CSU; UC.

CHEM 152 Introduction to General Chemistry

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or placement Milestone M50 based on California Title 5 regulations.

Corequisite: Completion of or concurrent enrollment in: CHEM 152L with a Grade of "C" or better, or equivalent

Advisory: MATH 116 with a Grade of "C" or better, or equivalent or MATH 104 with a Grade of "C" or better, or equivalent or STAT C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for CHEM 151

This is a one-semester preparatory course in chemistry consisting of an intensive study of the principles of inorganic and physical chemistry in preparation for General Chemistry. Topics include atomic structure, chemical nomenclature, periodicity, chemical equations, stoichiometry, solutions, and gas laws. Emphasis is placed on problem solving and chemical calculations. This course is intended for those students majoring in one of the natural sciences, engineering, or related curricula who need to take General Chemistry.

FT; AA/AS; CSU; UC.

CHEM 152L Introduction to General Chemistry Laboratory

48-54 hours lab; 1 unit

Grading: Letter Grade or Pass/No Pass

Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or placement Milestone M50 based on California Title 5 regulations.

Corequisite: Completion of or concurrent enrollment in: CHEM 152 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for CHEM 151

This course is a one-semester laboratory in the principles of inorganic and physical chemistry in preparation for General Chemistry. Topics include chemical measurement, significant figures, laboratory safety, laboratory techniques, chemical reactions and stoichiometry. Emphasis is placed on problem solving, data analysis and chemical calculations. This course is intended for students majoring in one of the natural sciences, engineering or related curricula who need to take General Chemistry.

FT; AA/AS; CSU; UC.

CHEM 160 Introductory Biochemistry
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: CHEM 130 with a Grade of "C" or better, or equivalent
This course is an introduction to the chemistry of biochemical reactions and biochemical molecules. Topics include acid/base chemistry; thermodynamics; cell biology; amino acids and proteins; enzymes; lipids; membranes and transport; carbohydrates; metabolism; nucleic acids; and information transfer. This course is designed for students majoring in nutrition, allied health, nursing, and the chemical or life sciences.

FT; AA/AS; CSU; UC.

CHEM 200 General Chemistry I - Lecture
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations. and CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 200L with a Grade of "C" or better, or equivalent
This is the first course in a two-course sequence in general chemistry. Emphasis is placed on the principles and laws of inorganic chemistry, including quantitative, mathematical problem solving. Topics include chemical equations, stoichiometry, atomic theory and its relationship to periodicity of the elements, bonding theories, molecular geometry, calorimetry, thermochemistry, solution chemistry, liquids, solids, and the gas laws. This course is intended for science majors and all students interested in chemistry.

FT; AA/AS; CSU; UC; C-ID: CHEM 110; CHEM 120S (CHEM 200, 200L, 201, 201L).

CHEM 200L General Chemistry I - Laboratory
96-108 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations and CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 200 with a Grade of "C" or better, or equivalent
This is the first-semester laboratory course in a two-course sequence in general chemistry. Emphasis is placed on laboratory experiments that illustrate the fundamental principles and laws of chemical behavior and the properties of matter, including quantitative, mathematical problem-solving. Topics include techniques of data analysis, chemical formulas, equations, stoichiometry and maintenance of a laboratory notebook. This course is intended for science majors and all students interested in chemistry.

FT; AA/AS; CSU; UC; C-ID: CHEM 110; CHEM 120S (CHEM 200, 200L, 201, 201L).

CHEM 201 General Chemistry II - Lecture
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 200 with a Grade of "C" or better, or equivalent and CHEM 200L with a Grade of "C" or better, or equivalent and Successful completion of Intermediate Algebra with a grade of "C" or better or appropriate placement based on California Title 5 regulations.
Corequisite: Completion of or concurrent enrollment in: CHEM 201L with a Grade of "C" or better, or equivalent
This course is the second course in a two-course sequence in general chemistry and is intended for students majoring in science or satisfying prerequisites for professional schools. The course covers the principles of physical and inorganic chemistry with an emphasis on quantitative, mathematical problem solving. Topics in the course include chemical kinetics, chemical equilibrium, acid-base theory, thermodynamics, electrochemistry, coordination chemistry and nuclear chemistry. The course also includes an introduction to organic chemistry.

FT; AA/AS; CSU; UC; C-ID: CHEM 120S (CHEM 200, 200L, 201, 201L).

CHEM 201L General Chemistry II - Laboratory
96-108 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations and CHEM 200 with a Grade of "C" or better, or equivalent and CHEM 200L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 201 with a Grade of "C" or better, or equivalent
This is the second-semester laboratory course of a two-course sequence in general chemistry. It is intended for students majoring in science or satisfying prerequisites for professional schools. Emphasis is placed on the fundamental principles of physical and inorganic chemistry. Topics include techniques of data analysis, chemical kinetics, chemical equilibrium, acids, bases, acidic/basic salts, thermochemistry, electrochemistry, and coordination chemistry. Computer skills are introduced and applied to data analysis, laboratory simulations, and computer interfacing with laboratory equipment.

FT; AA/AS; CSU; UC; C-ID: CHEM 120S (CHEM 200, 200L, 201, 201L).

CHEM 231 Organic Chemistry I - Lecture
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 201 with a Grade of "C" or better, or equivalent and CHEM 201L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 231L with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is the first semester of a one-year course in organic chemistry. Major themes include, but are not limited to, bonding, molecular structure, isomerism, conformational analysis, nomenclature, reaction mechanisms, and synthesis. Emphasis is placed on the reactions of aliphatic compounds, such as alkanes, cycloalkanes, alkenes, alkynes, alkyl halides, and alcohols. Organic chemistry literature and spectral interpretation using techniques, such as infrared and nuclear magnetic spectroscopies, are introduced to support the above topics. This course is designed for students pursuing a degree in the chemical sciences or training in chemical technology, as well as other transfer students who need organic chemistry as part of preparation for majors, such as molecular biology, premedical, predental, and pharmacy.

FT; AA/AS; CSU; UC; C-ID: CHEM 160S (CHEM 231, 231L, 233, 233L).

CHEM 231L Organic Chemistry I - Laboratory
96-108 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 201 with a Grade of "C" or better, or equivalent and CHEM 201L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 231 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This laboratory course is designed to illustrate the principles presented in the first semester of organic chemistry. Emphasis is placed on the determination of physical properties and the separation, purification and identification of organic compounds. This course acquaints students with the equipment, glassware, techniques and safe practices specific to the organic chemistry laboratory. Techniques, such as measurement of physical constants, recrystallization, extraction, distillation and chromatography are used in the synthesis and/or characterization of selected classes of organic compounds, such as alkanes, alkenes, alkynes, alkyl halides, and alcohols. The organic chemistry literature and spectral interpretation using techniques, such as infrared and nuclear spectroscopies, are introduced to support the above topics. This course is designed for students pursuing a degree in the chemical sciences or training in chemical technology, as well as other transfer students who need organic chemistry as part of preparation for majors, such as molecular biology, premedical, predental, and pharmacy.

FT; AA/AS; CSU; UC; C-ID: CHEM 160S (CHEM 231, 231L, 233, 233L).

CHEM 233 Organic Chemistry II - Lecture
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 231 with a Grade of "C" or better, or equivalent and CHEM 231L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 233L with a Grade of "C" or better, or equivalent
This course is the second semester of a one-year sequence in organic chemistry. Major themes include, but are not limited to, molecular structure, molecular behavior, nomenclature, reaction mechanisms, and synthesis. Emphasis is placed on the reactions of selected classes of organic compounds, such as alcohols, ethers, aldehydes, ketones, carboxylic acids and their derivatives, amines, benzenoid and heterocyclic aromatics and their derivatives, carbohydrates, lipids, amino acids and their bio-organic compounds. The study of these molecules provides a backdrop for exploring the factors that govern particular transformations within a synthetic sequence. The use of print and electronic media and the interpretation of spectroscopic information (such as infrared, nuclear magnetic resonance, and ultraviolet-visible spectroscopies, and mass spectrometry) for the analysis and differentiation of molecular structures is continued. This course is designed for students pursuing a degree in the chemical sciences or training in chemical technology, as well as other transfer students who need organic chemistry as part of preparation for majors, such as molecular biology, premedical, predental, and pharmacy.

FT; AA/AS; CSU; UC; C-ID: CHEM 160S (CHEM 231, 231L, 233, 233L).

CHEM 233L Organic Chemistry II - Laboratory
96-108 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 231 with a Grade of "C" or better, or equivalent and CHEM 231L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: CHEM 233 with a Grade of "C" or better, or equivalent
This course is designed to illustrate the principles presented in the second semester of organic chemistry. Emphasis is placed on synthesis, purification and/or characterization of selected classes of organic compounds, including but not limited to aromatics, alcohols, aldehydes and ketones, carboxylic acids, amines, and simple examples of bio-organic molecules. Additional emphasis is placed on multi-step synthetic pathways and product identification using selected methods of qualitative organic analysis such as wet chemical and advanced spectroscopic techniques. Variation of scale from micro- to macro-quantities, and more advanced separation and analytical techniques, distinguish the level of this course from the first semester of organic chemistry laboratory. This course is designed for students pursuing a degree in the chemical sciences or training in chemical technology, as well as other transfer students who need organic chemistry as part of preparation for majors, such as molecular biology, premedical, predental, and pharmacy.

FT; AA/AS; CSU; UC; C-ID: CHEM 160S (CHEM 231, 231L, 233, 233L).

CHEM 251 Quantitative Analytical Chemistry
48-54 hours lecture/96-108 hours lab; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CHEM 201 with a Grade of "C" or better, or equivalent and CHEM 201L with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: MATH 121 with a Grade of "C" or better, or equivalent or MATH 150 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This is a course in quantitative analysis. Major topics include theory and practice of gravimetric and volumetric methods of chemical analysis and introduction to instrumental methods of analysis with a focus on precision and accuracy of experimental data. This course is intended for students majoring in chemistry or biochemistry and others who need the course for career advancement.

FT; AA/AS; CSU; UC.

CHEM 290 Independent Study
48-162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is designed for students who wish to conduct additional research, a special project, or learning activities in the field of chemistry. It is not intended to replace an existing course in the discipline. In this course students have a written contract with their instructor for activities such as: preparing problem analyses, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

CHIC-Chicana and Chicano Studies

CHIC 110A Introduction to Chicana and Chicano Studies
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introductory survey of the field of Chicana/o Studies and the factors that influence the Chicano culture. Emphasis is placed on the historical development of the Chicano people including their Mesoamerican roots, cultural identification, political activities, and their contemporary roles and influence in United States culture, society and economy. This course is designed for all students interested in Chicana/o Studies, Social Sciences, and Ethnic Studies.

FT; AA/AS; CSU; UC.

CHIC 135 Chicana/o Literature
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This is a survey course that examines the literary expressions of the Chicana/o people in the United States with an emphasis on the early 1800s to the present. Students in this class read and discuss works from a variety of literary genres. Students also read and discuss works from important contributors to the body of Chicana/o Literature in order to understand how the literature reflects the historical, socio-political, cultural experiences of the Chicana/o in the United States and its relationship to global literary movements. This course is designed for Chicana/o Studies majors and anyone interested in Ethnic Studies and literature.

FT; AA/AS; CSU; UC.

CHIC 141A United States History from a Chicano Perspective
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a survey of early American history from the Mexican/Chicano perspective. Emphasis is placed on the period of discovery to the period of Reconstruction with emphasis on the evolution, influence, and experience of the Chicano. Students analyze Chicano contributions to the political, social, economic, and cultural development of the United States. This course is intended for all students interested in history, ethnic studies, or other social sciences.

FT; AA/AS; CSU; UC.

CHIC 141B United States History from a Chicano Perspective
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This is a survey course in American history that covers the period of the American acquisition in 1848 of Mexico to the present. Emphasis is placed on the role of Chicanos in the development of the United States throughout the nineteenth and twentieth centuries. Topics include slavery in the former Mexican territories, the Native American experience, immigration patterns and constitutional development and government in California. This course is intended for all students interested in history, ethnic studies, or other social issues.

FT; AA/AS; CSU; UC.

CHIC 170 La Chicana
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is the study of the Chicana in American society in historical and sociological perspective. Emphasis is placed on Chicana feminist scholarship and cultural representations, border issues, resistance to patriarchy, and the search for power. This course is designed for all students interested in Chicana/o Studies and Ethnic Studies.

FT; AA/AS; CSU; UC.

CHIL-Child Development

CHIL 100 Principles and Practices of Early Childhood Education
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an examination of the current early childhood field and workforce needs. Emphasis is placed on underlying theoretical principles and competencies as they relate to becoming highly qualified and successful early childhood educators who are prepared to meet the needs of our diverse society. This course is a foundational course for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 101 Human Growth and Development
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course examines the progression of development in the physical, cognitive, social, and emotional domains and identifies developmental milestones for children from conception through adolescence. Emphasis is on interactions between biological processes and environmental factors. Students observe children, evaluate individual differences, and analyze characteristics of development at various stages according to developmental theories. This course is a core requirement for the State of California Child Development Permit and the State of California Community Care Licensing, Title XXII.

FT; AA/AS; CSU; UC; C-ID: CDEV 100.

CHIL 103 Lifespan Growth and Development
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of human development from conception to death. Topics include theories of human development, including the physical, socio-emotional, and cognitive stages from infancy through adulthood and aging. Students explore the interrelationship of the family's role and its influences throughout life. They also perform behavioral observations of various life stages. This course is intended for child development professionals or anyone interested in the study of human development.

FT; AA/AS; CSU; UC.

CHIL 111 Curriculum: Music and Movement
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces the function of music and fundamental movement skills in early childhood educational programs. Emphasis is placed on the development of music and movement skills, basic teaching and guidance techniques, and selection of appropriate materials and equipment. Other topics include designing and implementing curriculum plans that are appropriate for a variety of age groups and developmental levels. This course is intended for students interested in working in early childhood education, obtaining California child development permits, and transferring to four-year institutions.

FT; AA/AS; CSU.

CHIL 120 Observation and Assessment in Early Childhood Programs

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: CHIL 101 with a Grade of "C" or better, or equivalent

This course is an introduction to the appropriate use of assessment and observation tools and provides strategies for documenting young children's development and learning. Emphasis is placed on the use of data to inform the planning of learning environments and curriculum experiences. Topics include strategies for collaboration with families and professionals. Ten hours of observation in a child care setting is required. This course is designed for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 121 Curriculum: Art

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course introduces the creative process and experience in early childhood education programs. Emphasis is placed on creative development, art curriculum activities, basic teaching skills, guidance techniques, equipment, and materials. Students select appropriate activities for a variety of age and maturity levels based on child development theories and concepts. This course is intended for students majoring in Child Development or others interested in the creative process in early childhood education.

FT; AA/AS; CSU.

CHIL 130 Introduction to Curriculum

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: Completion of or concurrent enrollment in: CHIL 101 with a Grade of "C" or better, or equivalent

This course is an introduction to planning developmentally appropriate curriculum and environments for children birth through age eight. Emphasis is placed on utilizing theories of learning and developmentally appropriate practices to plan environments and curriculum in all content areas. Topics include indoor and outdoor environmental considerations as well as the integration of learning domains. This course is designed for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 131 Curriculum: Language/Science

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for CHIL 133 or CHIL 135

This course is an introductory study of the function of language, math, and science learning in early childhood educational programs. Emphasis is placed on the development of language and science curriculum activities, basic teaching skills, guidance techniques, equipment, and materials. Students select appropriate activities for a variety of age groups and maturity levels based on child development theories and concepts. This course is designed for Child Development majors and may be used to partially fulfill requirements for Title 22 licensing and child development permits.

FT; AA/AS; CSU.

CHIL 141 The Child, Family and Community

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a study of the dynamics of human development and socialization in a culturally pluralistic society. Emphasis is placed on the influences of contemporary family living and cultural patterns on the child, school-family relationships, and community resources and services that support and strengthen families. This course is a core requirement for California Child Development teacher/director center permits as well as for the State of California Department of Community Care Title 22 licensing childcare centers requirements. This course is designed for all students interested in child development and multi-cultural and behavioral studies.

FT; AA/AS; CSU.

CHIL 150 Teaching in a Diverse Society

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course examines both historical and current perspectives of diversity and inclusion and the impact of systemic societal influences on development and learning. Emphasis is placed on incorporating strategies for developmental, cultural, and linguistically appropriate anti-bias curriculum as well as approaches to promote inclusive and anti-racist classroom communities. Topics include the influence of the student's own culture and life experiences on teaching and interactions with children and families. This course is designed for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 151 Program Planning
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: CHIL 101 with a Grade of "C" or better, or equivalent and CHIL 160 with a Grade of "C" or better, or equivalent and CHIL 111 with a Grade of "C" or better, or equivalent or CHIL 121 with a Grade of "C" or better, or equivalent or CHIL 131 with a Grade of "C" or better, or equivalent or CHIL 133 with a Grade of "C" or better, or equivalent or CHIL 135 with a Grade of "C" or better, or equivalent
Corequisite: CHIL 270 or CHIL 275
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course focuses on planning the preschool learning environment to promote optimal development. Emphasis is placed on curriculum planning, guidance, safety, record keeping, observation techniques, project planning, and classroom management. Students enrolled in this course must be concurrently working in a preschool learning environment under the supervision of a person holding a Child Development Master Teacher Permit or the equivalent. This course is intended for students pursuing teaching careers in early care and education settings and partially fulfills State of California Permit and Title 22 teacher requirements.

FT; AA/AS; CSU.

CHIL 153 Techniques of Teaching Using the Reggio Emilia Approach
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CHIL 265E
This course is based on the early childhood philosophy and teaching techniques adopted by the schools from Reggio Emilia, Italy. Emphasis is placed on the overall principles of the Reggio Emilia philosophy of valuing the capabilities of the child, collaborations between the teachers, family and community, strategies of emergent curriculum, project work and the documentation process. Adaptation strategies for the use of Reggio in traditional preschools and childcare programs are addressed. This course is designed for students majoring in child development and for teachers and administrators as partial fulfillment of Title 22 and Child Development Permit requirements.

FT; AA/AS; CSU.

CHIL 160 Observation and Assessment of Children
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: Health and Safety. TB clearance within the last year is required.
This course focuses on behavioral patterns and growth processes of young children through the use of a variety of assessment and observation strategies to document child development and behavior. Child observations are conducted and analyzed through supervised participation in the campus early education center. Topics include the use of observation and assessment of children in planning, implementing, and evaluating early childhood curriculum and environments. This course partially fulfills the specialization requirements for the State of California Master Teacher Permit.

FT; AA/AS; CSU.

CHIL 161 Observations and Issues in Child Development
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: Health and Safety. TB clearance within the last year is required.
This course explores current issues in child development and how these issues influence both the child and family. The course emphasizes effective communication skills, positive guidance techniques, kindergarten readiness skills, and appropriate classroom activities. It is intended for students majoring in child development and parents of children enrolled in the campus child development center. It partially fulfills the specialization requirements for the State of California Master Teacher Permit.

FT; AA/AS; CSU.

CHIL 162 Positive Child Guidance
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course explores various behavior management techniques; interpersonal communication; and ideas and suggestions to assist caregivers in guiding a child's behavior. Students apply developmental, cultural, and communicative principles in combination with observations of real situations. The focus is on children from birth through age 10. This course partially fulfills the specialization requirements for the State of California Master Teacher Permit. It is intended for students who plan careers in early childhood and family support programs.

FT; AA/AS; CSU.

CHIL 163 Experience in Child Guidance Techniques for Early Childhood Classrooms

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: CHIL 101 with a Grade of "C" or better, or equivalent and CHIL 141 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for CHIL 162

This course explores guidance techniques for working with children from birth to age eight in early education settings. Emphasis is placed on the application of social and emotional strategies, developmentally appropriate practices, supportive environmental design, and the principles of professional ethics and diversity in working with children and families. Observation techniques and guided practice are emphasized within a three hour weekly lab experience. This course is intended for students who plan careers in early childhood and family support programs.

FT; AA/AS; CSU.

CHIL 165 Children With Special Needs

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a survey of education for children with special needs. Emphasis is placed on the types and characteristics of special needs as well as on the methods for integrating children with special needs into inclusive educational settings. Topics include the history of special education legislation, current educational compliance requirements and community resources available to parents, teachers and other professionals. This course is designed for professionals and parents who work with children with special needs. This course partially fulfills the specialization requirement for the State of California Master Teacher Permit.

FT; AA/AS; CSU.

CHIL 166 Curriculum for Diverse Learners

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is an in-depth study of inclusive environments, guidance techniques, and curriculum planning strategies that are designed to meet the needs of the diverse children and families in our current society. Emphasis is placed on cognitive, physical, social- emotional, cultural, and linguistic diversity, and how well-designed environments, intentionally planned curriculum, and supportive behavioral strategies work together to provide a classroom that is welcoming and ensures that all children and families in the program thrive. This course is designed for parents, teachers, nurses, social workers, and paraprofessionals employed in schools and early childhood programs. This course partially meets the specialization requirements for the Master Teacher Permit.

FT; AA/AS; CSU.

CHIL 175 Infant-Toddler Growth and Development

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course examines the physical, social, emotional, and cognitive development of the infant and toddler and appropriate strategies to support this development. Emphasis is placed on culturally responsive techniques that support diverse family practices and connections. Appropriate observations and visitations to the community are required. This course meets State of California Title 22 licensing regulations for teachers in infant-toddler settings and fulfills the infant-toddler specialization requirement for the State of California Master Teacher Permit when taken in addition to CHIL 176. It is intended for students majoring in child development, parents, or those interested in infant-toddler care.

FT; AA/AS; CSU.

CHIL 176 Principles of Infant-Toddler Caregiving

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a study of the principles of infant-toddler care, including all aspects of infant and toddler development. Emphasis is placed on planning appropriate indoor and outdoor curriculum and environments. Topics include health, nutrition, and safety for the very young as well as licensing regulations, staff interactions, parent participation, and program development. This course meets State of California Title 22 licensing regulations for teachers in infant-toddler settings and fulfills the infant-toddler specialization requirement for the State of California Master Teacher Permit when taken in addition to CHIL 175. It is intended for students majoring in child development, parents, or those interested in infant-toddler care.

FT; AA/AS; CSU.

CHIL 180 Nutrition, Health, and Safety for Children

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a survey of the laws, regulations, standards, policies, procedures, and best practices related to health, safety, and nutrition in care and education settings for children birth through middle childhood. Emphasis is placed on the teacher's role in prevention strategies, nutrition and meal planning, integrating health safety and nutrition experiences into daily routines, and overall risk management. This course is designed for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 188 Violence in the Lives of Children and Families

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course examines the causes and effects of violence in the lives of children and families. Emphasis is placed on the skills needed for conflict resolution and on the environmental set-ups and curricula that promote peaceful, cooperative, and nonviolent play and interactions. Other topics include the history, current legislation, reporting responsibilities, and identification of abuse. This course is designed for parents, teachers, nurses, and other child care professionals who wish to learn strategies for understanding and responding to the various forms of stress and violence that affect children today.

FT; AA/AS; CSU.

CHIL 193 Early Childhood Practicum

48-54 hours lecture/96-108 hours lab; 5 units

Grading: Letter Grade Only

Prerequisite: CHIL 100 with a Grade of "C" or better, or equivalent and CHIL 101 with a Grade of "C" or better, or equivalent and CHIL 120 with a Grade of "C" or better, or equivalent and CHIL 130 with a Grade of "C" or better, or equivalent and CHIL 141 with a Grade of "C" or better, or equivalent

This course provides a supervised field experience in the development of early childhood teaching competencies and the daily planning of appropriate curriculum and environments for young children. Emphasis is placed on creating connections between theory and practice, developing professional behaviors, and building a comprehensive understanding of how to work effectively with children and families. Reflective practice is incorporated as student teachers design approaches, strategies, and techniques that promote children's development and learning and evaluate their own progress as a teacher of young children. Guidance is provided under the supervision of Early Childhood Education (ECE) / Child Development (CD) faculty and other qualified early education professionals. This course is designed for students majoring in child development and those interested in the field.

FT; AA/AS; CSU.

CHIL 202 Administration of Early Childhood Programs

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: CHIL 101 with a Grade of "C" or better, or equivalent and CHIL 141 with a Grade of "C" or better, or equivalent

Advisory: CHIL 111 with a Grade of "C" or better, or equivalent and CHIL 121 with a Grade of "C" or better, or equivalent or CHIL 131 with a Grade of "C" or better, or equivalent

This course is an overview of early childhood education program administration. Topics include theoretical perspectives on early childhood education, licensing regulations, funding sources, budgetary considerations, personnel management, curriculum development, and teacher selection. The course meets State of California Title 22 licensing regulations for site supervisors. It also partially fulfills State of California matrix requirements for Program Director and Site Supervisor Permits. This course is intended for anyone seeking a position as a site supervisor or center director.

FT; AA/AS; CSU.

CHIL 210 Supervision of Early Childhood Programs

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: CHIL 141 with a Grade of "C" or better, or equivalent and CHIL 151 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for CHIL 201 or 201B

This course is a study of the supervisory tools and techniques required to organize and evaluate early childhood programs. Emphasis is placed on supervisory functions, in-service staff training, educational philosophies, program and staff evaluation, models of parent education and involvement, and supportive services. This course is designed for students who intend to go into supervisory positions in early childhood education. It partially fulfills the State of California Child Development Permit Matrix requirement for supervisors and directors and also meets the State of California Title 22 licensing regulations for directors.

FT; AA/AS; CSU.

CHIL 215 Adult Supervision and Mentoring in Early Childhood Settings

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: CHIL 151 with a Grade of "C" or better, or equivalent

This course is a study of the methods and principles of supervising adults in early childhood settings. Students study effective models for guiding and evaluating adults, developing positive communication skills and recognizing the role of mentors in teaching environments. This course is designed for students who supervise other adults in classrooms while simultaneously providing appropriate settings for young children. It partially meets the requirements for the Master Teacher Permit, Site Supervisor, and Program Director permits issued by the California Commission on Teacher Credentialing.

AA/AS; CSU.

CHIL 270 Work Experience

54 - 216 hours other; 1-4 units

Grading: Letter Grade Only

This course is for Child Development students to acquire on-the-job training within an early care and education facility and partially fulfills State of California Permit and Title 22 teacher requirements. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

FT; AA/AS; CSU.

CHIL 275 Supervised Field Study

48-162 hours other; 1-3 units

Grading: Letter Grade Only

Prerequisite: CHIL 120 with a Grade of "C" or better, or equivalent or CHIL 130 with a Grade of "C" or better, or equivalent

This directed field study course provides students with an opportunity to apply classroom information in a practical setting with supervision from faculty as well as fieldsite supervisors. This course is intended for students who plan to teach or supervise in early childhood settings. It partially fulfills Title 22 and the State of California Child Development Permit experience requirement.

FT; AA/AS; CSU.

CHIL 280 Environmental Rating Scale

16-18 hours lecture; 1 unit

Grading: Letter Grade Only

This course introduces the function of the Early Childhood Environmental Rating Scale (ECERS). The course focuses on the importance of the environment and interactions in early childhood programs. This course is intended for early childhood professionals currently working in the field as well as students seeking professional development, child development permits, and employment opportunities.

FT; AA/AS; CSU.

CHIL 291 Child Development Lab Practicum

48-216 hours lab; 1-4 units

Grading: Letter Grade Only

Advisory: CHIL 161 with a Grade of "C" or better, or equivalent

This course provides supervised practical experience at the campus child development lab to supplement child development courses and related curriculum. Through on-site training, students gain practical knowledge in curriculum development; guidance strategies; observation; and child growth and development. This course is intended for students who plan careers in early childhood education and family support agencies or for parents who seek strategies and techniques for guiding children. The course may be used toward the field experience component for the State of California Child Development Permit.

FT; AA/AS; CSU.

CHIL 291A Child Development Center Practicum
48-54 hours lab; 1 unit
Grading: Letter Grade Only
This course provides directed laboratory experience in the campus Child Development Center. Students become familiar with the operating policies and procedures of a preschool program and observe and access the development of children as they reference the participant handbook and describe the policies of the campus lab. This course may be used toward the experience component for the State of California Child Development Permit. It is intended for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children.

FT; AA/AS; CSU.

CHIL 291B Child Development Center Practicum
48-54 hours lab; 1 unit
Grading: Letter Grade Only
This course provides directed laboratory experience in the campus Child Development Center. Students examine children's development, their safety, health, and their nutritional needs in a preschool setting with an emphasis on implementation with young children. This course may be used toward the experience component for the State of California Child Development Permit and toward the Health and Safety training requirements for Title 22. It is intended for students who plan careers in early childhood education and family support programs and for parents who seek practical experience in guiding and teaching children.

FT; AA/AS; CSU.

CHIL 291C Child Development Center Practicum
48-54 hours lab; 1 unit
Grading: Letter Grade Only
This course provides directed laboratory experience in the campus Child Development Center. Emphasis is placed on early education teaching techniques and selection of curriculum activities for children that are developmentally appropriate. This course may be used toward the experience component for the State of California Child Development Permit. It is intended for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children.

FT; AA/AS; CSU.

CHIL 291D Child Development Center Practicum
48-54 hours lab; 1 unit
Grading: Letter Grade Only
This course provides directed laboratory experience in the campus Child Development Center. Students examine effective routines and transitional activities in the organization and structure of an early child development setting. The class emphasizes positive guidance techniques for young children, and the selection of equipment and materials for young children that are developmentally age appropriate. This course may be used toward the field experience component for the State of California Child Development Permit. It is intended for students who plan careers in early childhood and family support programs and for parents who seek practical experience in guiding and teaching children.

FT; AA/AS; CSU.

CISC-Computer and Information Sciences

CISC 179 Introduction to Python Programming
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: CISC 181 with a Grade of "C" or better, or equivalent
This is an introductory course in programming using the Python language and incorporating the fundamentals of object oriented programming. Topics include the use and programming of the mouse, windows, forms, menus, dialog boxes, icons, buttons, text fields, files, graphics, and other components of the Windows environment. Students learn to analyze user needs and requirements; design the user interface; assign properties to objects in the user interface; code event procedures; test and debug completed programs and applications; and complete final user documentation. This course is intended for Computer and Information Sciences majors or anyone interested in the Python programming language.

FT; AA/AS; CSU; UC.

CISC 181 Principles of Information Systems
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
This course is an introduction to basic principles and theory relating to problem solving and analysis in business organizations using computers and software packages. Emphasis is placed on computer organization, data processing systems, decision support systems, and systems analysis. Business software is reviewed with an emphasis on spreadsheet systems including hands-on spreadsheet applications. This course is intended for the transfer student planning to major in business, economics, or social science.

FT; AA/AS; CSU; UC.

CISC 186 Visual Basic Programming
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CISC 181 with a Grade of "C" or better, or equivalent
This course is an introduction to programming using Visual Basic employing the fundamentals of event oriented programming in a Windows environment. Topics include the use and programming of a mouse, windows, forms, menus, dialog boxes, icons, buttons, text fields, files, graphics, and other components of a Windows environment in Visual Basic. This course is intended for students majoring in computer science or anyone interested in computer programming.

FT; AA/AS; CSU; UC.

CISC 187 Data Structures in C++
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CISC 192 with a Grade of "C" or better, or equivalent
This course introduces students to data structures and object-oriented software engineering. Emphasis is placed on implementing basic data structures, including collections and linked structures (stacks, queues, lists, arrays, trees, and hash tables) from the perspective of object-oriented programming. Topics include algorithms, object-oriented analysis, and the design and implementation of data structures in C++. This course is designed for students majoring in computer information systems and professionals in the field who want to update their programming skills.

FT; AA/AS; CSU; UC; C-ID: COMP 132.

CISC 190 Java Programming
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: CISC 186 with a Grade of "C" or better, or equivalent or CISC 106 with a Grade of "C" or better, or equivalent or CISC 150 with a Grade of "C" or better, or equivalent or CISC 181 with a Grade of "C" or better, or equivalent or CISC 182 with a Grade of "C" or better, or equivalent
This course is an introduction to programming using Java. The course covers the fundamentals of object-oriented programming utilizing the Java programming language for general purpose business programs and interactive games. This course is intended for students majoring in computer and information sciences or anyone interested in the Java programming language.

FT; AA/AS; CSU; UC; C-ID: COMP 122.

CISC 191 Intermediate Java Programming
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CISC 190 with a Grade of "C" or better, or equivalent
This course is an intermediate level study of the Java programming language. Topics include single and multidimensional arrays; objects and classes; object-oriented programming; inheritance and polymorphism; exception handling and text input/output (I/O); abstract classes and interfaces; graphical user interfaces (GUIs); recursion; concurrency; and generic collections and data structures, such as linked lists, queues, and stacks. This course is intended for students majoring in computer and information sciences or anyone interested in learning more about the Java programming language.

FT; AA/AS; CSU; UC; C-ID: COMP 132.

CISC 192 C/C++ Programming
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: CISC 186 with a Grade of "C" or better, or equivalent
This course presents basic programming concepts using the C++ programming language. The organization of standard Input/Output (I/O) classes is emphasized. Structured- and object-oriented programming techniques are presented and used to design and implement a variety of programming problems. This course is intended for students majoring in computer science or anyone interested in computer programming.

FT; AA/AS; CSU; UC.

CISC 205 Object Oriented Programming using C++
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CISC 192 with a Grade of "C" or better, or equivalent
This course introduces students to Object Oriented Programming (OOP) using the C++ programming language. Emphasis is placed on essential concepts related to OOP, including use of classes and objects, inheritance, templates, polymorphism, pointers and references, and input/output (I/O) streams. This course is intended for students majoring in computer information technology and all students interested in OOP.

FT; AA/AS; CSU; UC.

CISC 211 Computer Organization and Assembly Language

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: CISC 179 with a Grade of "C" or better, or equivalent or CISC 190 with a Grade of "C" or better, or equivalent or CISC 192 with a Grade of "C" or better, or equivalent or CISC 193 with a Grade of "C" or better, or equivalent
Advisory: MATH 116 with a Grade of "C" or better, or equivalent or MATH 141 with a Grade of "C" or better, or equivalent
This course is an introduction to the organization of modern digital computers and assembly language programming. Topics include language syntax; instruction set mnemonics; and segment, index, pointer, general purpose, and flag registers. A variety of memory addressing techniques are covered, as well as stack operations, particularly those associated with passing parameters to subroutine calls. Additional topics include machine architecture; memory addressing; input/output; interrupts; control structures; compiling; linking; and printer and disk interfaces. This course is intended for students majoring in computer and information sciences.

FT; AA/AS; CSU; UC; C-ID: COMP 142.

CISC 246 Discrete Mathematics for Computer Science

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: CISC 106 with a Grade of "C" or better, or equivalent or CISC 179 with a Grade of "C" or better, or equivalent or CISC 187 with a Grade of "C" or better, or equivalent or CISC 190 with a Grade of "C" or better, or equivalent or CISC 192 with a Grade of "C" or better, or equivalent or CISC 193 with a Grade of "C" or better, or equivalent or CISC 201 with a Grade of "C" or better, or equivalent or MATH 107 with a Grade of "C" or better, or equivalent
Advisory: MATH 245 with a Grade of "C" or better, or equivalent
This is a course in discrete mathematics to include concepts and techniques in practical and theoretical computer science, and related disciplines. Topics include graph theory, algebras, probability theory, complexity analysis and models of computation. This course is intended for transfer students planning to major in computer science.

FT; AA/AS; CSU; UC; C-ID: COMP 152.

CISC 290 Independent Study

48-162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, special problems or projects, or other learning activities in the field of computer and information sciences. It is not intended to replace an existing course in the discipline. In this course students have a written contract with their instructor for activities such as: problem analyses, engaging in primary research, and preparing reports.

AA/AS; CSU.

COMM-Communication Studies

For additional Communication Studies courses see COMS

COMM C1000 Introduction to Public Speaking

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for COMS 103 or SPEE 103

Part 1 (Identical): In this course, students learn and apply foundational rhetorical theories and techniques of public speaking in a multicultural democratic society. Students discover, develop, and critically analyze ideas in public discourse through research, reasoning, organization, composition, delivery to a live audience and evaluation of various types of speeches, including informative and persuasive speeches. Part 2 (Local): This course also includes an introduction to the rhetorical tradition of oral communication, emphasizing research, writing, and verbal and nonverbal messages. Communication theory is explored and applied to various live presentations using a variety of organizational contexts. This course is designed for communication studies majors and anyone interested in argumentation and the development of critical thinking skills.

FT; AA/AS; CSU; UC; C-ID: COMM 110.

COMS-Communication Studies

COMS 103 Oral Communication Studies see COMM C1000 Introduction to Public Speaking

COMS 104 Advanced Public Communication

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: COMM C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for SPEE 104

This course covers theory, practice, and critical analysis of public communication, including speeches on subjects of current interest both local and global. It includes an introduction to the relationship between rhetorical theory and criticism and rhetorical practice in public communication. Special emphasis is placed on advanced platform speaking and limited preparation speaking. This course is designed for students majoring in communication studies or anyone interested in advancing fundamental speech skills.

FT; AA/AS; CSU; UC.

COMS 135 Interpersonal Communication

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Limitation on Enrollment: This course is not open to students with previous credit for SPEE 135

This course is a study of effective interpersonal skill development and practice in oral and written communication. Emphasis is placed on the personal, situational, and cultural influences of interaction. Topics include human perception, interpersonal dynamics, listening, conflict management, and verbal and nonverbal symbol systems. The course is intended for students who communicate in one-on-one situations, including communication, fashion, allied health, public service, and business majors as well as those interested in further development of effective interpersonal skills in work, volunteer, and personal environments.

FT; AA/AS; CSU; UC; C-ID: COMM 130.

COMS 160 Argumentation and Critical Thinking
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for SPEE 160
This course is a study of argumentation and development of critical thinking through the rhetorical tradition. Emphasis is placed on research, analysis of propositions, testing of evidence, and development of constructive and refutation cases through the writing and revision of a sequence of critical compositions as a foundation for oral debate. Students locate, evaluate, and integrate outside sources into their writing assignments, which total at least 6,000 words for the semester. This course is designed for communication studies majors and anyone interested in argumentation and the development of critical thinking skills through composition and spoken discourse.

FT; AA/AS; CSU; UC; C-ID: COMM 120.

COMS 170 Small Group Communication
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: COMM C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for SPEE 170
This course is a study of the concepts and theories related to group formation and development, and basic group communication dynamics. Students lead and participate in various forms of group discussion and activities. This course is designed for communication studies and business majors as well as for anyone interested in working effectively in small group settings.

FT; AA/AS; CSU; UC; C-ID: COMM 140.

COMS 180 Intercultural Communication
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for SPEE 180
This course is a study of communication between members of diverse cultures. This study includes how cultures, cultural identity, languages, and social patterns affect communication between ethnic and cultural groups. Topics include interdependency in global society, verbal and nonverbal language systems, conflict styles, and contextual cultural implications. Students apply the principles of intercultural communication to contemporary cultural and global communication issues. This course is designed for communications majors and all students interested in developing intercultural communication skills.

FT; AA/AS; CSU; UC; C-ID: COMM 150.

COMS 201 Communication and Community
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: COMM C1000 with a Grade of "C" or better, or equivalent
This course is an overview of the academic discipline of Communication Studies, including its history, methods, processes, contexts, and fields of study. Other topics include basic models of communication, communication-related career fields, and health communication. This course is intended for Communication Studies majors or prospective majors.

FT; AA/AS; CSU; UC.

COMS 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is not open to students with previous credit for SPEE 290
This course is for students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

DIES-Diesel Technology

DIES 090 Forklift Operation

8-9 hours lecture/24-27 hours lab; 1 unit

Grading: Letter Grade Only

This course covers the theory, principles, and operation of forklifts. Topics include forklift safety; use and operation; load handling; preventive maintenance and upkeep; and problem identification. This course is designed to prepare students for the Occupational Safety and Health Administration (OSHA) Forklift Certification.

FT; AA/AS.

DIES 100 Introduction to Diesel Technology

16-18 hours lecture/48-54 hours lab; 2 units

Grading: Letter Grade Only

This beginning class introduces students to the field of medium/heavy duty diesel-powered trucks and equipment. Topics include common types of diesel-powered trucks and equipment; shop safety; industrial fasteners; hydraulic fittings; technician tool requirements; service shop organization and procedures; and measuring tools. Students also receive an overview of the Miramar College Diesel Technology program. This course is intended for students majoring in Diesel Technology or those interested in the heavy duty transportation industry.

FT; AA/AS; CSU.

DIES 101 Heavy Duty Truck, Advanced Transportation, Equipment Preventive Maintenance and Inspections

16-18 hours lecture/48-54 hours lab; 2 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent

This course covers preventive maintenance on trucks and other heavy duty equipment. Students learn to perform inspection and maintenance procedures on heavy duty trucks, alternative fueled trucks, and heavy equipment. Topics include the theory of maintenance practices; industry-related Material Safety Data Sheets (MSDS) and hazardous materials (HAZMAT) documentation; California Biannual Inspection of Terminal (B.I.T.); heavy duty shop tools and equipment usage; and service literature usage. This course is designed for students interested in the commercial diesel and alternative fuel industry.

FT; AA/AS; CSU.

DIES 102 Heavy Duty Truck and Heavy Equipment Heating and Air Conditioning

16-18 hours lecture/48-54 hours lab; 2 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent

This course covers the fundamental skills necessary for diagnosing and servicing heavy duty truck and heavy equipment heating, ventilation, and air conditioning (HVAC) systems. Topics include HVAC safety, theory of operation, use of HVAC diagnostic tools, and repair procedures. This course is designed for students interested in the commercial diesel vehicle industry.

FT; AA/AS; CSU.

DIES 105 Measuring Tools and Applied Mathematics

16-18 hours lecture/48-54 hours lab; 2 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for DIES 110 or 120

This course covers the care and use of precision measuring tools and common shop measuring tools. Students also learn industry-standard mathematical concepts and applications related to the diesel service industry. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 121 Diesel Engines A

64-72 hours lecture/144-162 hours lab; 7 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for DIES 110

In this course students learn the fundamental skills necessary to perform major overhaul operations on Detroit Diesel engines. Topics include theory of operation; construction and application; use of diesel repair shop equipment and tools; and dynamometer performance testing. This course is designed for students who intend to develop foundational skills applicable to the diesel repair industry.

FT; AA/AS; CSU.

DIES 122 Diesel Engines B

64-72 hours lecture/144-162 hours lab; 7 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 120
In this course students learn the fundamental skills necessary to perform major overhaul operations on Caterpillar diesel engines. Topics include theory of operation; construction and application; use of diesel repair shop equipment and tools, and dynamometer performance testing. This course is designed for students who intend to develop foundational skills applicable to the diesel repair industry.

FT; AA/AS; CSU.

DIES 123 Diesel Engines C

16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 127
In this course students learn the fundamental skills necessary to evaluate and repair engine components and accessories including cylinder blocks. Students also learn how to remove and install engines. This course is designed for students who intend to develop foundational skills applicable to the diesel repair industry.

FT; AA/AS; CSU.

DIES 124 Diesel Engines D

64-72 hours lecture/144-162 hours lab; 7 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 110
In this course students learn the fundamental skills necessary to perform major overhaul operations on Cummins diesel engines. Topics include theory of operation; construction and application; use of diesel repair shop equipment and tools; and dynamometer performance testing. This course is designed for students who intend to develop foundational skills applicable to the diesel repair industry.

FT; AA/AS; CSU.

DIES 125 Diesel Engines I

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 110 or 121
In this course students learn the fundamental skills necessary to perform major overhaul operations on Detroit Diesel engines. Topics include theory of operation; construction and application; and the use of diesel repair shop equipment and tools. This course is designed for students who have prior experience in the diesel repair industry.

FT; AA/AS; CSU.

DIES 126 Diesel Engines II

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 120, 201A, or 122
In this course students learn the fundamental skills necessary to perform major overhaul operations on Caterpillar diesel engines. Topics include theory of operation; construction and application; and the use of diesel repair shop equipment and tools. This course is designed for students who have prior experience in the diesel repair industry.

FT; AA/AS; CSU.

DIES 128 Diesel Engines III

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 124
In this course students learn the fundamental skills necessary to perform major overhaul operations on Cummins diesel engines. Topics include theory of operation; construction and application; and the use of diesel repair shop equipment and tools. This course is designed for students who have prior experience in the diesel repair industry.

FT; AA/AS.

DIES 131 Alternative-Fueled Engine Overhaul
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the fundamental skills necessary to perform major overhaul operations on alternative-fueled engines. Topics include theory of operation; construction and application; and the use of repair shop tools and equipment associated with large bore alternative-fueled engines. This course is designed for students who have prior experience in the diesel industry.

FT; AA/AS; CSU.

DIES 135 Applied Failure Analysis
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: DIES 105 with a Grade of "C" or better, or equivalent
This course introduces students to the fundamental principles involved in failure analysis of heavy duty diesel engine components. Students also learn problem solving techniques based on basic metallurgy concepts, different types of metals, metal forming processes, analysis of fractures, and identification of component wear characteristics. This course is designed for students interested in the commercial diesel and alternative fuel industry.

FT; AA/AS; CSU.

DIES 137 Diesel Fuel Injection Systems
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, principles of operation, laboratory practice, servicing, and maintenance procedures for diesel engine fuel systems used on heavy duty diesel trucks and equipment. Students learn fundamental skills required to repair high-pressure and electronically controlled fuel systems. Topics include pump timing, nozzle and unit-injector replacement, and cylinder cutout procedures. Students also learn the proper use of electronic tooling used in the diesel industry. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 137A Advanced Diesel Fuel Injection Systems
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: DIES 137 with a Grade of "C" or better, or equivalent and DIES 144 with a Grade of "C" or better, or equivalent
This course focuses on the electronically controlled fuel injection systems of Caterpillar, Cummins, and Detroit Diesel engines. Students perform independently while learning system design, analysis, and mechanical adjustments. Students also learn how to use electronic service tools to access and set programmable system features and electronic diagnostic tools to troubleshoot system malfunctions. This course is intended for students interested in advanced diesel technology systems.

FT; AA/AS; CSU.

DIES 138 Electrical Systems
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 130 or 215
This course covers the theory, principles of operation, laboratory practice, servicing, and maintenance procedures for diesel truck and equipment electrical systems. Topics include starting, charging, cab, and chassis systems. Students learn principles, practices, maintenance, and troubleshooting of batteries, starters, alternators, and truck and trailer wiring systems. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 144 Electronics for Diesel Technology
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course covers basic electrical and electronic theory related to heavy duty diesel powered equipment. Topics include basic electrical theory, series circuits, parallel circuits, circuit testing, and component identification. Students also learn the function and operation of electronic sensors. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 155 Air Brake Systems

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 140 or 214
This course covers the theory, laboratory practice, principles of operation, overhaul, and servicing of heavy duty transportation and equipment air brake systems. Topics include servo type brakes, foundation type brakes, S-cam brakes, wedge brakes, disc brakes, air compressors, air reservoir systems, piping, control valves, switches, anti-lock, brake service procedures, reusability guidelines, and actuators used in heavy duty transportation and equipment air systems. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 160 Heavy Duty Manual Transmissions

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 130 or 211A
This course covers the theory, laboratory practice, principles of operation, overhaul, maintenance, and troubleshooting of heavy duty manual transmissions for heavy duty transportation (HDT) vehicles using accepted industry standards and procedures. Topics include transmission types, powerflow, disassembly, component inspection, reassembly, reusability guidelines, air shift systems, troubleshooting procedures, and gear ratio calculations for manual transmissions used on Class 6 through Class 8 trucks. This course is designed for students majoring in diesel technology or those interested in the heavy duty transportation industry.

FT; AA/AS; CSU.

DIES 165 Truck Automatic Transmissions

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, laboratory practice, principles of operation, overhaul, maintenance, and troubleshooting of heavy duty automatic transmissions for heavy duty transportation (HDT) vehicles using accepted industry standards and procedures. Topics include transmission types and powerflow; torque converter types and powerflow; disassembly; component inspection; reassembly; reusability guidelines; transmission shift control systems; troubleshooting procedures; and planetary gear ratio calculations for automatic transmissions used on Class 6 through Class 8 trucks. This course is designed for students majoring in diesel technology or those interested in the heavy duty transportation industry.

FT; AA/AS; CSU.

DIES 170 Truck Drive Axles and Specifications

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 140 or 211B
This course covers the theory, laboratory practice, principles of operation, overhaul, maintenance, and troubleshooting of heavy duty drive axles for heavy duty transportation (HDT) vehicles using accepted industry standards and procedures. Topics include drive axle types, powerflow, disassembly, component inspection, reassembly, reusability guidelines, troubleshooting procedures, and truck specifications for drive axles used on Class 6 through Class 8 trucks. This course is designed for students majoring in diesel technology or those interested in the heavy duty transportation industry.

FT; AA/AS; CSU.

DIES 175 Truck Chassis R&R

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DIES 130 or 140
This course covers the theory, laboratory practice, and principles of component removal, overhaul, and servicing of heavy duty clutches used in heavy duty transportation (HDT). Students learn how to use specialized and general shop equipment and hand tools to remove and replace (R&R) components of heavy duty transportation units. Other topics include the operation, installation, and troubleshooting of single and multiple disc clutches. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 180 Steering, Suspension, and Driveline Systems

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, laboratory practice, principles of operation, servicing, overhaul, and maintenance of Heavy Duty Transportation (HDT) steering, suspension, and driveline systems used on Class 6 through Class 8 trucks. Topics include caster, camber, toe-in, basic alignment, steering systems, driveline systems, and suspension systems used on commercial trucks. Students learn common industry methods to perform vibration analysis of steering, suspension, and driveline systems as well as related adjustments and repairs. This course is designed for students majoring in Diesel Technology or those interested in the off-highway heavy equipment industry.

FT; AA/AS; CSU.

DIES 200 Mobile Hydraulic Systems

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, principles of operation, laboratory practice, servicing, and maintenance procedures for diesel truck and equipment hydraulic systems. Topics include hydraulic schematics, reservoirs, pumps, actuators, valves, piping, and fittings. Students learn how to use standard industry procedures, hydraulic schematics, and test equipment for diagnosing, analyzing, and repairing heavy duty transportation (HDT) mobile hydraulic systems and components. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 210 Brakes, Final Drives and Steering Systems

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers principles and practices in the operation and servicing of heavy equipment brakes, final drive systems, and steering systems. This course is designed for students interested in the off-highway diesel equipment industry.

FT; AA/AS; CSU.

DIES 220 Undercarriage

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the fundamentals of operation, wear analysis, preventive maintenance, and major service of track-type undercarriages. This course is designed for students interested in the off-highway diesel equipment industry.

FT; AA/AS; CSU.

DIES 230 Heavy Equipment Transmissions

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, laboratory practice, principles of operation, overhaul, maintenance, and troubleshooting of heavy equipment power-shift transmissions (HET) using accepted industry standards and procedures. Topics include transmission types and powerflow; torque converter types and powerflow; disassembly; component inspection; reassembly; reusability guidelines; transmission shift control systems; troubleshooting procedures; and planetary gear ratio calculations for automatic transmissions used on off-highway heavy equipment. This course is designed for students majoring in diesel technology or those interested in the off-highway heavy equipment industry.

FT; AA/AS; CSU.

DIES 240 Equipment Chassis R&R
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: DIES 100 with a Grade of "C" or better, or equivalent
This course covers the theory, laboratory practice, and principles of component removal, overhaul, and servicing of heavy duty clutches used in heavy duty transportation (HDT). Students learn how to use specialized and general shop equipment and hand tools to remove and replace (R&R) components on heavy equipment. Other topics include the operation, installation, and troubleshooting of single and multiple disc clutches. This course is intended for students majoring in Diesel Technology.

FT; AA/AS; CSU.

DIES 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in Diesel Technology or those interested in the diesel powered equipment industry.

FT; AA/AS; CSU.

DFLM-Digital Film Production

DFLM 101 Introduction to Film
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the narrative, thematic, and aesthetic aspects of cinema. It examines a wide variety of films and emphasizes styles of directors as well as aspects of characterization and themes. Topics include the artistic quality of film and the development of technical methods used by filmmakers to present their ideas. This course is intended for anyone interested in cinema or film production.

FT; AA/AS; CSU; UC.

DFLM 102 The American Cinema
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This introductory film studies course brings Hollywood film making into clear focus as a unique economic, industrial, aesthetic, and cultural institution. It explores how American films work technically, artistically, and culturally through encounters with the works of such directors as John Ford, Howard Hawks, and Martin Scorsese. This course is intended for anyone interested in cinema or film production.

FT; AA/AS; CSU; UC.

ECON-Economics

ECON 120 Principles of Macroeconomics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.
This course is an introduction to aggregate (macro) economic analysis. Topics include market systems; aggregate measures of economic activity; macroeconomic equilibrium; money and financial institutions; monetary and fiscal policy; international economics; and economic growth. This course is intended for business majors and students interested in macroeconomics.

FT; AA/AS; CSU; UC; C-ID: ECON 202.

ECON 121 Principles of Microeconomics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.
This course is an introduction to economic analysis of specific decision-making sectors in the economy (micro analysis). These sectors include households, firms, and government. Topics covered include productivity and costs for individual firms, industry types, the labor market, anti-trust issues, income distribution, and environmental externalities. This course is intended for business majors and all students interested in microeconomics.

FT; AA/AS; CSU; UC; C-ID: ECON 201.

EDUC-Education

EDUC 44A Supervised Tutoring: Communication
1 - 162 hours other; 0 units
Grading: Non-credit Course
This course is designed to prepare the student to succeed with the communication skills needed in corequisite and subsequent subject matter courses.

EDUC 44B Supervised Tutoring: Literacy
1 - 162 hours other; 0 units
Grading: Non-credit Course
This course is designed to prepare the student to succeed with the literacy skills needed in corequisite and subsequent subject matter courses.

EDUC 44C Supervised Tutoring: Quantitative Reasoning
1 - 162 hours other; 0 units
Grading: Non-credit Course
This course is designed to prepare the student to succeed with the quantitative reasoning needed in corequisite and subsequent subject matter courses.

EDUC 44D Supervised Tutoring: Critical Thinking
1 - 162 hours other; 0 units
Grading: Non-credit Course
This course is designed to prepare the student to succeed with the critical thinking skills needed in corequisite and subsequent subject matter courses.

EDUC 100 Tutor Training
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Pass/No Pass Only
This course prepares college-level students for tutoring adult/college students. Student trainees learn about tutoring methods as well as how to use appropriate written and mediated instructional materials. The course includes supervised tutoring practice.

FT; AA/AS; CSU.

ELAC-English Language Acquisition

ELAC 5A English Language Grammar - Low-Intermediate/Intermediate
16-18 hours lecture; 1-2 units
Grading: Pass/No Pass Only
Advisory: Completion of or concurrent enrollment in:
ELAC 15 with a Grade of "C" or better, or equivalent or Milestone L20 or ELAC 25 with a Grade of "C" or better, or equivalent
This course focuses on the study of English grammar for students whose first language is other than English. Emphasis is placed on clearly communicating one's thoughts and ideas. Topics include analyzing basic grammar structures and applying knowledge of these structures in producing and editing one's own texts. This course is intended for non-native speakers of English at the low-intermediate and intermediate levels.

FT.

ELAC 5B English Language Grammar - High-Intermediate/Advanced
16-18 hours lecture; 1-2 units
Grading: Pass/No Pass Only
Advisory: Completion of or concurrent enrollment in:
ELAC 35 with a Grade of "C" or better, or equivalent or ELAC 145 with a Grade of "C" or better, or equivalent or Milestone R40/W40
This course focuses on the study of English grammar for students whose first language is other than English. Emphasis is placed on clearly communicating one's thoughts and ideas. Topics include analyzing more advanced grammar structures and applying knowledge of these structures in producing and editing one's own texts. This course is intended for non-native speakers of English at the high-intermediate and advanced levels.

FT.

ELAC 7 English Pronunciation

16-18 hours lecture; 1-2 units

Grading: Pass/No Pass Only

This course is designed to assist non-native English learners develop oral/aural language skills through the improvement of understanding spoken English and articulation of the language. Emphasis is placed on clear and effective oral/aural communication and pronunciation. Topics include oral/aural discrimination, stress, rhythm, and intonation. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 15 Introduction to English Literacy and Communication

144-162 hours lecture; 9 units

Grading: Letter Grade or Pass/No Pass

Advisory: Assessment Skill Level L19. Students are advised to take the ELAC placement test prior to enrollment and perform at L19.

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 7, ENGL 58, ESOL 19, or ESOL 19A

This course provides non-native English speakers with the skills to integrate reading, writing, grammar, and oral communication at the low-intermediate level. Emphasis is placed on comprehending, summarizing, and interpreting audio and written texts as well as expressing one's own thoughts and opinions. Topics include communicating in an academic setting, applying critical reading strategies, writing paragraphs and short compositions in a variety of genres, as well as analyzing and producing grammatical structures in context. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 16 Accelerated English Language Acquisition - Low-Intermediate Level

32-36 hours lecture; 2 units

Grading: Pass/No Pass Only

Corequisite: ELAC 15 or Milestone L20 Note: Concurrent enrollment in ELAC 15 is required. Assessment Skill Level L20 is not required.

This course is intended for students who are currently enrolled in English Language Acquisition 15 and who desire additional support or more advanced reading, writing, and grammar activities. Emphasis is placed on deeper learning and understanding of English Language Acquisition 15 course content and producing more rigorous assignments. The course consists of personalized instruction and peer review to revise and expand upon the length and complexity of assignments in English Language Acquisition 15.

FT.

ELAC 23 Academic Listening and Speaking I

96-108 hours lecture; 6 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ELAC 15 with a Grade of "C" or better, or equivalent or Milestone L20

Limitation on Enrollment: This course is not open to students with previous credit for ESOL 22

This course provides non-native English speakers with academic listening and speaking skills at the intermediate level. Emphasis is placed on developing accuracy and fluency in oral communication skills as well as understanding and responding to audio texts from a variety of genres. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 25 Integrated Reading, Writing, and Grammar I

96-108 hours lecture; 6 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ELAC 15 with a Grade of "C" or better, or equivalent or Milestone L20

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 8, ENGL 60, or ESOL 20 and ESOL 21

This course provides non-native English speakers with the skills to integrate reading, writing, and grammar at the intermediate level. Emphasis is placed on applying critical reading strategies to a variety of genres, writing paragraph and multi-paragraph compositions based on assigned readings, and analyzing and producing grammatical structures in context. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 26 Accelerated English Language Acquisition - Intermediate Level

32-36 hours lecture; 2 units

Grading: Pass/No Pass Only

Corequisite: ELAC 25

This course is intended for students who are currently enrolled in English Language Acquisition 25 and who desire additional support or more advanced reading, writing, and grammar activities. Emphasis is placed on deeper learning and understanding of English Language Acquisition 25 course content. The course consists of personalized instruction and peer review to revise and expand upon the length and complexity of assignments in English Language Acquisition 25.

FT.

ELAC 33 Academic Listening and Speaking II

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ELAC 23 with a Grade of "C" or better, or equivalent or Milestone L30

Limitation on Enrollment: This course is not open to students with previous credit for ESOL 32

This course provides non-native English speakers with academic listening and speaking skills at the high-intermediate to advanced levels. Emphasis is placed on linguistic and interpersonal skills necessary for participation in a variety of formal and informal tasks in the college environment as well as understanding and responding to audio texts from a variety of genres. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 35 Integrated Reading, Writing and Grammar II

96-108 hours lecture; 6 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ELAC 25 with a Grade of "C" or better, or equivalent or Milestone L30

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 9, ENGL 6, or ESOL 30 and ESOL 31

This course provides non-native English speakers with the skills to integrate reading, writing, and grammar at the high-intermediate level. Emphasis is placed on applying critical reading strategies to a variety of genres, writing multi-paragraph compositions (including introduction of the academic essay) based on assigned readings and other sources, and analyzing and producing grammatical structures in context. This course is intended for non-native speakers of English preparing for college-level coursework.

FT.

ELAC 145 Integrated Reading, Writing, and Grammar III

96-108 hours lecture; 6 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ELAC 35 with a Grade of "C" or better, or equivalent or Assessment Skill Level L40

Corequisite: Completion of or concurrent enrollment in: ELAC 33 with a Grade of "C" or better, or equivalent

Students who meet the prerequisite by completion of ELAC 35 must have completed ELAC 33 or be concurrently enrolled in ELAC 33.

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 10, ENGL 62, ESOL 40, ESOL 45, or ELAC 45

This course provides non-native English speakers with the skills to integrate reading, writing, and grammar at the advanced level. Emphasis is placed on applying critical reading strategies to a variety of genres as well as analysis and synthesis of sources. The course also focuses on writing multi-paragraph compositions (including the academic essay), responding to and integrating sources, as well as analyzing and producing grammatical structures in context. This course is intended for non-native speakers of English preparing for college-level coursework.

FT; AA/AS; CSU; UC.

EMGM-Emergency Medical Technician

EMGM 50A CPR for Health Care Providers

8 - 16 hours lab; 0.1 units

Grading: Pass/No Pass Only

Limitation on Enrollment: This course is not open to students with previous credit for EMGM 50

This course covers basic cardio-pulmonary resuscitation (CPR) based on current American Heart Association standards. Topics include one-person, two-person, child, and infant CPR as well as foreign body airway obstruction; bag-valve-mask and mouth-to-mask ventilation; and automated external defibrillator (AED) use. This course is intended for current or prospective health care providers.

FT; AA/AS.

EMGM 105A Emergency Medical Technician - National Registry

96-108 hours lecture/48-54 hours lab; 7 units
Grading: Letter Grade Only
Prerequisite: EMGM 50A with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: EMGM 106 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 130 or EMGM 105
Health and Safety. Students must have a current BLS/ Healthcare Provider Level CPR Card approved by the American Heart Association or the American Red Cross, health record indicating immunizations are current, and a TB test administered within 14-30 days of course start (depending on course length).
This course covers the techniques of emergency medical care and transportation of the sick and injured within the responsibilities of the Emergency Medical Technician (EMT). The course content is based upon the State of California Emergency Medical Services (EMS) Authority requirements referenced in Title 22, Division 9, Chapter 2, Emergency Medical Technician of the California Code of Regulations. Course approval is with the County of San Diego Emergency Medical Services. Upon successful completion, the student will be eligible to take the National Registry of Emergency Medical Technicians-EMT Cognitive and Psychomotor Examination for Emergency Medical Technician. This course is intended for students preparing for a career as an EMT, paramedic, firefighter, lifeguard, nurse, physician assistant, or medical doctor.

FT; AA/AS; CSU.

EMGM 105B Emergency Medical Technician Support

24 - 46 hours lab; 0.5 units
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: EMGM 105A with a Grade of "C" or better, or equivalent or EMGM 350 with a Grade of "C" or better, or equivalent
This course provides additional hands-on experience and support in emergency medical care and transportation of the sick and injured. Students review key concepts, practices, and techniques. This course is intended for students preparing for a career as an EMT, paramedic, firefighter, lifeguard, nurse, physician assistant, or medical doctor.

FT; AA/AS; CSU.

EMGM 106 Perilaryngeal Airway Adjuncts/ Defibrillation Training

4 - 4.5 hours lecture/12 - 13.5 hours lab; 0.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: EMGM 105A with a Grade of "C" or better, or equivalent EMT certification.
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 136.
Health and Safety. San Diego County Division of Emergency Medical Services Policy D-320 requirement: Current BLS/Healthcare Provider Level CPR Card approved by the American Heart Association or the American Red Cross.
This course covers the skills required to integrate the use of the Automated External Defibrillator (AED), Esophageal/ Tracheal Airway Device "Combitube®," and Laryngeal/ Tracheal Airway "King®" in the prehospital care/ management of the victim of cardiac/respiratory arrest. Topics include skill proficiency in basic life support; airway management; use of the AED; and intubation utilizing a San Diego Emergency Medical Services Authority (EMSA)-approved perilaryngeal airway adjunct. This course is intended for practicing Emergency Medical Technicians (EMTs), students seeking initial EMT certification, or others working in the healthcare field. Students must be employed with an approved provider agency in order to utilize the airway device in the provision of care.

FT; AA/AS; CSU.

EMGM 205 EMT to Paramedic Bridge

24-27 hours lecture/48-54 hours lab; 2.5 units
Grading: Letter Grade Only
Prerequisite: EMGM 105A with a Grade of "C" or better, or equivalent current State of California EMT certification
Limitation on Enrollment: Health and Safety. Students must hold a current CPR/BLS certification.
This course provides advanced knowledge, skills, and experience in preparation for paramedic training. Students are introduced to the Advanced Life Support (ALS) system, equipment, and procedures with an emphasis on the protocols and resources used in San Diego County. Topics include the ALS system; legal issues; San Diego County resources; communications; ambulance operations; special patient populations; and the employment of ALS skills and procedures in patient assessment, stabilization, pre-hospital care, and transportation. Students also conduct two 12-hour ride-alongs in a paramedic ambulance.

FT; AA/AS; CSU.

EMGM 296 Individualized Instruction in Emergency Medical Technology

48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: EMGM 105A or EMGM 350
This course provides supplemental instruction to reinforce achievement of the learning objectives of a course in the same subject area under the supervision of an instructor for the designated course. Learning activities may employ a variety of self-paced multimedia learning systems, language labs, print and electronic resources, laboratory, or field research arrangements to assist students in reaching specific learning objectives. This open entry/open exit course is offered concurrently with designated courses. This course is intended for students currently enrolled in a related course or preparing for a licensing or certification exam.

FT; AA/AS; CSU.

EMGM 350 Refresher Course for San Diego County EMT

8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: EMGM 105A with a Grade of "C" or better, or equivalent EMT certificate
Limitation on Enrollment: Health and Safety. Students must possess a current Basic Life Support card for Healthcare Provider
This 32-hour non-associate degree course provides San Diego County certified Emergency Medical Technician (EMT) students a review of didactic knowledge and practical skills required to recertify/reinstate, in compliance with State of California Code of Regulations. Topics include a review of current San Diego Emergency Medical Service (EMS) treatment guidelines; anatomy; physiology; pathophysiology; patient assessment; recognition and treatment of life threatening emergencies; epinephrine auto-injector administration; intranasal naloxone administration; chest seal application; tourniquet application; wound packing with hemostatic gauze; finger-stick blood glucose testing; emergency childbirth; behavioral emergencies; ambulance operations; triage; and disaster scene management and environmental emergencies. Upon successful completion, students are eligible to recertify through San Diego County Emergency Medical Services and/or the National Registry of Emergency Medical Technicians.

FT.

ENGE-Engineering

ENGE 116 Computational Methods in Engineering

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: MATH 151 with a Grade of "C" or better, or equivalent
This course introduces students to computational methods and their applications to computer-based problem solving for engineers. Students formulate and solve engineering problems through modeling and the application of numerical methods, then evaluate and rationalize the results using Matlab computational engineering software. Topics include functions and arrays, data and file management, loops, control flow, and standard library packages and software. Numerical methods covered include matrix operations, Gauss Reduction, Newton Raphson, curve fitting, interpolation, numerical differentiation and numerical integration. Engineering application include finite element analysis, dynamics, computational fluid mechanics, data visualization and image analysis. This course is designed for students majoring in engineering.

FT; AA/AS; CSU; UC.

ENGL-English

ENGL 101-Reading and Composition has been renumbered to ENGL C1000-Academic Reading and Writing

ENGL 205-Critical Thinking and Intermediate Composition has been renumbered to and ENGL C1001-Critical Thinking and Writing

ENGL 31 Academic Literacy

32-36 hours lecture; 2 units
Grading: Pass/No Pass Only
Prerequisite: ELAC 145 with a Grade of "C" or better, or equivalent or Milestone R40/W40 or **Corequisite:** ENGL C1000 or ENGL 105
This is a course for students who have assessed into basic skills English courses and desire to concurrently enroll in English C1000: Academic Reading and Writing or English 105: Composition and Literature. Academic Literacy creates success in English C1000 or 105 by focusing on reading, writing, and critical thinking. Students learn to articulate arguments, create academic identities, and build and strengthen relationships with texts, others, and themselves.

FT.

ENGL 105 Composition and Literature

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ELAC 145 with a Grade of "C" or better, or equivalent or Milestone R40/W40 Students with Milestone R30/W30 must enroll in ENGL 105X (ENGL 105 and ENGL 31 learning community).
This is a composition course using literature as a background for improving writing skills. Students discuss the general nature and elements of literature and literary criticism by reading and analyzing representative works of fiction, drama, and poetry. Based on this subject matter, students are required to write a variety of critical papers, including a research paper, comprising at least 6,000 graded words. This course is intended for students majoring in English or those students interested in literature and in developing strong critical and analytical writing skills. Designated sections of this course may be taught from a specific cultural perspective.

FT; AA/AS; CSU; UC.

ENGL 208 Introduction to Literature

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course provides an inquiry into the basic nature of literature. Students read and analyze representative literary works in fiction, non-fiction, poetry, and drama from various cultures and periods, applying practical critical techniques in essays, reports, and exams. This course is designed for students with a general interest in literature as well as for those majoring in the field.

FT; AA/AS; CSU; UC; C-ID: ENGL 120.

ENGL 209 Literary Approaches to Film

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is a study of film from a literary perspective. Emphasis is placed on reading and writing about film, film analysis, and cultural impact. Topics include film composition, genre, and literary criticism. This course is designed for English majors and all students interested in literature and/or film.

FT; AA/AS; CSU; UC.

ENGL 210 American Literature I

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is a survey of American literature from its beginning to the late 19th century, including representative works from the Colonial Period (1588-1765), the New Republic (1765-1829), the American Renaissance (1829-1860), and the beginnings of Realism (1860-1880). Students critically analyze and discuss diverse authors of these periods, addressing relevant historical, social, political, philosophical, aesthetic, cultural, and religious issues. This course is intended for English majors and anyone interested in American Literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 130.

ENGL 211 American Literature II

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

A survey of American Literature from the late 19th century to the present, which includes representative works from the Age of Realism (1865-1914), the Modernist Period (1914-1945), and the Postmodern Era (1950-present). Students critically analyze and discuss diverse authors of these periods, addressing relevant historical, social, political, philosophical, aesthetic, cultural, and religious issues. This course is intended for English majors and anyone interested in American Literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 135.

ENGL 215 English Literature I: 800-1799

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course offers a survey of British literature from the Anglo-Saxon period to the pre-Romantic period (approximately 800 to 1799), including representative works from the Old and Middle English periods, the Renaissance and the Elizabethans, the Cavalier, Metaphysical, and Puritan periods, the Restoration and the Neoclassical periods. Students read and discuss the major authors of these periods, addressing relevant social, political, cultural, and religious issues. Through a variety of learning activities and assignments, students critically engage with specific works and their literary, cultural, historical and political significance, considering the interplay between text and context. This course is intended for English majors and all students interested in literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 160.

ENGL 216 English Literature II: 1800 - Present

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course offers a survey of British literature from the Romantic period to the 21st century (approximately 1800 to the present) including representative works from the pre-Romantic and Romantic periods; the Victorian and later Victorian period; the Modern period; the Postmodern period; the postcolonial era; and the contemporary era. Students read and discuss the major authors of these periods, addressing relevant social, political, cultural, and religious issues. Students also critically analyze, in essays and research papers, authors, specific works, and other topics as assigned. This course is intended for students majoring in English and those interested in English Literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 165.

ENGL 220 Masterpieces of World Literature I: 1500 BCE - 1600 CE

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course offers a survey of world literature in translation, from the ancient world through the European renaissance (approximately 2150 BCE - 1600 CE), including the established classic literature of the Near East, Tibet, Greece and Rome, India, China, Japan, Africa, the Islamic world, and Europe. Students read and discuss a variety of authors from these regions, and address relevant social, cultural, and religious issues. Students critically analyze, in essays and papers, specific authors, works, themes, and other topics as assigned. This course is intended for English majors and anyone interested in World Literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 140.

ENGL 221 Masterpieces of World Literature II: 1600 - Present

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course offers a survey of world literature in translation, from the close of the European renaissance through the present time, including the literature of Asia, Europe, North America, Central America, South America, Africa and the Islamic world. Students read and discuss a variety of authors from these regions, and address relevant social, religious, and cultural issues. Students critically analyze, in essays and papers, specific authors, works, themes, and other topics as assigned. This course is intended for English majors and anyone interested in World Literature.

FT; AA/AS; CSU; UC; C-ID: ENGL 145.

ENGL 230 Asian American Literature

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course is a survey of Asian American literature. The relationship between identity and the creative work of prominent Asian American writers is explored, as well as the ways in which Asian American writers have been influenced by various artistic, cultural, linguistic, and socio-political forces. Students are introduced to prominent Asian American texts and encouraged to analyze through writing and discussion the defining conversations and controversies in Asian American literary history. This course is intended for all students interested in Asian American Literature and Asian American Studies.

FT; AA/AS; CSU; UC.

ENGL 234 Hip Hop Literature: A Poetry Class

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course is an introduction to Hip Hop literature/poetry. Emphasis is placed on key figures, poets, and other artists who have profoundly contributed to the genre and its different styles and forms. The course explores Hip Hop poetry's connections to other prominent forms of literature and literary theories. This course is designed for English majors and anyone interested in Hip Hop literature.

FT; AA/AS; CSU; UC.

ENGL 237 Women in Literature

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

This course is an introduction to images of women in literature and to women writers. Students read from a variety of genres including stories, poetry, novels, and essays, written by different authors from a range of social, cultural, and ethnic backgrounds. This course is intended for students majoring in English or anyone interested in literature.

FT; AA/AS; CSU; UC.

ENGL 249A Introduction to Creative Writing I

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 249

This course is an introduction to creative writing with special emphasis on inclusive, anti-racist, and decolonized writing and artistic approaches. Students use the basic elements of poetry and fiction writing to analyze the works of professional BIPOC (Black, indigenous, and people of color) writers to create original pieces, and to critique the work of their peers as well as their own in supportive and inclusive writing workshop spaces. This course is intended for students majoring in English, and all students, as well as lifelong learners, interested in narrative/memoir, poetry, creative non-fiction, fiction, and screenwriting.

FT; AA/AS; CSU; UC.

ENGL 402 Advanced Technical Writing
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL C1001 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a study of the tools and techniques used in technical documentation and editing. Emphasis is placed on the application of effective communication in technical writing. Topics include effective workplace writing; composing formal reports, presentations, and proposals; intercultural communication and collaborative writing; synthesizing data for representation; creating instructions, procedures, or manuals; and critical reading of technical publications for editing policies. Other topics include research writing in American Psychological Association (APA) format and grant writing. This course is intended to meet upper division general education requirements for students enrolled in baccalaureate degree programs.

FT; AA/AS; CSU.

ENGL C1000 Academic Reading and Writing
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Placement as determined by the college's multiple measures assessment process.
Advisory: Milestone R40/W40. Students with Milestone R30/W30 must enroll in ENGL C1000X (ENGL C1000 and ENGL 31 learning community).
Limitation on Enrollment: This course is not open to students with previous credit for ENGL 101
Part 1 (CCN Identical): In this course, students receive instruction in academic reading and writing, including writing processes, effective use of language, analytical thinking, and the foundations of academic research. Part 2 (Local): Students read, analyze, discuss, and think critically using a variety of works and sources. Based on these activities, students write essays, fully documented research projects, and other types of texts for various purposes and audiences. This written work, which demonstrates effective, logical, and precise expression of ideas, totals at least 6,000 graded words. Designated sections of this course may be taught from a specific cultural perspective. (Formerly ENGL 101).

FT; AA/AS; CSU; UC; C-ID: ENGL 100.

ENGL C1001 Critical Thinking and Writing
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: College-level composition (ENGL C1000, ENGL C1000H, ENGL C1000E/C-ID ENGL 100) or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ENGL 205
Part 1 (CCN Identical): In this course, students receive instruction in critical thinking for purposes of constructing, evaluating, and composing arguments in a variety of rhetorical forms, using primarily non-fiction texts, refining writing skills and research strategies developed in ENGL C1000 College Reading and Writing (C-ID ENGL 100) or similar first-year college writing course. Part 2 (Local): Emphasis is placed on reading, evaluating, and writing argumentative prose. Students locate, evaluate and integrate outside sources into their writing assignments, which total at least 8,000 words for the semester. This course is intended for students majoring in English and all students interested in improving critical thinking and writing skills. (Formerly ENGL 205).

FT; AA/AS; CSU; UC; C-ID: ENGL 105.

EXSC-Exercise Science

EXSC 113A Swimming I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 155 or PHYE 155W
This course is the first in a series of swimming courses. Emphasis is placed on fundamental swimming technique and water safety skills. This is an entry level course for novice swimmers. When this course is offered for three hours per week, the additional time is utilized for skill development.

FT; AA/AS; CSU; UC.

EXSC 113B Swimming II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 113A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 155X
This course is the second in a series of swimming courses. Emphasis is placed on the development of swimming strokes, open turns, entering the water, and aquatic emergency situations. This course is intended for beginning level swimmers with some aquatic experience. When this course is offered for three hours per week, the additional time is utilized for skill development.

FT; AA/AS; CSU; UC.

EXSC 113C Swimming III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 113A with a Grade of "C" or better, or equivalent and EXSC 113B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 155Y
This course is the third in a series of swimming courses. Emphasis is placed on intermediate swim stroke development, open turns, head first water entry, and pool and open water emergency response. This course is intended for intermediate level swimmers. When this course is offered for three hours per week, the additional time is utilized for skill development.

FT; AA/AS; CSU; UC.

EXSC 113D Swimming IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 113B with a Grade of "C" or better, or equivalent and EXSC 113C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 155Z.
This course is the fourth in a series of swimming courses. Emphasis is placed on advanced swimming techniques, turns, finishes, and racing starts, swim propulsion and drag theories, and aquatic survival and safety skills. This course is intended for advanced swimmers. When this course is offered for three hours per week, the additional time is utilized for skill development.

FT; AA/AS; CSU; UC.

EXSC 114A Aquatic Fitness I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 106
This course is the first in a series of four aquatic fitness courses. This course is an introduction to cardiovascular fitness through aquatic activities. Topics include aquatic fitness testing, timed swims, proper warm-up and cool-down, principles of swimming propulsion, and introductory safety. This course is intended for those starting at an entry level of cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 114B Aquatic Fitness II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 114A with a Grade of "C" or better, or equivalent
This course is the second in a series of four aquatic fitness courses. This course provides instruction and conditioning for various beginning level aquatic activities. Topics include beginning personal aquatic workout design and implementation, aquatic interval training, heart rate monitoring, using a pace clock, and safety concerns and techniques. This course is intended for those starting at a beginning level of cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 114C Aquatic Fitness III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 114B with a Grade of "C" or better, or equivalent
This course is the third in a series of four aquatic fitness courses. This course provides instruction and conditioning for various intermediate level aquatic activities. Topics include analysis of personal health and lifestyle, intermediate level workout design, goal setting and motivation, body specific training for an aquatic environment, individual aquatic activities, and intermediate training types and safety concerns. This course is intended for those starting at an intermediate level of cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 114D Aquatic Fitness IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 114C with a Grade of "C" or better, or equivalent
This course is the fourth in a series of four aquatic fitness courses. This course provides instruction and conditioning for various advanced aquatic activities. Topics include components of aquatic fitness, advanced workout design, aquatic training for specific races, strokes and events, aquatic training with advanced equipment, advanced aquatic conditioning terminology and nutrition and hydration principles. This course is intended for those starting at an advanced level of cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 115A Water Exercise I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 156
This course provides students with introductory level knowledge and practice in the fundamental elements of fitness through the application of water resistance and buoyancy. Emphasis is placed on fundamental techniques of water exercise for cardiorespiratory fitness, muscular strength, endurance and flexibility. This course is the first in a series of four water exercise courses. It is intended for students seeking to develop introductory physical fitness habits or low impact/rehabilitative physical fitness exercise techniques.

FT; AA/AS; CSU; UC.

EXSC 115B Water Exercise II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 115A with a Grade of "C" or better, or equivalent
This course provides introductory level students with beginning level knowledge and practice in the fundamental elements of fitness through the application of water resistance and buoyancy. Emphasis is placed on a variety of water exercises for cardiorespiratory fitness, muscular strength, endurance and flexibility. This course is the second in a series of four water exercise courses. It is intended for students seeking to develop beginning physical fitness habits or low impact/rehabilitative physical fitness exercise techniques.

FT; AA/AS; CSU; UC.

EXSC 115C Water Exercise III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 115B with a Grade of "C" or better, or equivalent
This course provides beginning level students with intermediate level knowledge and practice in the fundamental elements of fitness through the application of water resistance and buoyancy. Emphasis is placed on flexibility. Also included is a variety of water exercises for cardiorespiratory fitness, muscular strength, and endurance. This course is the third in a series of four water exercise courses. It is intended for students seeking to develop intermediate physical fitness habits or low impact/ rehabilitative physical fitness exercise techniques.

FT; AA/AS; CSU; UC.

EXSC 115D Water Exercise IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 115C with a Grade of "C" or better, or equivalent
This course provides intermediate level students with advanced level knowledge and practice in the fundamental elements of fitness through the application of water resistance and buoyancy. Emphasis is placed on muscular strength/endurance. Also included is a variety of water exercises for cardiorespiratory fitness and flexibility. This course is the fourth in a series of four water exercise courses. It is intended for students seeking to develop advanced physical fitness habits or low impact/ rehabilitative physical fitness exercise techniques.

FT; AA/AS; CSU; UC.

EXSC 124A Core and Cardio Fitness I

32 - 54 hours lab; 0.5-1 units

Grading: Pass/No Pass Only

Limitation on Enrollment: This course is not open to students with previous credit for PHYE 153 or PHYE 153W

This course provides students with introductory level knowledge and practice in attaining and maintaining core and cardio fitness levels. Instruction emphasizes cardiovascular fitness as well as core fitness through individual and circuit training. This course is the first in a series of four core and cardio fitness courses. It is intended for students seeking to develop introductory physical fitness habits or Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 124B Core and Cardio Fitness II

32 - 54 hours lab; 0.5-1 units

Grading: Pass/No Pass Only

Advisory: EXSC 124A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYE 153X

This course provides introductory level students with beginning knowledge and practice in attaining and maintaining core and cardio fitness levels. Instruction emphasizes beginning cardiovascular fitness as well as core fitness through individual and circuit training. Other topics include a variety of core fitness tests, stability ball exercise routines, and beginning level aerobic and core conditioning program design. This course is the second in a series of four core and cardio fitness courses. It is intended for students seeking to develop beginning physical fitness habits or Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 124C Core and Cardio Fitness III

32 - 54 hours lab; 0.5-1 units

Grading: Pass/No Pass Only

Advisory: EXSC 124B with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYE 153Y

This course provides beginning level students with intermediate knowledge and practice in attaining and maintaining core and cardio fitness levels. Instruction emphasizes intermediate cardiovascular fitness as well as core fitness through individual and circuit training. Other topics include fitness level assessment and conditioning for the treadmill; continuous, interval, and fartlek aerobic conditioning elements; beginning plyometric exercises; coronal and oblique plane movements; and clinical evaluations such as blood pressure and blood lipid tests. This course is the third in a series of four core and cardio fitness courses. It is intended for students seeking to develop intermediate physical fitness habits or Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 124D Core and Cardio Fitness IV

32 - 54 hours lab; 0.5-1 units

Grading: Pass/No Pass Only

Advisory: EXSC 124C with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYE 153Z

This course provides intermediate students with advanced knowledge and practice in attaining and maintaining core and cardio fitness levels. Instruction emphasizes advanced cardiovascular fitness as well as core fitness through individual and circuit training. Other topics include core and cardio fitness assessment data comparison; advanced core fitness assessments including plyometric tests; cardiovascular interval and sprint training; advanced plyometric training involving lateral movement; dietary analysis; and identification and incorporation of dietary modifications. This course is the fourth in a series of four core and cardio fitness courses. It is intended for students seeking to develop advanced physical fitness habits or Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 125A Aerobic Dance I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 103 or PHYE 103W
This course is an introduction to all forms of Aerobic Dance and movement. Emphasis is placed on fundamental Aerobic Dance technique, vocabulary, and performance concepts. This course is the first in a series of four aerobic dance courses. It is designed for all students interested in Aerobics as a cardiovascular, movement-oriented sport.

FT; AA/AS; CSU; UC.

EXSC 125B Aerobic Dance II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 125A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 103X
This course provides students with knowledge and practice in beginning Aerobic Dance principles. Emphasis is placed on beginning Aerobic Dance technique, vocabulary, strength, and performance concepts. Other topics include Cardio Latin dance rhythms and styles, additional dance vocabulary, expanded use of weights, and sports nutrition. This course is the second in a series of four aerobic dance courses. It is designed for all students interested in Aerobics as a cardiovascular, movement-oriented sport.

FT; AA/AS; CSU; UC.

EXSC 125C Aerobic Dance III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 125B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 103Y
This course provides students with knowledge and practice in intermediate level, complex forms of Aerobic Dance, its variations, and directional changes. Cardio Kickboxing technique and plyometric moves are added for a diverse, dynamic workout. Emphasis is placed on intermediate level Aerobic Dance technique, vocabulary, and performance concepts. This course is the third in a series of four aerobic dance courses. It is designed for all students interested in Aerobics as a cardiovascular, movement-oriented sport, and who have taken the beginning level version of this class.

FT; AA/AS; CSU; UC.

EXSC 125D Aerobic Dance IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 125C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 103Z
This course provides students with knowledge and practice in complex forms of advanced Aerobic Dance and its variations, such as Cardio Latin dance, Cardio Kickboxing, and Cardio Hip Hop styles and rhythms. Emphasis is placed on advanced levels of Aerobic Dance technique, vocabulary, and performance concepts. Other topics include advanced principles of body alignment such as movement combinations and jumps; advanced level plies such as sliding and jumping; and plyometrics. This course is the fourth in a series of four aerobic dance courses. It is designed for all students interested in Aerobics as a cardiovascular, movement-oriented sport, and who have taken the intermediate level version of this class.

FT; AA/AS; CSU; UC.

EXSC 126A Cardio Conditioning I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 123 or 123W.
This course provides instruction in the basic skills necessary to improve aerobic fitness, cardiovascular health, muscular endurance/strength, and static flexibility. Topics include fitness terminology, identifying individual fitness level and areas to improve, basic exercise programming, proper warm up/cool down and resting/exercise heart rate. This class is designed for students interested in a healthy lifestyle as well as kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 126B Cardio Conditioning II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 126A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 123X.
This course provides instruction in exercise programming through moderately intense activities including cross training, basic boxing, plyometrics, speed and agility, core stability, dynamic flexibility and nutrition. This course is designed to provide students the opportunity to continue the fundamental principles of physical fitness and their impact on life-long health and wellness. This class is designed for students interested in a healthy lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 126C Cardio Conditioning III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 126B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 123Y.
This course is designed to provide students the opportunity to develop and implement a personalized fitness plan to help them pursue their lifelong commitment to life-long health and wellness. Topics include goal setting, training zones, and body specific training principles through moderate/highly intense activities. This class is designed for students interested in a healthy lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 126D Cardio Conditioning IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 126C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 123Z.
This course is the fourth in a series of Cardio Conditioning courses. Students develop, analyze and implement advanced group fitness plans. Topics include agility and jump training, running, sports cross training, advanced core training, stress management and nutrition. Data gathering and assessment methods are also covered. This class is designed for students interested in a healthy lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 130A Indoor Cycling I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
This course is the first in a series of Indoor Cycling courses. Emphasis is placed on instruction in the basic fundamentals necessary to improve indoor cycling techniques and improve cardiovascular/aerobic fitness. Topics includes cycling terminology and ergonomics, overall fitness evaluation, various indoor cycling exercise regimens, and goal setting programs for individual health and fitness benefits. This class is designed for students interested in cardiovascular fitness improvement through indoor cycling (spinning).

FT; AA/AS; CSU; UC.

EXSC 130B Indoor Cycling II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 130A with a Grade of "C" or better, or equivalent
This course is the second in a series of Indoor Cycling courses. Emphasis is placed on beginning to intermediate cycling techniques, heart rate calculations, fitness evaluations, and cardiovascular training and program design. Beginning level principles of physiology are explored including how to train to elicit a desired physiological response. This class is designed for students interested in aerobic fitness improvement through indoor cycling as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 130C Indoor Cycling III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 130B with a Grade of "C" or better, or equivalent
This course is the third in a series of Indoor Cycling courses. Emphasis is based on intermediate to advanced cycling techniques, interval training, power cycling, and intermediate workload training. Intermediate level principles of physiology are explored including how to train within a workload range and why. This class is designed for students interested in aerobic fitness improvement through indoor cycling as well as Exercise Science or related majors.

FT; AA/AS; CSU; UC.

EXSC 130D Indoor Cycling IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 130C with a Grade of "C" or better, or equivalent
This is the fourth course in a series of Indoor Cycling courses. Emphasis is placed on advanced cycling techniques, advanced interval training, advanced power cycling and advanced workload training. Advanced principles of physiology are explored including how to train within a workload and why. This class is designed for students interested in aerobic fitness improvement through advanced indoor cycling as well as Exercise Science or related majors.

FT; AA/AS; CSU; UC.

EXSC 134 Adapted Weight Training
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: A physician's medical release form is required.
This course is not open to students with previous credit for PHYE 182
This course is designed for students with disabilities as an introduction to progressive resistance training. Emphasis is placed on developing cardiorespiratory and muscle endurance, muscle strength and flexibility and a healthy body composition through individualized safe and beneficial exercise programming. The course includes exercises that focus on relaxation, joint mobility, body maintenance, and activities for daily living. A physician's medical release is required.

AA/AS; CSU; UC.

EXSC 135A Individual Conditioning I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 132 or PHYE 132W.
This course provides individually programmed instruction in the fundamental skills and techniques of strength training and aerobic activity. The positive impact of physical education on health and wellness is explored and emphasized. This course is of particular interest to students wishing to enter the fields of sports medicine and athletics, as well as to students seeking to improve overall fitness.

FT; AA/AS; CSU; UC.

EXSC 135B Individual Conditioning II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 135A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 132X.
This course provides individually programmed instruction in the beginning level skills of the 5 components of fitness. Students learn proper body mechanics for basic movement patterns utilizing a variety of different training modalities. Beginning level principles of physiology is explored including how to train to elicit a desired physiological response.

FT; AA/AS; CSU; UC.

EXSC 135C Individual Conditioning III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 135B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 132Y.
This course provides individually programmed instruction in the intermediate principles of the 5 components of fitness. Students learn basic anatomy and build upon the principles of physiology learned in previous levels of this course to create both individual workouts and a long term workout plan to meet individualized conditioning goals.

FT; AA/AS; CSU; UC.

EXSC 135D Individual Conditioning IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 135C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 132Z
This course provides individually programmed instruction in the advanced principles of the 5 components of fitness. Students learn how to instruct others in proper movement patterns and body mechanics for several strength training and cardiovascular training modalities. Students utilize their knowledge of the advanced principles of anatomy and physiology to create a workout plan for another individual, identifying modifications, and variations of exercises depending on the unique needs of the subject they are designing a workout for.

FT; AA/AS; CSU; UC.

EXSC 136A Off-Season Conditioning for Sport I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 191 or PHYE 165
This course is designed to enhance the physical and mental skills needed to participate in intercollegiate sports activities. Emphasis is placed on weight training, running, skill development games, and individual development for sport. When this course is offered for one unit the additional time is utilized in the practice and perfection of individual sport-specific skills. This course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 136B Off-Season Conditioning for Sport II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 136A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 165 or PHYE 191.
This course provides intercollegiate athletes with individually programmed coaching in the fundamental skills of sports-specific training and aerobic conditioning. Through progressive inquiry and practice, students demonstrate more advanced levels of athletic performance. When this course is offered for one unit the additional time is utilized in the development and implementation of sport-specific exercise programs. This course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 139A Weight Training I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 166 or PHYE 166W.
This is the first in a series of progressive resistance training courses. Instruction includes proper methods of weight training, use of weight training machines, cardio exercise equipment, lifting of free weights, and warm up/cool down. Instruction also includes charting exercises, introduction to major muscle groups and the weight training exercises to improve strength and range of motion. This class is designed for students interested in a healthy lifestyle as well as exercise science majors.

FT; AA/AS; CSU; UC.

EXSC 139B Weight Training II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 139A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 166X
This is the second in a series of progressive resistance training courses. Emphasis is placed on alternative training methods including circuit and interval training, hill climbing, and fat burning. This course includes basic nutrition to help build muscle and/or reduce body weight utilized in student development of a personal fitness program. This class is designed for students interested in a healthy lifestyle as well as exercise science majors.

FT; AA/AS; CSU; UC.

EXSC 139C Weight Training III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 139B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 166Y.
This is the third in a series of progressive resistance training courses. Emphasis is placed on the use of the weight training machines, cardio exercise equipment, and Olympic lifts. This course covers alternate methods of resistance training including medicine balls, plyo balls, bosu balls, elastic cords, and TRX belts. This class is designed for students interested in a healthy lifestyle as well as exercise science majors.

FT; AA/AS; CSU; UC.

EXSC 139D Weight Training IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 139C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 166Z.
This is the fourth in a series of progressive resistance training courses. This course covers the proper use of weight lifting machines, cardio exercise equipment, and alternate methods of resistance training and lifting of free weights. This class is designed for students interested in a healthy lifestyle as well as exercise science majors.

FT; AA/AS; CSU; UC.

EXSC 140A Boot Camp I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
This course provides students with introductory level instruction in fundamental skills related to core strength, stability, and performance. Topics include physical readiness testing, proper exercise technique, and fundamental core and strength training. This course is the first in a series of four boot camp physical training courses. It is intended for kinesiology majors and all students interested in comprehensive physical fitness training.

FT; AA/AS; CSU; UC.

EXSC 140B Boot Camp II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 140A with a Grade of "C" or better, or equivalent
This course provides introductory students with beginning level instruction in fundamental skills related to core and unilateral strength, stability, and performance. Topics include core stability, targeted functional training. This course is the second in a series of four boot camp physical training courses. It is intended for kinesiology majors and all students interested in comprehensive physical fitness training.

FT; AA/AS; CSU; UC.

EXSC 140C Boot Camp III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 140B with a Grade of "C" or better, or equivalent
This course provides students with intermediate level instruction in fundamental skills related to core and unilateral strength, stability, and performance. Topics include core stability and targeted functional training. This course is the third in a series of four boot camp physical training courses. It is intended for kinesiology majors and all students interested in comprehensive physical fitness training.

FT; AA/AS; CSU; UC.

EXSC 140D Boot Camp IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 140C with a Grade of "C" or better, or equivalent
This course provides intermediate students with advanced level instruction in skills related to core and unilateral strength, stability, and performance. Topics include core stability and targeted functional training. This course is the fourth in a series of four boot camp physical training courses. It is intended for kinesiology majors and all students interested in comprehensive physical fitness training.

FT; AA/AS; CSU; UC.

EXSC 141A Total Body Conditioning I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
This course is the first in a series of total body conditioning courses. Emphasis is placed on developing proper training techniques necessary to improve muscular strength and endurance using compound and accessory exercises in rapid sequence. Topics will include identification of major movement patterns and modifications based on ability levels, basic strength exercises for muscle groups with emphasis on the core, and safety practices. When this course is offered for three hours per week, the additional time is utilized for skill development. This course is designed for kinesiology majors and all students interested in improving fitness.

FT; AA/AS; CSU; UC.

EXSC 141B Total Body Conditioning II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 141A with a Grade of "C" or better, or equivalent
This course is the second in a series of total body conditioning courses. Emphasis is placed on improving muscular strength and endurance and cardiorespiratory endurance using compound and accessory exercises and cardiorespiratory intervals in rapid sequence. Topics will include identification of muscle groups used in single and multi-joint movement exercises, intermediate strength exercises for muscle groups with emphasis on functional exercises, and use of appropriate modifications for varying ability levels. When this course is offered for three hours per week, the additional time is utilized for skill development. This course is designed for kinesiology majors and all students interested in improving fitness.

FT; AA/AS; CSU; UC.

EXSC 141C Total Body Conditioning III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 141B with a Grade of "C" or better, or equivalent
This course is the third in a series of total body conditioning courses. Emphasis is placed on improving muscular strength and endurance and cardiorespiratory endurance using compound and accessory exercises and cardiorespiratory intervals in rapid sequence. Topics will include understanding of advanced exercise techniques, advanced strength and plyometric exercises for muscle groups with emphasis on functional exercises. When this course is offered for three hours per week, the additional time is utilized for skill development. This course is designed for kinesiology majors and all students interested in improving fitness.

FT; AA/AS; CSU; UC.

EXSC 144A Fitness Walking I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 154.
This course introduces students to various walking techniques and basic principles of aerobic and cardiovascular health. It is intended for Kinesiology majors and all students interested in a healthy lifestyle.

FT; AA/AS; CSU; UC.

EXSC 144B Fitness Walking II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 144A with a Grade of "C" or better, or equivalent
This beginning-level course covers the principles of aerobic and cardiovascular health through various walking techniques. Instruction in fitness principles, stress reduction, weight management, and heart health are also covered. This course is intended for Kinesiology majors and all students interested in a healthy lifestyle.

FT; AA/AS; CSU; UC.

EXSC 144C Fitness Walking III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 144B with a Grade of "C" or better, or equivalent
This intermediate-level course covers the principles of aerobic and cardiovascular health through various walking techniques. Students design basic walking programs that include walking frequency, duration, intensity, and mode. Instruction in fitness principles, stress reduction, weight management, heart health, individual training zones, and fitness assessments are also covered. This course is intended for Kinesiology majors and all students interested in a healthy lifestyle.

FT; AA/AS; CSU; UC.

EXSC 144D Fitness Walking IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 144C with a Grade of "C" or better, or equivalent
This advanced-level course covers the principles of aerobic and cardiovascular health through various walking techniques. Students design individualized warm-up, walking, and cool-down programs and calculate and employ individual target heart rate zones for weight management and cardiovascular endurance. Instruction in fitness principles, stress reduction, weight management, heart health, individual training zones, fitness assessments, and lifestyle changes are also covered. This course is intended for Kinesiology majors and all students interested in a healthy lifestyle.

FT; AA/AS; CSU; UC.

EXSC 145A Yoga I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 168.
This is the first of four levels of classes relating to yoga. This course is an introduction to fundamental yoga practices and principles. Instruction includes learning the fundamentals of yoga postures. The students will also gain a fundamental understanding of the practices of relaxation techniques and breathing practices. This course is designed for students who want to increase health, longevity and who are interested in understanding the importance of the fitness aspect of their life.

FT; AA/AS; CSU; UC.

EXSC 145B Yoga II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 145A with a Grade of "C" or better, or equivalent
This is the second of four levels of classes relating to yoga. This course is an introduction to fundamentals of basic yoga practices and principles. Instruction includes basic yoga postures, guided relaxations, and breathing practices, as well as some basic stress reduction techniques. This course is designed for students interested in utilizing basic yoga and stress reduction techniques to help increase their health and longevity.

FT; AA/AS; CSU; UC.

EXSC 145C Yoga III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 145B with a Grade of "C" or better, or equivalent
This is the third of four levels of classes relating to yoga. This course will cover intermediate yoga practices and principles including some intermediate inversions. Instruction includes intermediate yoga postures, guided relaxations, basic inversions, breathing practices, and basic partner yoga as well as stress reduction techniques and nutritional analysis. This course is designed for students interested in learning about both fitness and nutrition. The students will utilize intermediate yoga to help increase their health and longevity.

FT; AA/AS; CSU; UC.

EXSC 145D Yoga IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 145C with a Grade of "C" or better, or equivalent
This is the fourth of four levels of classes relating to yoga. This course will cover advanced yoga practices and principles. Instruction includes advanced yoga postures, guided relaxations, inversions, breathing practices, and partner yoga as well as stress reduction techniques and nutritional analysis. This course is designed for students interested in developing their own workout regime utilizing advanced yoga to help increase their health and longevity.

FT; AA/AS; CSU; UC.

EXSC 147A Kickboxing I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 233.
This is the first in a series of kickboxing courses. Topics include fundamental kickboxing terminology, safety, physical fitness, and controlled sparring. Emphasis is placed on single strike upper body kickboxing combinations. This course is intended for all students interested in fundamental level kickboxing.

FT; AA/AS; CSU; UC.

EXSC 147B Kickboxing II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 147A with a Grade of "C" or better, or equivalent
This is the second in a series of kickboxing courses. Topics include beginning kickboxing terminology, safety, physical fitness, and controlled sparring. Emphasis is placed on double strike kickboxing combinations that include the lower body. This course is intended for all students interested in beginning level kickboxing.

FT; AA/AS; CSU; UC.

EXSC 147C Kickboxing III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 147B with a Grade of "C" or better, or equivalent
This is the third in a series of kickboxing courses. Topics include intermediate kickboxing terminology, safety, physical fitness, and controlled sparring. Emphasis is placed on triple strike kickboxing combinations that include the full body. This course is intended for all students interested in intermediate level kickboxing.

FT; AA/AS; CSU; UC.

EXSC 147D Kickboxing IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 147C with a Grade of "C" or better, or equivalent
This is the fourth in a series of kickboxing courses. Topics include advanced kickboxing terminology, safety, physical fitness, and controlled sparring. Emphasis is placed on four strike kickboxing combinations that include the full body. This course is intended for all students interested in advanced level kickboxing.

FT; AA/AS; CSU; UC.

EXSC 148A Mixed Martial Arts I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 232
This is the first in a series of mixed martial arts exercise courses. Emphasis is placed on fundamental mixed martial arts terminology, safety, self-defense, etiquette, punches, blocks, strikes, kicks, stances, pressure points, and forms. This course is intended for all students interested in fundamentals techniques including but not limited to Thai-boxing, judo, jiu jitsu, and boxing as referenced by the International Mixed Martial Arts Federation organization.

FT; AA/AS; CSU; UC.

EXSC 148B Mixed Martial Arts II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 148A with a Grade of "C" or better, or equivalent
This is the second in a series of mixed martial arts exercise courses. Emphasis is placed on beginning mixed martial arts terminology, safety, self-defense, etiquette, punches, blocks, strikes, kicks, stances, pressure points, and forms. This course is intended for all students interested in beginning techniques including but not limited to Thai-boxing, judo, jiu jitsu, and boxing as referenced by the International Mixed Martial Arts Federation organization.

FT; AA/AS; CSU; UC.

EXSC 148C Mixed Martial Arts III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 148B with a Grade of "C" or better, or equivalent
This is the third in a series of mixed martial arts exercise courses. Emphasis is placed on intermediate mixed martial arts terminology, safety, self-defense, etiquette, punches, blocks, strikes, kicks, stances, pressure points, and forms. This course is intended for all students interested in intermediate techniques including but not limited to Thai-boxing, judo, jiu jitsu, and boxing as referenced by the International Mixed Martial Arts Federation organization.

FT; AA/AS; CSU; UC.

EXSC 148D Mixed Martial Arts IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 148C with a Grade of "C" or better, or equivalent
This is the fourth in a series of mixed martial arts exercise courses. Emphasis is placed on advanced mixed martial arts terminology, safety, self-defense, etiquette, punches, blocks, strikes, kicks, stances, pressure points, and forms. This course is intended for all students interested in advanced techniques including but not limited to Thai-boxing, judo, jiu jitsu, and boxing as referenced by the International Mixed Martial Arts Federation organization.

FT; AA/AS; CSU; UC.

EXSC 154A Badminton I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 108
This course is the first in a series of four badminton courses. This course provides instruction and court experience in the skills, strategies and rules necessary to play badminton at the novice level. Instruction includes the basic strokes, vocabulary and sportsmanship. This course is intended for novice level badminton players.

FT; AA/AS; CSU; UC.

EXSC 154B Badminton II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 154A with a Grade of "C" or better, or equivalent
This course is the second in a series of four badminton courses. Emphasis is placed on beginning level skills, shots, serves, footwork and strategies. This course is intended for kinesiology majors and all students interested in incorporating the game of badminton into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 154C Badminton III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 154B with a Grade of "C" or better, or equivalent
This course is the third in a series of four badminton courses. Emphasis is placed on intermediate level skills, shots, serves, footwork and strategies for singles and doubles play. This course is intended for kinesiology majors and all students interested in incorporating the game of badminton into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 154D Badminton IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 154C with a Grade of "C" or better, or equivalent
This course is the fourth in a series of four badminton courses. Emphasis is placed on advanced level skills, and strategies for singles and doubles tournament play. This course is intended for kinesiology majors and all students interested in incorporating the game of badminton into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 158A Basketball I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 112.
This course is the first in a series of four basketball courses. This course introduces students to the game of basketball. Instruction includes basic individual offensive and defensive fundamental skills, history of the game, terminology, rules, etiquette, proper warm-up and cool down and safety. Emphasis is placed on games using less than full teams and half court situations. This course is designed for anyone who has an interest in playing basketball.

FT; AA/AS; CSU; UC.

EXSC 158B Basketball II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 158A with a Grade of "C" or better, or equivalent
This course is the second in a series of four basketball courses. This course provides students the opportunity to improve individual beginning skills and introduces individual offensive moves and team concepts. Topics include transition basketball, team offense and defense as well as theories of basketball conditioning. Emphasis is placed on 5 -5 play and full court situations and strategies of team play. This class is designed for those with a basic knowledge and ability to play basketball.

FT; AA/AS; CSU; UC.

EXSC 158C Basketball III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 158B with a Grade of "C" or better, or equivalent
This course is the third in a series of four basketball courses. This course provides students the opportunity to improve individual intermediate skills through self analysis of strengths and weaknesses and introduces full court pressure play. Students are expected to write programs to improve individual skills. Topics include full court zone and man pressure, full court offense and specialty plays. Emphasis is placed on skill work drills, 5-5 play and full court situations. This class is designed for those that have above an intermediate knowledge and skill level in basketball.

FT; AA/AS; CSU; UC.

EXSC 158D Basketball IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 158C with a Grade of "C" or better, or equivalent
This course is the fourth in a series of four basketball courses. This course provides students the opportunity to develop technical skills necessary to coach the game of basketball and stresses the development of advanced skills and team play. Topics include analysis of team play, writing a practice plan, how to scout an opponent and evaluation of individual play. Emphasis is placed on skill work drills and full court tournament play. This class is designed for those that have an intermediate knowledge of basketball and possess an advanced skill level.

FT; AA/AS; CSU; UC.

EXSC 159A Bowling I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 115 or PHYE 115A
This course provides students with introductory level knowledge and practice in the fundamental elements of bowling, including stance, point of origin, approach, back-swing, release, and follow-through. Emphasis is placed on introductory level skills, strategies, rules, and etiquette. This course is the first in a series of four bowling courses. It is intended for kinesiology majors and all students interested in incorporating the sport of bowling into an active lifestyle. All objectives are covered in this course whether offered for 0.5 or one unit. When the course is offered for one unit, the additional time is utilized for skills practice, spot bowling, or participation in league bowling situations.

FT; AA/AS; CSU; UC.

EXSC 159B Bowling II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade or Pass/No Pass
Advisory: EXSC 159A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 115B
This course provides introductory level students with beginning level knowledge and practice in the fundamental elements of bowling, including stance, point of origin, approach, back-swing, release, and follow-through. Emphasis is placed on beginning level skills, strategies, rules, and etiquette. This course is the second in a series of four bowling courses. It is intended for kinesiology majors and all students interested in incorporating the sport of bowling into an active lifestyle. All objectives are covered in this course whether offered for 0.5 or one unit. When this course is offered for one unit, the additional time is utilized for skills practice, spot bowling, or participation in league bowling situations.

FT; AA/AS; CSU; UC.

EXSC 159C Bowling III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade or Pass/No Pass
Advisory: EXSC 159B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 115C
This course provides beginning level students with intermediate level knowledge and practice in the fundamental elements of bowling, including stance, point of origin, approach, back-swing, release, and follow-through. Emphasis is placed on intermediate level skills, strategies, rules, and etiquette. This course is the third in a series of four bowling courses. It is intended for kinesiology majors and all students interested in incorporating the sport of bowling into an active lifestyle. All objectives are covered in this course whether offered for 0.5 or one unit. When this course is offered for one unit, the additional time is utilized for skills practice, spot bowling, or participation in league bowling situations.

FT; AA/AS; CSU; UC.

EXSC 159D Bowling IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade or Pass/No Pass
Advisory: EXSC 159C with a Grade of "C" or better, or equivalent
This course provides intermediate level students with advanced level knowledge and practice in the fundamental elements of bowling, including stance, point of origin, approach, back-swing, release, and follow-through. Emphasis is placed on advanced level skills, strategies, rules, and etiquette. This course is the fourth in a series of four bowling courses. It is intended for kinesiology majors and all students interested in incorporating the sport of bowling into an active lifestyle. All objectives are covered in this course whether offered for 0.5 or one unit. When this course is offered for one unit, the additional time is utilized for skills practice, spot bowling, or participation in league bowling situations.

FT; AA/AS; CSU; UC.

EXSC 166A Golf I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 126.
This course provides golf instruction and practice. Emphasis is placed on the fundamentals of the grip, stance, alignment, and the techniques and practice of the short game strokes of pitching, chipping and putting. Topics include the rules, terminology, safety procedures, values, etiquette, equipment, and history of golf. This course is designed for all students interested in playing golf as part of a fitness lifestyle or kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 166B Golf II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 166A with a Grade of "C" or better, or equivalent
This course provides golf instruction and practice. Emphasis is placed on techniques of the full swing with irons, hybrids, fairway metals and drivers. Topics include golf fitness, stretching and the principles of warm-up as well as golf club selection and use. This course is designed for all students interested in playing golf as part of a fitness lifestyle or kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 166C Golf III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 166B with a Grade of "C" or better, or equivalent
This course provides golf instruction and practice. Emphasis is placed on specialty shots, such as sand, side hill and up and down hill lies. The fundamental errors in golf are analyzed to correct individual errors focusing on swing techniques and the mental approach to the game. Topics include the laws of ball flight, the swing plane, and wise use of practice time. This course is designed for all students interested in playing golf as part of a fitness lifestyle and kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 166D Golf IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 166C with a Grade of "C" or better, or equivalent
This course provides golf instruction and practice. Emphasis is placed on playing strategies, analysis of golf rounds for strengths and weaknesses, student analysis of several different golf swings, and the handicap system. Stroke and Match plays are arranged between class members to develop playing strategies in competition. This course is designed for all students interested in playing golf as part of a fitness lifestyle and kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 174A Soccer I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 149 or PHYE 149W.
This course provides instruction in basic soccer skill technique, strategies, etiquette and rules necessary to play soccer at the novice level. Topics include basic dribbling, heading and collection with the soccer ball. Students also define, apply and interpret the basic rules and safety procedures within the game of soccer. This class is designed for students interested in an active lifestyle as well as for Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 174B Soccer II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 174A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 149X.
This course provides instruction in soccer technique, tactics, and physical skills necessary to play soccer at the beginning level. Topics include dribbling skills including scissors and Matthews moves, passing techniques and turning while collecting a soccer ball. Students also define and apply methods of scoring, set pieces and principles of team defense within the game of soccer. This class is designed for students interested in an active lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 174C Soccer III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 174B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 149Y.
This course provides instruction in individual soccer techniques, tactics, and physical skills necessary to play soccer at the intermediate level. Topics include shooting from both close and far distances, lofted passing techniques and offensive heading of the soccer ball. Students also define, apply and interpret methods of creating space, both offensively and defensively as an individual player. This class is designed for students interested in an active lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 174D Soccer IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 174C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 149Z.
This course provides instruction in team soccer techniques, tactics, physical skills, etiquette, and rules necessary to play soccer at the advanced level. Topics include building the offensive through the back, playing through the midfield and attacking from the central and flank positions. Students also define and apply methods of zonal defending and defending various systems of play as a team. This class is designed for students interested in an active lifestyle as well as Kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 176A Softball I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 151.
This course is the first in a series of four softball courses. This course provides instruction to develop the fundamental skills of throwing, catching, running, hitting, and rules of play of softball as well as individual and team skill development and strategies involved in competitive game situations. This course is intended for all students interested in softball.

FT; AA/AS; CSU; UC.

EXSC 176B Softball II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 176A with a Grade of "C" or better, or equivalent
This course is the second in a series of four softball courses. This course provides instruction to continue the development of the beginning skills of throwing, catching, running, hitting, and rules of play of softball as well as individual and team skill development and strategies involved in competitive game situations. This course is intended for all students interested in softball.

FT; AA/AS; CSU; UC.

EXSC 176C Softball III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 176B with a Grade of "C" or better, or equivalent
This course is the third in a series of four softball courses. This course provides instruction to develop the intermediate skills of throwing, catching, running, hitting, and rules of play of softball, as well as, individual and team skill development and strategies involved in competitive game situations. This course is intended for all students interested in softball.

FT; AA/AS; CSU; UC.

EXSC 176D Softball IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 176C with a Grade of "C" or better, or equivalent
This course is the fourth in a series of four softball courses. This course provides instruction to develop the advanced skills of throwing, catching, running, hitting and rules of play of softball, as well as, advanced individual and team skill development and strategies involved in competitive game situations. This course is intended for all students interested in softball.

FT; AA/AS; CSU; UC.

EXSC 178A Tennis I
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 159 and PHYE 159W.
This course is the first in a series of four courses in tennis. Emphasis is placed on introductory level skills, strokes, strategies, rules and etiquette. This course is intended for kinesiology majors and all students interested in incorporating the game of tennis into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 178B Tennis II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 178A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 159X.
This course is the second in a series of four courses in tennis. Emphasis is placed on beginning level skills, strokes, strategies, rules and etiquette as they relate to tournament play. This course is intended for kinesiology majors and all students interested in incorporating the game of tennis into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 178C Tennis III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 178B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 159Y.
This course is the third in a series of four courses in tennis. Emphasis is placed on intermediate level skills, strokes, strategies, rules and etiquette as they relate to league and tournament play. This course is intended for kinesiology majors and all students interested in incorporating the game of tennis into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 178D Tennis IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 178C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 159Z.
This course is the fourth in a series of four courses in tennis. Emphasis is placed on advanced skills, strokes, strategies, rules and etiquette as they relate to singles and doubles tournament play. This course is intended for kinesiology majors and all students interested in incorporating the game of tennis into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 179A Pickleball I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
This course is an introduction to the sport of pickleball. Emphasis is placed on the fundamental pickleball techniques, rules and etiquette needed to play pickleball with no prior experience. When the course is offered for three hours per week, the additional time is utilized for stroke development and application of strategies in playing situations. This course is designed for kinesiology majors and all students interested in the sport of pickleball.

AA/AS; CSU; UC.

EXSC 179B Pickleball II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 179A with a Grade of "C" or better, or equivalent
This course provides instruction and on-court experience in the skills, strategies, rules and etiquette necessary to play pickleball at a beginner level, including both singles and doubles. No prior experience is required, although a background in other racquet sports such as tennis, racquetball or badminton is helpful. When the course is offered for three hours per week, the additional time is utilized for stroke development and application of strategies in playing situations. This course is designed for kinesiology majors and all students interested in the sport of pickleball.

AA/AS; CSU; UC.

EXSC 179C Pickleball III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 179B with a Grade of "C" or better, or equivalent
This course provides instruction and on-court experience in the skills strategies, rules and etiquette necessary to play pickleball at an intermediate level, including both singles and doubles. Completion of Pickleball I or II is not required, but recommended. A background in other racquet sports such as tennis, racquetball or badminton is helpful. When the course is offered for three hours per week, the additional time utilized for stroke development and application of strategies in playing situations.

AA/AS; CSU; UC.

EXSC 179D Pickleball IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 179C with a Grade of "C" or better, or equivalent
This course provides instruction and on-court experience in the skills, strategies, rules and etiquette necessary to play pickleball at an advanced level, including both singles and doubles. Completion of Pickleball 3 is highly recommended. A background in other racquet sports such as tennis, racquetball or badminton is helpful. When the course is offered for three hours per week, the additional time is utilized for stroke development and application of strategies in playing situations, including tournaments. This course is designed for kinesiology majors and all students interested in the sport of pickleball.

AA/AS; CSU; UC.

EXSC 182A Volleyball I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 161
This course is the first of four courses in volleyball. Emphasis is placed on introductory level skills, basic rules, strategies and etiquette. This course is intended for Kinesiology majors and all students interested in incorporating the sport of volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 182B Volleyball II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 182A with a Grade of "C" or better, or equivalent
The course is the second of four courses in volleyball. Emphasis is placed on beginning level skills and offensive and defensive systems as they relate to team play. This course is intended for Kinesiology majors and all students interested in incorporating the sport of volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 182C Volleyball III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 182B with a Grade of "C" or better, or equivalent
This course is the third of four courses in volleyball. Emphasis is placed on intermediate level individual offensive and defensive skills. Topics include offensive team systems and options, and defensive theory and team systems as they relate to league play. This course is intended for Kinesiology majors and all students interested in incorporating the sport of volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 182D Volleyball IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 182C with a Grade of "C" or better, or equivalent
This course is the fourth of four courses in volleyball. Emphasis is placed on advanced level individual offensive and defensive skills. Topics include diversified offensive and defensive team systems as they relate to intercollegiate and international level volleyball. This course is intended for Kinesiology majors and all students interested in incorporating the sport of volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 183A Beach Volleyball I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
This course if the first of four courses in beach volleyball. Emphasis is placed on volleyball terminology, introductory level skills, improvement of cardiovascular/aerobic fitness, basic rules, safety procedures, strategies and etiquette. This course is intended for kinesiology majors and all students interested in incorporating the sport of beach volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 183B Beach Volleyball II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 183A with a Grade of "C" or better, or equivalent
This course is the second of four courses in beach volleyball. Emphasis is placed on beginning level skills and offensive and defensive systems as they relate to team play. This course is intended for Kinesiology majors and all students interested in incorporating the sport of volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 183C Beach Volleyball III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 183B with a Grade of "C" or better, or equivalent
This is the third of four courses in beach volleyball. Topics include intermediate skill development, introduction to plyometric training, team strategies on offense and defense. This course is intended for kinesiology majors and all students interested in incorporating the sport of beach volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 183D Beach Volleyball IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 183C with a Grade of "C" or better, or equivalent
This is the fourth of four courses in beach volleyball. Topics include advanced skill development, introduction to plyometric training, team strategies on offense and defense. This course is intended for kinesiology majors and all students interested in incorporating the sport of beach volleyball into an active lifestyle.

FT; AA/AS; CSU; UC.

EXSC 184A Water Polo I
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 163
This course is an introduction to water polo. Emphasis is placed on fundamental water polo techniques and introductory level skills, including picking up a ball in the water, passing, receiving, shooting, dribbling, and playing in a game. Other topics include introductory level offensive and defensive positioning and movements; team strategies; and rules of play. This course is the first in a series of four water polo courses. It is intended for students interested in the sport of water polo.

FT; AA/AS; CSU; UC.

EXSC 184B Water Polo II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 184A with a Grade of "C" or better, or equivalent
This course provides beginning level knowledge and practice in the sport of water polo. Emphasis is placed on beginning level water polo techniques and skills, including picking up a ball in the water, passing, receiving, shooting, dribbling, and playing in a game. Other topics include: beginning level offensive and defensive positioning and movements, team strategies and rules of play. This course is the second in a series of four water polo courses. It is intended for students interested in the sport of water polo.

FT; AA/AS; CSU; UC.

EXSC 184C Water Polo III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 184B with a Grade of "C" or better, or equivalent
This course provides intermediate level knowledge and practice in the sport of water polo. Emphasis is placed on intermediate level water polo techniques and skills, including picking up a ball in the water, passing, receiving, shooting, dribbling, and playing in a game. Other topics include intermediate level offensive and defensive positioning and movements; team strategies; and rules of play. This course is the third in a series of four water polo courses. It is intended for students who have been playing water polo for more than 6 months.

FT; AA/AS; CSU; UC.

EXSC 184D Water Polo IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 184C with a Grade of "C" or better, or equivalent
This course provides students with advanced level knowledge and practice in the sport of water polo. Emphasis is placed on advanced level water polo techniques and skills, including passing, receiving, shooting, dribbling, and playing in a game. Other topics include advanced level offensive and defensive positioning and movements; team strategies; and rules of play. This course is the fourth in a series of four water polo courses. It is intended for students who have been playing water polo for more than 12 months.

FT; AA/AS; CSU; UC.

EXSC 204 Intercollegiate Basketball I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 204
This course is intended for the first season of intercollegiate competition. Basketball skills and game strategies are at a more advanced level of participation than those of an introductory course in basketball. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 205 Intercollegiate Basketball II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 204 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 205
This course is intended for the second season of intercollegiate competition. Basketball skills and game strategies are at the advanced levels of participation. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 214 Intercollegiate Soccer I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 214.
This is a course in which students competing in their first intercollegiate soccer season learn and practice the techniques and strategies necessary for successful participation. The topics covered are fundamental through advanced skills as well as offensive and defensive strategies. This course is offered separately for men and women in the fall semester. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 215 Intercollegiate Soccer II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 234B
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 215
This is a course in which students competing in their second intercollegiate soccer season of competition learn and practice the techniques and strategies necessary for successful participation. Those topics covered are fundamental through advanced soccer skills and both offensive and defensive strategies. This course is offered separately for both men and women in the Fall semester. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 216 Intercollegiate Softball I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 216.
A physician's medical release form is required.
This course is designed for students competing in their first intercollegiate softball season. Students will learn and practice the techniques and strategies necessary for successful participation. Those topics covered are fundamental through advanced softball skills and offensive and defensive strategies. Students must demonstrate increased softball skill proficiency and skill attainment with each repetition. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 220 Intercollegiate Tennis I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 178D with a Grade of "C" or better, or equivalent or previous competitive tennis experience
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 220.
This is a course for students competing in their first intercollegiate tennis season. This course is offered in the spring semester for men and women and may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 221 Intercollegiate Tennis II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 220 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 221
This is a course for students competing in their second intercollegiate tennis season. This course is offered in the spring semester for men and women and may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 224 Intercollegiate Volleyball I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 224.
This is the first course in intercollegiate volleyball competition. Topics include analyses of team offensive and defensive systems. This course is designed to prepare advanced volleyball students for intercollegiate competition. This course is offered in the fall and spring semester and may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 225 Intercollegiate Volleyball II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 224 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 225.
This is the second course in intercollegiate volleyball competition. This course is offered in the fall and spring semester and may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 226 Intercollegiate Water Polo I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 226.
This course is designed for men and women participating in intercollegiate water polo competition. Topics include fundamental techniques of water polo, individual and team offensive tactics, individual and team defensive tactics, and rules of play. This course is designed to improve student proficiency and skill level with each repetition and may be taken two times for credit. It is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 227 Intercollegiate Water Polo II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Prerequisite: EXSC 226 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 227.
This course is designed for men and women participating in intercollegiate water polo competition. Topics include advanced techniques of water polo, advanced individual and team offensive tactics, advanced individual and team defensive tactics, and further study in rules of play. This course is designed to improve student proficiency and skill level with each repetition and may be taken two times for credit. It is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 228A Intercollegiate Beach Volleyball I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
This course is designed for students participating in intercollegiate beach volleyball competitions. Topics include techniques of beach volleyball, individual and team offensive tactics, individual and team defensive tactics, and rules of play. This course is designed to improve student proficiency and skill level with each repetition and may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 228B Intercollegiate Beach Volleyball II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 228A with a Grade of "C" or better, or equivalent
This course is designed for students participating in intercollegiate beach volleyball competitions. Topics include advanced techniques of beach volleyball, advanced individual and team offensive tactics, advanced individual and team defensive tactics, and further study in rules of play. This course is designed to improve student proficiency and skill level with each repetition and may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 231A Theories and Strategies of Basketball I
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 251A.
This course covers the theoretical concepts necessary for students to compete successfully in their first intercollegiate basketball season. Topics include rules, game strategies, history, and game preparation. The physiological requirements for the intercollegiate athlete and importance of nutritional components for optimal performance are emphasized. Separate sections of this course are offered for men and women. The course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 231B Theories and Strategies of Basketball II
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: EXSC 231A with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: EXSC 205
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 251B.
This course covers advanced theoretical concepts and techniques for intercollegiate basketball competition. Topics include advanced team strategies, efficient basketball conditioning techniques, goals for game preparation, and leadership qualities for basketball. Concepts of team building and social skills necessary for success at the intercollegiate level are also emphasized. Separate sections of this course are offered for men and women. The course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 234A Theories and Strategies of Soccer I
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 257A
This course covers the theoretical concepts necessary for students to compete successfully in their first intercollegiate soccer season. Topics include mechanical analysis of fundamental through advanced soccer skills, offensive and defensive strategies, statistics, rules, and officiating. Separate sections of this course are offered for men's soccer and women's soccer. The course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 234B Theories and Strategies of Soccer II
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 257B.
This course covers advanced theoretical concepts and techniques for intercollegiate soccer competition. Topics include advanced team strategies, efficient conditioning techniques, goals for game preparation, and leadership qualities. Concepts for team building and social skills necessary for success at the intercollegiate level are emphasized. Separate sections of this course are offered for men's soccer and women's soccer. The course is intended for intercollegiate athletes.

FT; AA/AS; CSU; UC.

EXSC 236A Theories and Strategies of Beach Volleyball I
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: EXSC 228A with a Grade of "C" or better, or equivalent
This course covers theoretical concepts necessary for successful participation in beach volleyball. Topics covered include mechanical analysis of fundamentals through advanced beach volleyball skills, offensive/defensive strategies, court etiquette, rules and officiating. This course is designed for students competing on the intercollegiate beach volleyball team and those interested in the sport of beach volleyball.

FT; AA/AS; CSU; UC.

EXSC 236B Theories and Strategies of Beach Volleyball II
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: EXSC 228B with a Grade of "C" or better, or equivalent
This course covers advanced theoretical concepts necessary for successful participation in beach volleyball. Topics include advanced team strategies, efficient beach volleyball conditioning techniques, goals for game preparation, and leadership qualities for beach volleyball. Concepts of team building and social skills necessary for success at the intercollegiate level are also emphasized. This course is designed for students competing on the intercollegiate beach volleyball team and those interested in the sport of beach volleyball.

FT; AA/AS; CSU; UC.

EXSC 239A Theories and Strategies of Intercollegiate Volleyball I
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 224 or EXSC 225
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 255A.
This is a course in which students competing in their first intercollegiate volleyball season learn the theoretical concepts necessary for successful participation. Topics covered include mechanical analysis of fundamentals through advanced volleyball skills, offensive/defensive strategies, statistics, rules, and officiating.

FT; AA/AS; CSU; UC.

EXSC 239B Theories and Strategies of Intercollegiate Volleyball II
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: EXSC 239A with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: EXSC 225
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 255B.
This is a course in which students competing in their second intercollegiate volleyball season learn the theoretical concepts necessary for successful participation. Topics covered include officiating, statistics, concepts for team building, goals for game preparation, leadership, and social skills for success at the intercollegiate level.

FT; AA/AS; CSU; UC.

EXSC 240 Physical Education in the Elementary Schools

40-45 hours lecture/24-27 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 240
This course includes a brief study of the growth, development, and characteristics of the elementary school child. The elements of written lesson plans, units, evaluations, and various forms of testing are covered. The teaching of fundamental skills, rhythms, dance, and games based on sound physiological principles for this age group is emphasized. The positive impact of physical education on health and wellness, in addition to, academic achievement is explored. Students gain knowledge and understanding of the physiological and sociological effects of alcohol, narcotics, drugs, and tobacco and of ways to identify, refer, and support students and their families who may be at risk of physical, psychological, emotional, or social health problems. Actual teaching situations are experienced in the lab sessions. This course is designed to fulfill lower division preparation for the kinesiology major or for students interested in elementary education.

FT; AA/AS; CSU.

EXSC 241B Introduction to Kinesiology

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 241B.
This introductory course covers the professional career options, history, basic philosophy, and principles of kinesiology. Other topics include current and emerging issues in foods and nutrition. This course is intended for Kinesiology majors or anyone exploring opportunities in the fields of health, wellness, physical activity, nutrition, or sport.

FT; AA/AS; CSU; UC; C-ID: KIN 100.

EXSC 242B Care and Prevention of Injuries

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 242, 242B or EXSC 289
This course covers the theory and practice of emergency field care and basic athletic first aid. Topics include prevention and care of common athletic injuries, bandaging and/or taping techniques. This course is designed for students interested in athletic training, coaching of sports and majoring in Physical Education, Kinesiology and Exercise Science.

FT; AA/AS; CSU; UC.

EXSC 270 Exercise Science Internship / Work Experience

54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 270.
This course provides on-the-job learning experience for students employed in an exercise science-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation, and achievement of job-related behavioral learning objectives. This course may be taken up to four times. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students majoring in exercise science or those interested in the fitness, health, and wellness industry. This includes but is not limited to the fields of personal training, physical therapy, strength and conditioning, health and wellness coaching, and yoga teaching.

FT; AA/AS; CSU.

EXSC 280 Applied Exercise Physiology

32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 280
This course is an introduction to how the body functions under conditions of exercise stress and how fitness behaviors affect health and wellness. Emphasis is placed on muscular, cardiorespiratory, and other physiological processes that occur as a result of exercise conditioning, as well as their effects on disease risk. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 281 Applied Kinesiology

32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 281
This course is a study of movement as it relates to exercise under both normal and injury conditions. Students learn the practical implications of exercise on bones, joints, nerves, and muscles. Emphasis is placed on applying body alignment, range of motion, stabilization, and acceleration principles to the development of exercise programs. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 282 Techniques of Weight Training
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 282.
This course is an introduction to teaching techniques in weight training. Topics include anatomy, physiology, training sequences, equipment options, safety factors, and contraindications. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 283 Exercise and Fitness Assessment
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 283.
This course prepares students to assess and evaluate exercise and fitness parameters. Topics include the measurement and evaluation of cardiorespiratory endurance; muscular strength and endurance; flexibility; body fat; pulmonary function; and blood pressure. Emphasis is placed on determining the appropriate test, conducting the test, interpreting the results, and creating an exercise program. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 284 Fitness and Sports Nutrition
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 284.
This course covers the basic principles of nutrition and the ramifications on sports activities. Topics include general nutrition, nutritional considerations for optimal sports performance, and weight control. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 285 Exercise for Special Populations
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 285.
This course presents exercise implications for special populations related to age, medical condition, and level of fitness. Emphasis is placed on cardiac conditions; diabetes; obesity; physical disabilities; Human Immunodeficiency Virus (HIV) and Acquired Immune Deficiency Syndrome (AIDS); asthma; and sensory impairments. Issues and barriers to exercise are included for each of the following groups: seniors; children; athletes; the mentally impaired; and pregnant and postpartum women. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 286 Techniques of Exercise Leadership
28-31.5 hours lecture/12-13.5 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 286.
This course provides students with the principles and techniques involved in developing a personal trainer/client relationship. Emphasis is placed on client assessment, communication skills, program design, exercise adherence, teaching strategies, and professional responsibility and liability. This course is intended for students seeking certification as personal trainers.

FT; AA/AS; CSU.

EXSC 288 Personal Training Professional Preparation
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 270
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 287, PHYE 288 or EXSC 287.
This course is designed to provide students in the Personal Trainer Certificate Program with practical experience in the field of exercise and fitness. Emphasis is placed on participant screening, evaluation, and exercise program design; self- marketing; trainer/client relationships; and professional responsibility in a fitness setting.

FT; AA/AS; CSU.

EXSC 290 Independent Study

48 - 162 hours other; 1-3 units

Grading: Letter Grade or Pass/No Pass

Limitation on Enrollment: Obtain Permission Number from Instructor

This course is not open to students with previous credit for PHYE 290.

This course is for students who wish to conduct additional research, a special project, or learning activities in the field of exercise science. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

EXSC 292A Yoga Teacher Training Essentials

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Advisory: Completion of or concurrent enrollment in: EXSC 145A with a Grade of "C" or better, or equivalent or EXSC 145B with a Grade of "C" or better, or equivalent or EXSC 145C with a Grade of "C" or better, or equivalent or EXSC 145D with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for EXSC 292.

This course serves as an introduction to the fundamental concepts of yoga necessary to further one's personal practice and to instruct beginner level yoga classes. Students will investigate and develop an in-depth understanding of the eight limbs of yoga, with a specific focus on the yamas, niyamas, asanas, and pranayama as a foundation for teaching yoga. Additional topics include the history and philosophy of yoga, introduction to Sanskrit, anatomy and biomechanics of yoga, asana classification, types of yoga, introduction to the yoga sutras, and basic alignment principles. This course partially fulfills the requirement for the 200-hour Registered Yoga Teacher (RYT) credential with Yoga Alliance. It is intended for students seeking certification as a Registered Yoga Teacher, current yoga teachers, group fitness instructors, health coaches, personal trainers, or other health and fitness professionals.

FT; AA/AS; CSU.

EXSC 292B Yoga Teacher Training Progressive Methodologies

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: EXSC 292A with a Grade of "C" or better, or equivalent

Advisory: Completion of or concurrent enrollment in: EXSC 145A with a Grade of "C" or better, or equivalent or EXSC 145B with a Grade of "C" or better, or equivalent or EXSC 145C with a Grade of "C" or better, or equivalent or EXSC 145D with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for EXSC 293.

This course provides students with the class blueprint and teaching tools from which to develop and implement all-levels yoga classes. With a focus on instructional methods, students will explore and practically apply the concept of intelligent sequencing for leading purposeful vinyasa-based yoga class experiences. Other topics include verbal and nonverbal communication strategies; student learning styles; meditation; asana progressions and regressions; introduction to physical adjustments; energetic anatomy; lifestyle and ethics for yoga teachers; and the business of yoga. This course partially fulfills the requirement for the 200-hour Registered Yoga Teacher (RYT) credential with Yoga Alliance. It is intended for students seeking certification as a Registered Yoga Teacher, current yoga teachers, group fitness instructors, health coaches, personal trainers, or other health and fitness professionals.

FT; AA/AS; CSU.

EXSC 293A Yoga Teacher Training Integration

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: EXSC 292A with a Grade of "C" or better, or equivalent or Registered Yoga Teacher-200 (RYT-200) certification and EXSC 292B with a Grade of "C" or better, or equivalent or Registered Yoga Teacher-200 (RYT-200) certification

Advisory: Completion of or concurrent enrollment in: EXSC 145A with a Grade of "C" or better, or equivalent or EXSC 145B with a Grade of "C" or better, or equivalent or EXSC 145C with a Grade of "C" or better, or equivalent or EXSC 145D with a Grade of "C" or better, or equivalent

This course provides aspiring yoga teachers with the tools to deepen their independent practice in order to strengthen their teaching and develop a personal teaching style. The course focuses on designing, integrating, and implementing knowledge and teaching of asanas, pranayama techniques, meditation, and yogic history and philosophy. Students also learn about the business aspects of teaching yoga. Students may be required to attend an on- or off-campus yoga class. This course is intended for students seeking certification as a Registered Yoga Teacher, current yoga teachers, group fitness instructors, health coaches, personal trainers, or other health and fitness professionals.

FT; AA/AS; CSU.

EXSC 293B Yoga Teacher Training Implementation

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: EXSC 293A with a Grade of "C" or better, or equivalent

Advisory: Completion of or concurrent enrollment in: EXSC 145A with a Grade of "C" or better, or equivalent or EXSC 145B with a Grade of "C" or better, or equivalent or EXSC 145C with a Grade of "C" or better, or equivalent or EXSC 145D with a Grade of "C" or better, or equivalent

This course provides students with the advanced knowledge and skills to design and implement all levels of yoga classes and yoga based educational workshops. It integrates in-depth study of yogic philosophy and Sanskrit terminology with injury management and the use of props for asana progressions and regressions as well as intelligent sequencing and theming to create purposeful class experiences. This course is intended for students seeking certification as a Registered Yoga Teacher, current yoga teachers, group fitness instructors, health coaches, personal trainers, or other health and fitness professionals.

FT; AA/AS; CSU.

EXSC 392A Special Topics in Sports Theory and Training I

8-9 hours lecture/24-108 hours lab; 1-3 units

Grading: Letter Grade or Pass/No Pass

This beginning-level course provides students the opportunity to develop theoretical understanding and individual training in a specific sport. Theories, principles, and techniques are taught for a variety of different sports that may vary from term to term. Sports focus areas for each section are listed in the class schedule.

FT; AA/AS; CSU.

EXSC 392B Special Topics in Sports Theory and Training II

8-9 hours lecture/24-108 hours lab; 1-3 units

Grading: Letter Grade or Pass/No Pass

Advisory: EXSC 392A with a Grade of "C" or better, or equivalent

This intermediate-level course provides students the opportunity to develop additional theoretical understanding and individual training in a specific sport. Theories, principles, and techniques are taught for a variety of different sports that may vary from term to term. Sports focus areas for each section are listed in the class schedule.

FT; AA/AS; CSU.

EXSC 393A Special Topics in Exercise and Fitness Theory and Training

8 - 18 hours lecture/24 - 108 hours lab; 1 unit

Grading: Pass/No Pass Only

This course provides students the opportunity to develop theoretical understanding and individual training in exercise and fitness, including but not limited to yoga, personal training, athletic training, physical therapy, and strength and conditioning. Theories, principles, and techniques are taught for a variety of different exercise and fitness areas that may vary from term to term. Exercise and fitness focus areas for each section are listed in the class schedule. This course is designed for students pursuing certification in personal training, yoga instruction, or related wellness and fitness fields.

FT; AA/AS; CSU.

FILI-Filipino

FILI 100 Filipino American Experience
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an overview of the history, cultures, values, contributions, experiences, and social struggles of Filipinos in America. Students apply theory and knowledge produced by the Filipino American community to analyze the history and lived experiences of Filipino Americans in relation to integration, acculturation, social struggles, and ethnic identity and affirmation. Students also critically evaluate the role of race and racism in Filipino American communities and experiences as well as the relevance of resistance, racial and social justice, and solidarity to current U.S. institutions and structures. This course is intended for anyone interested in the field of Ethnic Studies or the history and experiences of Filipino Americans.

FT; AA/AS; CSU; UC.

FILI 101 Filipino American Psychology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an overview of Filipino American psychology. Students analyze current Filipino American psychological and mental health perspectives, including the foundational concepts of culture, ethnicity, and race as they relate to Filipino Americans at multiple levels (social, communal, familial, and individual). Using these foundational concepts, students consider the values and meanings that influence Filipino American mental health and psychological issues, including psychological disorders that are particularly relevant for Filipino American populations (e.g., depression, intergenerational conflict, and trauma). This course is intended for students majoring or interested in Ethnic Studies.

FT; AA/AS; CSU; UC.

FIPT-Fire Protection Technology

FIPT 100D Fire Department Testing Procedures
16 hours lecture/48 hours lab; 1.5 units
Grading: Letter Grade Only
This course assists students in preparing for the process of competing for an entry-level firefighter position. The course includes simulated written exams, oral interviews and a variety of physical ability tests, including the Candidate Physical Ability Test(CPAT), Biddle, and other firefighter physical ability examinations. Topics include general knowledge of firefighter principles considered for written tests, interview techniques, principles of exercise, and task-specific exercise training. This course is intended for students preparing to enter a firefighter academy, fire academy graduates and students who are interested in sharpening their skills for entry-level fire department testing procedures.

FT; AA/AS; CSU.

FIPT 101 Fire Protection Organization
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 101
This course introduces students to the philosophy and history of fire protection as well as to career opportunities in fire protection and related fields. Topics include fire loss analysis; the organization and function of public and private fire protection services and systems; the fire department as part of local government; laws and regulations affecting the fire service; fire service nomenclature; basic fire chemistry and physics; and fire strategy and tactics. This course is intended for students majoring in Fire Technology or anyone interested in fire protection.

FT; AA/AS; CSU.

FIPT 102 Fire Prevention Technology
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides fundamental information about the history and philosophy of fire prevention and the organization and operation of fire prevention bureaus. Other topics include the use of fire codes; the identification and correction of fire hazards; and the relationships among fire prevention, fire safety education, and fire detection and suppression systems. This course is intended for students majoring in Fire Technology.

FT; AA/AS; CSU.

FIPT 103 Fire Protection Equipment and Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides students with an overview of fire protection equipment and systems. Topics include the design and operational features of fire detection and alarm systems; heat and smoke control systems; special protection and sprinkler systems; water supply for fire protection; and portable fire extinguishers. This course is intended for students majoring in Fire Technology.

FT; AA/AS; CSU.

FIPT 104 Building Construction for Fire Protection
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces building construction components that relate to fire safety. Students learn about key building inspection factors such as construction and structure design; pre-fire planning operations; and operating at fires. Other topics include the development and evolution of building and fire codes in relation to past fires in residential, commercial, and industrial occupancies. This course is intended for students majoring in Fire Technology.

FT; AA/AS; CSU.

FIPT 105 Fire Behavior and Combustion
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the theory and fundamentals of fire behavior including how fires start; how and why they spread; and how they are controlled. Topics include fire chemistry and physics; fire characteristics of materials; extinguishing agents; and fire control techniques. This course is intended for students majoring in Fire Technology or anyone interested in fire science.

FT; AA/AS; CSU.

FIPT 107 Fire Fighting Tactics and Strategy
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides an in-depth analysis of the principles of fire control through utilization of personnel, equipment, pre-planning fire problems, and extinguishing agents on the fire ground. Topics include a review of fire chemistry, methods of fire attack, and basic fire fighting tactics and strategy. This course is intended for students majoring in Fire Technology.

FT; AA/AS; CSU.

FIPT 109 Fire Service Hydraulics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 151
This course introduces students to hydraulics laws and formulas as they relate to fire service. Students perform calculations to assure adequate water pressures and volumes used for fire department operations. Other topics include the principles of fluid pressure; fire pump operation and design; hose line construction and capability; and community water supply capabilities. This course is intended for students majoring in Fire Technology.

FT; AA/AS; CSU.

FIPT 111 Fire Apparatus and Equipment
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the specifications, design, construction features, and operational capabilities of mobile and fixed firefighting apparatus. Topics include the effective deployment, utilization, and performance of pumpers, ladder trucks, and related specialized equipment under emergency conditions. This course is intended for students preparing for employment as firefighters.

FT; AA/AS; CSU.

FIPT 120 Firefighter Safety and Survival
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides students with the basic principles and history related to the national firefighter life safety initiatives, with a focus on the need for cultural and behavior change throughout the emergency services. Topics include assessment of fire dangers; common fire situations; risk abatement; personal preparation for unforeseen fire emergencies; roles and responsibilities in educating the public on fire safety; and development of a survival attitude. Students learn problem-solving techniques for increased situational awareness and self-reliance in emergencies. This course is intended for students majoring in Fire Technology; practicing firefighters and other emergency service personnel; or anyone with an interest in fire safety.

FT; AA/AS; CSU.

FIPT 125 Report Writing for the Fire Service
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers forms, formats, and techniques of written reports used in the Fire Service. Topics include report content and form; principles of clear writing; report writing steps; applications of report writing in the Fire Service; and the use of report writing technology. Students learn how to gather, record, and organize facts from a fire or Emergency Medical Services (EMS) incident and then use those facts to describe the incident in a complete, clear, concise, and correctly formatted narrative report. Students also learn to prepare various personnel-related reports. This course is intended for students majoring in Fire Technology or anyone seeking to improve Fire Service report writing skills.

FT; AA/AS; CSU.

FIPT 150A Introduction to Fire Suppression and Maintenance Manipulative Tasks (Beginning)
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 100A or FIPT 100A
This course introduces the applied operation and maintenance of basic rescue and fire suppression apparatus and equipment. Topics include ropes, ladders, and other equipment; forcible entry techniques; search and rescue; and physical fitness training. This course is intended for students majoring in the field of fire technology or those interested in a career in the fire service. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 150B Introduction to Fire Suppression and Maintenance Manipulative Tasks (Intermediate)
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: FIPT 150A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 100B or FIPT 100B
This course provides intermediate-level instruction in the operation and maintenance of fire service equipment. Topics include extinguishers and protective equipment; hose, nozzles, and fittings; hose evolutions; fire service ladders; salvage and overhaul procedures; and physical fitness training. The course is designed at an intermediate level within the guidelines of training for Firefighter I certification as specified by the California Fire Service Training and Education Division of the Office of the state Fire Marshal. It is intended for students majoring in the field of fire technology or those interested in a career in the fire service. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 150C Introduction to Fire Suppression and Maintenance Manipulative Tasks (Advanced)
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: FIPT 150T with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 100C or FIPT 100C
This course provides advanced instruction in the operation and maintenance of fire service equipment. Topics include extinguishers and protective equipment; hose; nozzles; fittings; hose evolutions; fire service ladders; and salvage and overhaul procedures. This course is designed at an advanced level to facilitate students' qualification for the manipulative training portion of Firefighter I as specified by the California Fire Service Training and Education Division of the State Fire Marshal's Office. It is intended for students majoring in the field of fire technology or those interested in a career in the fire service. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 150T Truck Operations
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: FIPT 150B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 106 or FIPT 150D
This course provides advanced instruction in the operation and maintenance of fire service truck company equipment. Topics include truck company equipment, responsibilities, tactics, and specialized skills. This course is designed at an advanced level to facilitate students' qualification for the manipulative training portion of Firefighter I as specified by the California Fire Service Training and Education Division of the State Fire Marshal's Office. It is intended for students majoring in the field of fire technology or those interested in a career in the fire service. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 150W Wildland Firefighter Safety and Survival
24 - 27 hours lecture/48 - 61 hours lab; 2.5 units
Grading: Letter Grade Only
This course provides students with fundamental knowledge of the factors affecting wildland fires including fuel, weather, topography, prevention, fire behavior, and public education. Students also learn about control techniques common to all agencies involved in wildland fire control. Course content includes certification in L-180, S-130, S-190, and Wildland Basic Firefighter Safety and Survival Level 1. Students are required to complete manipulative wildland training sessions to certify in S-130. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
This work experience course of supervised employment is designed to assist students to acquire career awareness, work habits, attitudes and skills related to the student's college major. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

FT; AA/AS; CSU.

FIPT 311A Swiftwater Rescue Technician I
24 - 36 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: LFGD 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 311M
This course is an intensive three-day training in swiftwater rescue skills. Course format consists of one day of classroom instruction followed by two days of developing and practicing water rescue skills. The course emphasizes self-rescue skills in swift moving water. Other topics include water dynamics; hazards and obstacles; basic rescue equipment; technical rope systems; and in-water contact rescue.

FT; AA/AS; CSU.

FIPT 321D Driver Operator - Driving
4 - 5 hours lecture/36 - 43 hours lab; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 110 or FIRE 210A or FIPT 210A or FIPT 321A
Health and Safety. Students must possess a valid California driver's license with a Class C Firefighter endorsement. This course meets the technical and driving requirements established by the State Fire Marshal for fire emergency vehicles. Topics include state code requirements for emergency vehicles; fire apparatus specifications and design; construction features; performance factors; basic inspection and maintenance of fire apparatus; and driving and placement exercises of pumpers.

FT; AA/AS.

FIPT 321P Driver Operator - Pumping
4 - 5 hours lecture/36 - 43 hours lab; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 110 or FIRE 210B or FIPT 210B or FIPT 321B
This course meets the technical and practical requirements for using fire department pumpers. Topics include fire apparatus pumping specifications; testing; design and construction features; performance factors; and field hydraulics.

FT; AA/AS.

FIPT 322A Common Passenger Vehicle Rescue Technician

24 - 40 hours lab; 0.5 units

Grading: Pass/No Pass Only

Advisory: EMGM 105A with a Grade of "C" or better, or equivalent or EMGM 350 with a Grade of "C" or better, or equivalent and FIPT 381G with a Grade of "C" or better, or equivalent or FIPT 381S with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 312 or FIPT 312A

This course provides the knowledge and skills to prepare an emergency responder to extricate victim(s) from a common passenger vehicle in a safe and effective manner in accordance with Authorities Having Jurisdiction (AHJ) policies and procedures. Topics include sizing up an incident; creating an incident action plan; establishing safety zones; mitigating hazards; stabilizing and creating access and egress openings for rescue from a vehicle resting on its wheels, side, and roof or in a multi-hazard configuration or environment; disentangling and removing victims; and terminating an incident. This course incorporates awareness, operations, and technician training based on National Fire Protection Association (NFPA) 1006 standard.

FT; AA/AS.

FIPT 322B Confined Space Rescue Awareness

1 hours lecture/7 hours lab; 0.2 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 308B or FIPT 308C

This course provides an introduction to the hazards, equipment, and operational positions of safe and legal confined space entry. It also includes a review of California Division of Occupational Safety and Health (Cal-OSHA) regulations with regard to permit-required confined spaces. This course is intended for personnel with confined spaces within their areas of responsibility, including current or future public safety personnel. This course is a requirement for Firefighter I Certification.

FT; AA/AS.

FIPT 322C Firefighter Survival

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

This course provides information, skills, and techniques designed to assist in avoiding fatal errors on the fireground. Students learn to avoid situations that could cause them to become lost, trapped, or injured at a fire scene. Topics include firefighter survival terminology, survival attitude, situational awareness, and problem-solving techniques intended to provide self-reliance in an emergency. Course instruction includes the use of case studies to analyze common factors in line-of-duty deaths (LODDs). This course is a requirement for Firefighter I Certification.

AA/AS.

FIPT 322D Behavioral Health and Cancer Awareness 1A

1 hours lecture/7 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides awareness-level information on behavioral health and cancer for front-line responders. Topics include the impacts of stress; factors and practices for resilience; types, prevalence, and causes of cancer; carcinogenic chemicals; and cancerous contaminants. This course is a requirement for Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 322F Low Angle Rope Rescue Operational

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for FIRE 115 or FIPT 115

This California Fire Training and Education System course equips students with the information, techniques, and methods needed for utilizing rope, webbing, hardware friction devices, and litters in low angle rescue situations. Topics include rappelling; rope and related equipment; anchor systems; safety lines; stretcher lashing and rigging; mechanical advantage systems; and single line/tow line rescue systems.

FT; AA/AS.

FIPT 322G Open Water Rescuer - Basic

24 - 40 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 381G with a Grade of "C" or better, or equivalent Firefighter I certification or FIPT 381S with a Grade of "C" or better, or equivalent Firefighter I certification

Limitation on Enrollment: Health and Safety. Students must pass an in-class swim competency test.

This course improves an individual's level of comfort and confidence for safely and proficiently performing contact rescues in static and surf water conditions. Safety is strongly emphasized throughout the class. Risk management is reinforced during every skill to establish the student's level of comfort in the water and to identify and overcome limitations. Swimming, stroke technique, and body positioning in the water are covered. Other topics include reading and understanding water flow and surf; contact rescues using rescue buoy devices and boards; dealing with combatant victims; self-rescues; and rescues of multiple victims, both conscious and unconscious. The entire course meets the requirements of swimming contact rescue of National Fire Protection Association (NFPA) 1670 and NFPA 1006 Chapter 11, sections 11.2, Chapter 15, sections 15.2.

FT; AA/AS.

FIPT 323A Hazardous Materials: First Responder Awareness (FRA)

1 hours lecture/7 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides students information on hazardous materials (hazmat) notification and reporting requirements for fire department personnel who may witness or discover a hazmat leak, spill, or discharge. The course meets or exceeds the requirements of the Code of Federal Regulations (CFR) 29 1910.120 and the California Code of Regulations (CCR) Title 8.

FT; AA/AS.

FIPT 323B Hazardous Materials: First Responder Operational (FRO)

24 - 27 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 323A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 306A

This course provides students with a fundamental knowledge of the factors affecting operating procedures at a hazardous materials (hazmat) incident. It is intended to improve the capabilities of the First Responder to respond to a hazmat event in a safe and competent manner, within the typical resource and capability limits at the "operational" level. The course emphasizes the requirements of the California State Board of Fire Services Certified Firefighter I training (Hazmat Operations), International Fire Service Accreditation Congress (IFSAC) standards, and Professional Qualifications (ProBoard) requirements. It also meets the First Responder Operational Hazmat Emergency Response certified course requirements of California Code of Regulations (CCR) Title 19, Division 2, Chapter 1, Subchapter 2, Sections 2510-2560. This course is a requirement for Firefighter I Certification.

FT; AA/AS.

FIPT 323C Hazardous Materials Incident Commander

4 hours lecture/12 - 20 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 381F with a Grade of "C" or better, or equivalent

This course provides the tools a person needs to assume control of an emergency response to a hazardous materials incident. Topics include hazard assessment, risk management, legal compliance, and protective action implementation. Instructional methods include class activities, case studies and tabletop exercises with emphasis on applied decision making. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 324A Basic Incident Command System (NIMS ICS 100 & 200)

4-4.5 hours lecture/12-13.5 hours lab; 0.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 310A
This course covers the first two levels of Incident Command System (ICS) training: ICS 100 and 200. ICS 100 introduces the ICS and provides the foundation for higher level ICS training. ICS 100 topics include the history, features, principles, and organizational structure of the ICS as well as the relationship between the ICS and the National Incident Management System (NIMS). ICS 200 prepares students to operate efficiently during an incident or event within the ICS, including functioning in an ICS supervisory position. This course is intended for students majoring in Fire Technology. This course is a requirement for Firefighter I Certification.

FT; AA/AS.

FIPT 324B I-300: Intermediate ICS

8-9 hours lecture; 0.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 310B
This course consists of Incident Command System (ICS) Training Modules 7-11. It expands on the Basic ICS and Standardized Emergency Management System (SEMS) by providing more description and detail of the organization and operation of the ICS. Topics include management of resources, duties of all positions, and examples of how the essential principles are used in incident or event planning. This course is intended for practicing emergency response personnel.

FT; AA/AS.

FIPT 324C I-400: Advanced ICS

16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 310C
This course consists of Incident Command System (ICS) Training Modules 12-15. It expands on the ICS and Standardized Emergency Management System (SEMS) by providing more description and detail of the organization and operation of the ICS. Topics include large scale organization development, roles and relationships of primary staff, considerations related to large and complex incident or event management, area command, and the importance of interagency coordination. This course is intended for practicing emergency response personnel.

FT; AA/AS.

FIPT 324D Intermediate Wildland Fire Behavior S-290

32 - 44 hours lab; 0.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 310O
This classroom-based skills course prepares prospective supervisors to undertake safe and effective fire management operations. This second course in a series continues developing fire behavior prediction knowledge and skills. Students also focus on fire environment differences and local conditions. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 332A Confined Space Rescue Technician

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 322B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 308A
This advanced rescue system course focuses on removing victims trapped in exceedingly difficult and/or large-scale entrapments. Students learn how to use specialized equipment and follow proper operating procedures. The course emphasizes the history, philosophy, organization, and operation of a confined space rescue; code reference; identification and correction of confined space rescue hazards; and the relationship between fire rescue safety education and monitoring systems.

FT; AA/AS.

FIPT 332B Rescue Systems 1: Basic Rescue Skills

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 322F with a Grade of "C" or better, or equivalent or FIPT 381G with a Grade of "C" or better, or equivalent or FIPT 381S with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIRE 243 or FIPT 243
This course provides training in heavy rescue techniques. Students learn how to use rescue equipment, construct rescue systems, package rescuers, and manage rescue scenes. Topics include rescue scene considerations and management; rescue rope and related equipment; lifting and moving heavy objects; breaching and breaching operations; ladder rescue systems; and structure shoring systems.

FT; AA/AS.

FIPT 332E Rope Rescue Technician
40 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 322F with a Grade of "C" or better, or equivalent and FIPT 332B with a Grade of "C" or better, or equivalent
This California Fire Training and Education System course equips students with the information, techniques, and methods needed to perform high angle rope rescues and to participate in the engineering and operation of simple to complex rescue systems. Topics include rope and related equipment; anchor systems; high angle victim packaging; line systems; rescue scene organization and management; and various high angle rescue techniques.

FT; AA/AS; CSU.

FIPT 332F Trench Rescue Technician
24 - 27 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 332B with a Grade of "C" or better, or equivalent
This course prepares students to work safely and efficiently in a trench rescue environment. Topics include trench and excavation regulations; soil characteristics; trench configurations and hazards; rescue team preparation; incident response; initial on-scene and pre-entry operations; shoring systems, components, and installation; victim rescue and recovery; and incident termination.

FT; AA/AS.

FIPT 340 Company Officer 2A: Human Resource Management for Company Officers
32 - 44 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 381F with a Grade of "C" or better, or equivalent
This course provides information on the use of human resources to accomplish assignments. Topics include evaluating member performance; supervising personnel; and integrating health and safety plans, policies, and procedures into daily activities as well as the emergency scene. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 341 Company Officer 2B: General Administration Functions for Company Officers
4 hours lecture/12 - 20 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 381F with a Grade of "C" or better, or equivalent
This course provides information on general administrative responsibilities of a fire company officer. Other topics include the implementation of department policies and procedures as well as conveying the fire department's role, image, and mission to the public. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 342 Company Officer 2C: Fire Investigation and Inspection for Company Officers
32 - 44 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 381F with a Grade of "C" or better, or equivalent
This course provides information on conducting inspections; identifying hazards and addressing violations; performing a fire investigation to determine preliminary cause; and securing the incident scene and preserving evidence.

FT; AA/AS; CSU.

FIPT 343 Company Officer 2D: All Risk Command Operations for Company Officers
32 - 44 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 323C with a Grade of "C" or better, or equivalent and FIPT 381F with a Grade of "C" or better, or equivalent
This course prepares students to conduct a variety of command operations. Topics include incident size-up; initial plans of action involving single and multiunit operations for various types of emergency incidents; situation mitigation utilizing agency safety procedures; pre incident planning; and post-incident analysis. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 344 Company Officer 2E: Wildland Incident Operations for Company Officers

32 - 44 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 324D with a Grade of "C" or better, or equivalent and FIPT 343 with a Grade of "C" or better, or equivalent and FIPT 381F with a Grade of "C" or better, or equivalent

This course provides information on Wildland Urban Interface (WUI) command operations. Topics include evaluating and reporting incident conditions; analyzing incident needs; developing and implementing a plan of action to deploy incident resources; suppressing a wildland fire; establishing an incident command post; creating an Incident Action Plan (IAP); and completing incident records and reports. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 345 Fire and Emergency Services Instructor: Instructor Methodology

40 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 381F with a Grade of "C" or better, or equivalent

This course covers fundamental principles and techniques of instruction with an emphasis on applied instruction in the fire service. Topics include course outline and lesson plan development; instructional aids; classroom environment management; legal and ethical issues; and instructor accountability and liability. This course is intended for practicing firefighters seeking advancement to the company officer level.

FT; AA/AS; CSU.

FIPT 345B Fire and Emergency Services Instructor II

40 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 345 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 206C OR FIPT 326C

This course provides students the opportunity to develop, receive feedback, and finalize instructional materials as well as deliver two teaching demonstrations. Topics include lesson plan development, ancillary components, and tests in accordance with the latest concepts in vocational education. This course is intended for practicing firefighters seeking additional training in instructional practices.

FT; AA/AS; CSU.

FIPT 350 Chief Fire Officer 3

8-9 hours lecture/96-108 hours lab; 2.5 units

Grading: Letter Grade Only

This course provides the student with a basic knowledge of the requirements of Fire Chief. Topics include human resource management, budget and fiscal responsibilities, general administration functions, and emergency services delivery functions. This course meets the requirements for Fire Chief by combining the four California State Fire Marshal Fire Chief Officer courses. It is intended for current Battalion Chiefs and Company Officers aspiring to promote to Battalion Chief and above.

FT.

FIPT 351A Fire Inspector 1A: Inspection and Code Enforcement

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and FIPT 125 with a Grade of "C" or better, or equivalent

This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I. Topics include legal responsibilities and authority; codes and standards; the inspection process; confidentiality and privacy requirements; and ethical conduct. Students also learn fire inspection administrative tasks including preparing inspection reports; recognizing the need for a permit or plan review; investigating common complaints; and participating in legal proceedings.

FT; AA/AS.

FIPT 351B Fire Inspector 1B: Fire and Life Safety

24-27 hours lab; 0.5 units

Grading: Letter Grade Only

Advisory: FIPT 351A with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent

This course provides students with a basic knowledge of fire and life safety related to the roles and responsibilities of a Fire Inspector I. Topics include building construction; occupancy classifications and load; means of egress; hazardous conditions; fire growth potential; fire flow; and emergency planning and preparedness measures.

FT; AA/AS.

FIPT 351C Fire Inspector 1C: Field Inspection
24-27 hours lab; 0.5 units
Grading: Letter Grade Only
Advisory: FIPT 351A with a Grade of "C" or better, or equivalent and FIPT 351B with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides students with a basic knowledge of field inspection roles and responsibilities of a Fire Inspector I. Topics include basic plan review; emergency access for an existing system; hazardous materials; and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers.

FT; AA/AS.

FIPT 351D Fire Inspector 1D: Field Inspection - California Specific
16 - 18 hours lab; 0.2 units
Grading: Letter Grade Only
Advisory: FIPT 351A with a Grade of "C" or better, or equivalent and FIPT 351B with a Grade of "C" or better, or equivalent and FIPT 351C with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides students with a basic knowledge of a Fire Inspector I's field inspection roles and responsibilities specific to California codes and standards. Topics include tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments.

FT; AA/AS.

FIPT 352A Fire Inspector 2A Fire Prevention Administration
16 - 20 hours lab; 0.2 units
Grading: Letter Grade or Pass/No Pass
Advisory: FIPT 351A with a Grade of "C" or better, or equivalent and FIPT 351B with a Grade of "C" or better, or equivalent and FIPT 351C with a Grade of "C" or better, or equivalent and FIPT 351D with a Grade of "C" or better, or equivalent ; OR California State Fire Prevention 1A, 1B, and 1C certification ;OR Five (5) years' experience as a fire inspector in a California fire agency
This course provides students with a basic knowledge of the administrative requirements related to the roles and responsibilities of a Fire Inspector 2, including processing permit and plan review applications, enforcing permit regulations, investigating complex complaints, recommending modifications to codes and standards, recommending policies and procedures for inspection services, generating written appeals correspondence, initiating legal action, evaluating inspection reports, and proposing technical reference material acquisition. It is intended for students seeking employment as a fire inspector.

FT; AA/AS.

FIPT 352B Fire Inspector 2B Fire and Life Safety Requirements
24-27 hours lab; 0.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: FIPT 352A with a Grade of "C" or better, or equivalent
This course provides students with a basic knowledge of fire and life safety requirements related to the roles and responsibilities of a Fire Inspector 2 including occupancy classification, egress elements, emergency plans and procedures, occupant loads, building construction, and fire growth potential. It is intended for students seeking employment as a fire inspector.

FT; AA/AS.

FIPT 352C Fire Inspector 2C Inspecting New and Existing Fire and Life Safety Systems and Equipment
16 - 20 hours lab; 0.2 units
Grading: Letter Grade or Pass/No Pass
Advisory: FIPT 352B with a Grade of "C" or better, or equivalent
This course provides students with a basic knowledge of inspection requirements related to the roles and responsibilities of a Fire Inspector 2 including inspection of life safety systems and building services equipment, fire protection systems, and emergency access criteria. It is intended for students seeking employment as a fire inspector.

FT; AA/AS.

FIPT 352D Fire Inspector 2D Hazardous Materials, Operations, and Processes

32 - 40 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

Advisory: FIPT 352C with a Grade of "C" or better, or equivalent

This course provides students with a basic knowledge of hazardous materials, operations, and processes related to the roles and responsibilities of a Fire Inspector 2 including hazardous conditions, flammable and combustible liquids and gases, and hazardous materials. It is intended for students seeking employment as a fire inspector.

FT; AA/AS.

FIPT 353A Plan Examiner 1A - Building Plan Review

24-27 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides the knowledge and skills that prepare a plan examiner to carry out administrative responsibilities associated with plan review services and evaluate plans for new buildings in accordance with applicable codes and standards and jurisdictional policies and procedures. It is intended for students seeking California State Fire Training Plan Examiner certification.

FT; AA/AS.

FIPT 353B Plan Examiner 1B - Fire Protection and Life Safety Systems Plan Review

24-27 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

Advisory: FIPT 353A with a Grade of "C" or better, or equivalent

This course provides the knowledge and skills that prepare a plan examiner to evaluate fire flow compliance and identify requirements and review installation plans for fire protection and life safety systems. It is intended for students seeking California State Fire Training Plan Examiner certification.

FT; AA/AS.

FIPT 353C Plan Examiner 1C - Hazards and Special Operations Plan Review

28 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

Advisory: FIPT 353B with a Grade of "C" or better, or equivalent

This course provides the knowledge and skills that prepare a plan examiner to evaluate plans associated with new construction, systems integration, alternative compliance, wildland urban interface areas, and special operations including hazardous materials and high-piled combustible storage. It is intended for students seeking California State Fire Training Plan Examiner certification.

FT; AA/AS.

FIPT 354A Fire Marshal 1A - Administration and Professional Development

18 - 24 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides an overview of the administrative roles and responsibilities of the Fire Marshal. Topics include the administrative tasks of managing a fire prevention bureau, personnel management, strategic and operational planning, budgeting, management information systems, and professional development programs. It is intended for students seeking California State Fire Training's Fire Marshal certification.

FT; AA/AS; CSU.

FIPT 354B Fire Marshal 1B - Community Relations & Fire and Life Safety Education

18 - 24 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides an overview of the knowledge and skills needed to manage fire protection agency community relations and fire and life safety education programs. Topics include developing relationships; presenting safety proposals; creating media communication strategies and policies and participating in media interviews; creating a collaborative fire and life safety education partnership; managing a fire and life safety education strategy, organizational awareness campaign, and reports; and implementing and evaluating fire and life safety programs. It is intended for students seeking California State Fire Training's Fire Marshal certification.

FT; AA/AS; CSU.

FIPT 354C Fire Marshal 1C - Fire Investigation Program Management

18 - 24 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides an overview of the knowledge and skills needed to administer fire investigation requirements. Students learn to review documentation intended for litigation or resolution, conduct investigative analysis, manage technical resources, develop and manage a comprehensive investigation program, and construct a resource plan for investigations with allied groups. It is intended for students seeking California State Fire Training's Fire Marshal certification.

FT; AA/AS; CSU.

FIPT 354D Fire Marshal 1D - Community Risk Reduction Program Management

18 - 24 hours lab; 0.2 units

Grading: Letter Grade Only

This course provides an overview of the knowledge and skills needed to manage a community risk reduction program. Students learn to evaluate target risks and emergency incident data; manage a data and information management program; interpret data and information to a conduct risk analysis; create, implement, and evaluate a risk management solution or program; integrate risk management solutions with community stakeholders; and design and implement facilitation plans. It is intended for students seeking California State Fire Training's Fire Marshal certification.

FT; AA/AS; CSU.

FIPT 354E Fire Marshal 1E - Regulatory Programs Management

29 - 32 hours lab; 0.5 units

Grading: Letter Grade Only

This course provides an overview of the knowledge and skills needed to manage fire service regulatory programs. Topics include the adoption, modification, and maintenance of codes, standards, and jurisdictional requirements; inspection, plan review, design review, appeals, record-keeping, permit, and complaint reconciliation processes; and compliance interpretation; alternative means/methods/materials, and interagency coordination programs. It is intended for students seeking California State Fire Training's Fire Marshal certification.

FT; AA/AS; CSU.

FIPT 355A Fire and Life Safety Educator 1

28 - 32 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides the skills and knowledge needed for a Fire and Life Safety Educator to safely and effectively deliver educational programs. It is intended for students seeking California State Fire Training's Fire and Life Safety Educator 1 certification.

FT; AA/AS; CSU.

FIPT 355B Fire and Life Safety Educator 2

21 - 24 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides the skills and knowledge needed for an experienced Fire and Life Safety Educator to safely, effectively, and competently prepare educational programs and information to meet identified needs. It is intended for students seeking California State Fire Training's Fire and Life Safety Educator 1 certification.

FT; AA/AS; CSU.

FIPT 355C Fire and Life Safety Educator 3

32 - 40 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides the skills and knowledge needed for an experienced Fire and Life Safety Educator to safely, effectively, and competently create, administer, and evaluate educational programs and information. It is intended for students seeking California State Fire Training's Fire and Life Safety Educator 1 certification.

FT; AA/AS; CSU.

FIPT 356A Fire Investigation 1A - Basic Fire Investigation

34 - 40 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

Advisory: FIPT 105 with a Grade of "C" or better, or equivalent

This course provides information on securing the fire scene and determining the origin and cause of the fire. Topics include responsibilities of a fire investigator, securing the fire ground, conducting an exterior and interior survey, analyzing fire patterns, interpreting individual fire patterns, discriminating the effects of explosions, examining and removing fire debris, reconstructing the area of origin, and inspecting the performance of building systems. NFPA 1033 Standard Professional Qualifications for Fire Investigator is the basis for this course. This course is designed for students seeking State Fire Training (SFT) certification as a Fire Investigator.

FT; AA/AS; CSU.

FIPT 356B Fire Investigation 1B - Evidence and Documentation

34 - 40 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides information on fire scene documentation and evidence collection/preservation. Topics include photographing the scene, diagramming the scene, constructing investigative notes, processing evidence and establishing chain of custody, processing victims and fatalities, selecting evidence for analysis, maintaining a chain of custody, preparing a fire investigation report, and disposing of evidence. This course is based on the National Fire Protection Association (NFPA) 1033 Standard for Fire Investigator Professional Qualifications. This course is designed for students seeking State Fire Training (SFT) certification as a Fire Investigator.

FT; AA/AS; CSU.

FIPT 356C Fire Investigation 1C - Preparation for Legal Proceedings

34 - 40 hours lab; 0.5 units

Grading: Letter Grade or Pass/No Pass

This course provides information on legal considerations for a court proceeding. Topics include coordinating expert resources, formulating an opinion, presenting investigative findings, and testifying during legal proceedings. NFPA 1033 Standard for Fire Investigator Professional Qualifications is the basis for this course. This course is designed for students seeking State Fire Training (SFT) certification as a Fire Investigator.

FT; AA/AS; CSU.

FIPT 362A In-service Fire Training Modules

192 - 240 hours lab; 4 units

Grading: Pass/No Pass Only

Prerequisite: FIPT 381F with a Grade of "C" or better, or equivalent Firefighter I card or FIPT 381G with a Grade of "C" or better, or equivalent Firefighter I card or FIPT 381S with a Grade of "C" or better, or equivalent Firefighter I card

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 265 or FIPT 362

This in-service fire training course updates, improves, and assesses the knowledge, skills, and abilities of fire crews. During the course students complete Emergency Medical Technician (EMT)-1 recertification and wildland/urban interface training. Other topics include hazardous materials, weapons of mass destruction, Motor Vehicle Incident (MVI) / Mass Casualty Incident (MCI) training, Aircraft Rescue Firefighting (ARFF), and incident command position responsibilities.

FT.

FIPT 380W Basic Wildland Firefighter Academy

16-18 hours lecture/72-81 hours lab; 2.5 units

Grading: Letter Grade Only

This California Department of Forestry (CDF)/United States Forest Service (USFS) Firefighter I Basic Academy course introduces students to knowledge and skills related to wildland fire control. Topics emphasize the safe and efficient performance of tasks expected of wildland firefighters. This course is intended for students currently employed or seeking employment as firefighters.

FT; AA/AS.

FIPT 381F Regional Firefighter I Academy

432-486 hours lab; 9 units

Grading: Letter Grade Only

Prerequisite: EMGM 105A with a Grade of "C" or better, or equivalent EMT certificate

Advisory: FIPT 101 with a Grade of "C" or better, or equivalent and FIPT 150A with a Grade of "C" or better, or equivalent and FIPT 150W with a Grade of "C" or better, or equivalent and FIPT 323B with a Grade of "C" or better, or equivalent and FIPT 324A with a Grade of "C" or better, or equivalent and FIPT 332A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Health and Safety. Must have passed the Firefighter Entrance Exam.

Health and Safety. Must have a current Candidate Physical Abilities Test (CPAT) card or equivalent.

This course provides students with the theory, techniques, and psychomotor skills needed to be a firefighter. Topics include the fire service's role in society; principles of fire behavior; firefighter health and safety; fire equipment operation and maintenance; and fire fighting tasks and techniques. The course emphasizes the requirements of the California State Board of Fire Services Certified Firefighter I training, International Fire Service Accreditation Congress (IFSAC) standards and Professional Qualifications (ProBoard) requirements. This course combined with FIPT 381G Firefighter I Academy Skills Review and Certification satisfies all training requirements for the IFSAC Firefighter I certification.

FT; AA/AS; CSU.

FIPT 381G Firefighter I Academy Skills Review and Certification

72 - 95 hours lab; 1.5 units

Grading: Letter Grade Only

Advisory: FIPT 381F with a Grade of "C" or better, or equivalent

Fire Fighter 1 Skills Review/Exam covers all skills and knowledge needed for the entry level Fire Fighter with a focus on the International Fire Service Accreditation Congress (IFSAC) and National Board on Fire Services Professional Qualifications (Pro Board) certifications through State Fire Training. Other topics include principles of structural firefighting, hazardous materials and wildland fire fighting. This course is intended for students actively seeking California State Fire Fighter I certification.

FT; AA/AS.

FIPT 381P Firefighter I Test Preparation and Fire Control 3

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Prerequisite: FIPT 150C with a Grade of "C" or better, or equivalent

This course prepares students for the California Firefighter I (2019) certification exams according to the National Fire Protection Association (NFPA) 1001 Professional Qualifications for Firefighter I. Topics include summary reviews of fire department operations; personal protective equipment (PPE); building construction; ropes and knots; hand and power tools; fire behavior; water and hose systems; property conservation and overhaul; strategy and procedures for structure and vehicle fires; and firefighter safety and survival. Students also develop hands-on skills in combating structure fires using a live-fire simulator. This course meets the requirements for Fire Control 3 Certification and also prepares students to take the Firefighter I (2019) Written and Skills Exam. The exam is approximately one week in duration and covers the structure, wildland, and hazmat requirements needed to earn the Firefighter I Certification.

FT; AA/AS; CSU.

FIPT 381S San Diego City Basic Firefighter I Academy

624-702 hours lab; 13 units

Grading: Letter Grade Only

Prerequisite: EMGM 105A with a Grade of "C" or better, or equivalent EMT certificate

Advisory: FIPT 101 with a Grade of "C" or better, or equivalent and FIPT 150A with a Grade of "C" or better, or equivalent and FIPT 150W with a Grade of "C" or better, or equivalent and FIPT 323B with a Grade of "C" or better, or equivalent and FIPT 324A with a Grade of "C" or better, or equivalent and FIPT 332A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Health and Safety. Must have passed the Firefighter Entrance Exam.

Health and Safety. Must have a current Candidate Physical Abilities Test (CPAT) card or equivalent.

This course provides students with the theory, techniques, and psychomotor skills needed to be a firefighter in the San Diego Fire-Rescue Department (SDFD). Topics include the fire service's role in society; principles of fire behavior; firefighter health and safety; fire equipment operation and maintenance; basic fire fighting tasks and techniques; and SDFD-specific policies and procedures. The course emphasizes the requirements of the California State Board of Fire Services Certified Firefighter I training, International Fire Service Accreditation Congress (IFSAC) standards, and Professional Qualifications (ProBoard) requirements. This course satisfies all training requirements for the IFSAC Firefighter I certification. Open enrollees are selected through the “open enrollee lottery” before each academy.

FT; AA/AS; CSU.

FIPT 392L Special Topics in Fire Management

24-243 hours lab; 0.5-4.5 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for FIPT 392

This course provides students with sound management principles needed for the transition from supervisor to manager in the fire service. Management principles and practices are taught from a variety of different focus areas that may vary from term to term. Focus areas may include: human relations, group dynamics, conflict resolution, financial planning, budget preparation and control, diversity management, and labor relations, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 392S Special Topics in Fire Management
1 hours lecture/7 - 20.5 hours lab; 0.2 units
Grading: Letter Grade Only
This course provides students with sound management principles needed for the transition from supervisor to manager in the fire service. Management principles and practices are taught from a variety of different focus areas that may vary from term to term. Focus areas may include: human relations, group dynamics, conflict resolution, financial planning, budget preparation and control, diversity management, and labor relations, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 393L Special Topics in Hazardous Materials
24-243 hours lab; 0.5-4.5 units
Grading: Letter Grade Only
This course provides students with sound information and practices in dealing with hazardous materials incidents. Hazardous material principles and practices are taught from a variety of different focus areas that may vary from term to term. Focus areas may include: Hazardous Materials Incident Commander, Hazardous Materials Technician, Hazardous Materials Safety Officer, Hazardous Materials Specialist, Hazardous Materials Decontamination, Hazardous Materials Mitigation, or Hazardous Materials Weapons of Mass Destruction, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 393S Special Topics in Hazardous Materials
1 hours lecture/7 - 20.5 hours lab; 0.2 units
Grading: Letter Grade Only
This course provides students with information and practices in dealing with hazardous materials incidents. Hazardous material principles and practices are taught from a variety of different focus areas that may vary from term to term. Focus areas may include: Hazardous Materials Incident Commander, Hazardous Materials Technician, Hazardous Materials Safety Officer, Hazardous Materials Specialist, Hazardous Materials Decontamination, Hazardous Materials Mitigation, or Hazardous Materials Weapons of Mass Destruction, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 394L Special Topics in Firefighting Tactics
24 - 243 hours lab; 0.5-4.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 394
This course provides professional training in various kinds of firefighting tactics and related activities. Fundamental skills and techniques used by firefighters in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include various kinds of firefighting tactics, vehicle or equipment operation, or firefighter safety and survival, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

FIPT 394S Special Topics in Firefighting Tactics
1 hours lecture/7 - 20.5 hours lab; 0.2 units
Grading: Letter Grade Only
This course provides professional training in various kinds of firefighting tactics and related activities. Fundamental skills and techniques used by firefighters in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include various kinds of firefighting tactics, vehicle or equipment operation, or firefighter safety and survival, among others. Focus areas are listed in the class schedule and student transcripts. This course is intended for practicing firefighters.

FT; AA/AS.

GEND-Gender Studies

GEND 101 Introduction to Gender Studies
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an interdisciplinary study of gender. Emphasis is placed on the theoretical approaches to studying gender. These approaches include examining the impact of race/ethnicity in gender roles, socialization of men and women, and the role of gender in major institutions (for example, the family, media, and education). This course is designed for developing critical thinking skills in exploring issues of gender through feminist analysis of structures of privilege and oppression. This course will be useful for those considering careers in the social sciences, social work, teaching, counseling, and nursing.

FT; AA/AS; CSU; UC; C-ID: SOCI 140.

GEOG-Geography

GEOG 101 Physical Geography
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a spatial study of the Earth's dynamic physical systems and processes. Topics include the natural environment and nature-society interactions with an emphasis on scientific literacy and critical thinking. The course covers classification and analysis of spatial patterns of weather, climate, climate change and the enhanced greenhouse effect, the water cycle, landforms, and the distribution of living organisms. This course also addresses environmental issues in geography and sustainability. The course develops students' spatial analysis skills using maps, Geographic Information Systems (GIS), the Global Positioning System (GPS), and remote sensing imagery. This course is intended for social science majors, sustainability majors, or anyone seeking an understanding of Earth's physical systems and human impacts on the natural environment.

FT; AA/AS; CSU; UC; C-ID: GEOG 110.

GEOG 101L Physical Geography Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: GEOG 101 with a Grade of "C" or better, or equivalent
This course requires practical observations and applications of the geographic grid, atlases, and topographic maps, weather and climate, natural vegetation and soils, and landforms. This includes exercises in remote sensing and computer tools for data analysis, including Google Earth and Geographic Information Systems (GIS). This course is designed for students interested in geography, geology, or Earth science.

FT; AA/AS; CSU; UC; C-ID: GEOG 111.

GEOG 102 Cultural Geography
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an introduction to thematic cultural geography. Emphasis is placed on population, race, language, religion, settlement patterns, political organization, economic activities, industry, and the regional distribution of these elements. This course is for students interested in thematic cultural geography or Social Science majors.

FT; AA/AS; CSU; UC; C-ID: GEOG 120.

GEOG 104 World Regional Geography
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is a survey of the world's major geographical regions, including Europe, North America, Latin America, Africa, Australia, Oceania, and South, East, and Southeast Asia. Emphasis is placed on the historical, environmental, cultural, economic, and technological factors that impact these geographical areas. This course is intended for students majoring in Geography and all students interested in world geography.

FT; AA/AS; CSU; UC; C-ID: GEOG 125.

GEOL-Geology

GEOL 100 Physical Geology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Concurrent enrollment in: GEOL 101
This course is an introduction to the science of the earth, the materials of which it is composed, and the processes that are acting upon it. Topics include plate tectonics and Earth's internal structure; the formation and classification of minerals and rocks; geologic structures; and geologic processes of the earth's surface and subsurface. This course is intended for students with a general interest in the geological sciences as well as those majoring in geology, earth science, or geological engineering.

FT; AA/AS; CSU; UC; C-ID: GEOL 100.

GEOL 101 Physical Geology Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: GEOL 100 with a Grade of "C" or better, or equivalent
This laboratory course is a practical study of mineral and rock identification; landforms; topographic/geologic map interpretation; and geologic structures. It is intended for students with a general interest in the geological sciences as well as those majoring in geology, earth science, or geological engineering.

FT; AA/AS; CSU; UC; C-ID: GEOL 100L.

GEOL 104 Earth Science
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a survey of Earth's major physical systems, including the lithosphere, hydrosphere, atmosphere, and Earth's place in the solar system. Emphasis is placed on a synthesis of pertinent topics in geology, physical geography, oceanography, meteorology, and astronomy. This course is intended for those with a general interest in the Earth sciences.

FT; AA/AS; CSU; UC; C-ID: GEOL 120.

GEOL 111 Dinosaurs, Mass Extinctions, and Earth History
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent and GEOL 100 with a Grade of "C" or better, or equivalent or GEOL 104 with a Grade of "C" or better, or equivalent
This course covers the principles of historical geology. Topics include the origin and evolution of the Earth and biosphere, dinosaurs, mass extinctions, fossils, plate tectonics, biological evolution, and geologic dating techniques. This course is intended for students with a general interest in geoscience, as well as those majoring in geology, geography, earth science, or geological engineering.

FT; AA/AS; CSU; UC; C-ID: GEOL 111.

GEOL 130 Field Geology of San Diego County
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and GEOL 100 with a Grade of "C" or better, or equivalent or GEOL 101 with a Grade of "C" or better, or equivalent or GEOL 104 with a Grade of "C" or better, or equivalent or GEOL 120 with a Grade of "C" or better, or equivalent or OCEA 101 with a Grade of "C" or better, or equivalent
This course explores the geologic history and plate tectonic evolution of San Diego County. Emphasis is placed on the geology of various regions, including the coastal plain, Peninsular Ranges, and Salton Trough. Through lectures, laboratory activities, and field trips, students will gain a deeper understanding of the processes that have shaped these areas. Topics include plate tectonic theory, regional geology, rocks and minerals, map and compass work, geo-spatial data collection, and geologic report writing. This course is intended for those with an interest in field geology.

FT; AA/AS; CSU; UC.

GEOL 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Advisory: GEOL 100 with a Grade of "C" or better, or equivalent and GEOL 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of geology. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

HEAL-Health Education

HEAL 101 Health and Lifestyle
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course covers aspects of mental, emotional, social, environmental, spiritual, and physical health. Emphasis is placed on knowledge for developing the attitude, understanding, and practice of a preventive lifestyle for healthy living and optimal wellness. Topics include chronic diseases, physical activity, nutrition, weight management, birth control methods, human sexuality, alcohol, tobacco and illicit chemical use, stress, and factors that contribute to wellness and longevity. Experience in personal health assessment and the changing of health behaviors is stressed. This course is intended for all students seeking a healthy lifestyle as well as those pursuing a teaching credential. It satisfies the State of California teaching credential Health Education requirement.

FT; AA/AS; CSU; UC.

HEAL 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of health education. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

HIST-History

HIST 100 World History I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course examines the growth of civilizations and the interrelationships of peoples of Europe, Asia, Africa, and the Americas from the birth of civilization to the eve of the Modern Period. Topics in social, intellectual, economic, and political history are covered. This course is intended for history majors and all students interested in a global historical perspective.

FT; AA/AS; CSU; UC.

HIST 101 World History II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course examines the comparative history of the world's civilizations in Africa, the Americas, Asia, and Europe from the dawn of the Modern Period (1600) to the present. Topics in social, intellectual, economic, and political history are covered. This course is intended for history majors as well as anyone seeking a global historical perspective.

FT; AA/AS; CSU; UC; C-ID: HIST 160.

HIST 105 Introduction to Western Civilization I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an historical survey of Western Civilization from the early human communities through the early modern period. The course is designed to introduce students to the ideas, attitudes, and institutions basic to Western Civilization through primary and secondary source material. This course is intended for students majoring in history as well as any student seeking a broad historical perspective.

FT; AA/AS; CSU; UC; C-ID: HIST 170.

HIST 106 Introduction to Western Civilization II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a historical survey of Western Civilization from early modernism to the present. Students are introduced to the ideas, attitudes, and institutions basic to Western Civilization. Topics include the political structures, social structures, forms of cultural expression, and patterns of change during key periods of Western history. This course is intended for history majors as well as any student seeking a broad historical perspective.

FT; AA/AS; CSU; UC; C-ID: HIST 180.

HIST 109 History of the United States I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers the history of the United States from its colonial origins through the period of Reconstruction. It provides an overview of the diverse peoples who interacted, settled, and influenced the history of the nation and its developing economic, social, and political institutions. Concentrating on class, ethnicity/race, and gender, students are required to analyze a variety of primary and secondary sources, think critically, and write thesis-based essays. This course is intended for all students interested in United States history.

FT; AA/AS; CSU; UC; C-ID: HIST 130.

HIST 110 History of the United States History II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers the history of the United States from Reconstruction to the present. It provides an overview of the diverse peoples who influenced the history of the nation and its maturing economic, social, and political institutions. Concentrating on class, ethnicity/race, and gender, students are required to analyze a variety of primary and secondary sources, think critically, and write thesis-based essays. This course is intended for all students interested in United States history.

FT; AA/AS; CSU; UC; C-ID: HIST 140.

HIST 115A History of the Americas I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a history of the Americas from 1500 through 1870. Emphasis is placed on a comparison of the cultural forms, political institutions, social relations, and economic structures that resulted from the interactions among people of different socially defined cultures, races, ethnicities, and social classes. Topics include the emergence of the independence movements in the Americas; political conflict and civil war in the newly independent countries; and the consolidation of stable nation states by 1870. The United States Constitution and subsequent political institutions in the United States are compared to the other newly independent countries in the Americas. This course is intended for students majoring in History and those interested in the history of the Americas.

FT; AA/AS; CSU; UC.

HIST 115B History of the Americas II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a history of the Americas from 1865 to the present. Emphasis is placed on the application of classical liberalism during the late nineteenth century, construction of corporatist states during the mid-twentieth century, and the advent of neo-liberalism in the late twentieth century. Topics include the development of the California State Constitution, the expansion of commerce, and international relations among nations in the Western Hemisphere. This course is intended for students majoring in History and those interested in the history of the Americas.

FT; AA/AS; CSU; UC.

HIST 120 Introduction to Asian Civilizations
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course examines the social, cultural, and political evolution of distinct civilizations in East, South, and Southeast Asia from prehistory to the end of the sixteenth century. Emphasis is placed on topics such as the development of indigenous religions/philosophies, the rise and decline of regional kingdoms/dynasties, cultural achievements, and gender roles. This course is intended for all students interested in Asian history and culture.

FT; AA/AS; CSU; UC.

HIST 121 Asian Civilizations in Modern Times
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course examines the evolution of the distinct cultures, thought, and institutions in East, South, and Southeast Asia from the sixteenth century to the present through critical investigations into the impact of modernization on the political, social, economic, and cultural dimensions of these societies. Emphasis is placed on topics such as the first encounters with Western powers, the evolution of Western imperialism, the rise of nationalist movements and independent nation states, and their evolution and progress to the present. This course is intended for all students interested in Asian history and culture.

FT; AA/AS; CSU; UC.

HIST 123 U.S. History from the Asian Pacific American Perspective
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course examines the global, national, and local forces that shaped the lives of Asian Pacific Islander Americans (APIA) from the 1850s to the present. Topics include labor, migration, and settlement of diverse APIA groups; national debates over legal, social, and economic inclusion and exclusion; American overseas expansion; racial and gender politics; family formation; and pan-ethnicity. California constitutionalism, state and local governments, and California state and federal government relations are also covered. This course is intended for all students interested in history, ethnic studies, and Asian American studies.

FT; AA/AS; CSU; UC.

HIST 141 Women in United States History I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers the history of the United States from its colonial origins through the period of Reconstruction with a special emphasis on the history and role of women. Topics include the diverse contributions of women that influenced the history of the nation and its developing economic, social, and political institutions. The course requires students to analyze a variety of materials, think critically, and write thesis-based essays. This course is intended for students interested in history or women's studies.

FT; AA/AS; CSU; UC.

HIST 142 Women in United States History II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course covers the history of the United States from Reconstruction to the present with a special emphasis on the history and role of women. Topics include the diverse peoples who influenced the history of the nation and its maturing economic, social and political institutions. This course requires students to analyze a variety of materials, think critically, and write thesis-based essays. It is intended for students interested in history or women's studies.

FT; AA/AS; CSU; UC.

HIST 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of history. It is not intended to replace an existing course in the discipline. In this course students have a written contract with their instructor for activities such as: preparing problem analyses, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

HSEC-Homeland Security

HSEC 100 Introduction to Homeland Security
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course introduces the structure, organization and components of the Department of Homeland Security. Students examine the importance of the agencies associated with Homeland Security and their interrelated duties and relationships. Other topics include significant historical events; state, national, and international law; and contemporary threats. This course is intended for students employed or seeking employment with the Department of Homeland Security as well as anyone interested in the role of Homeland Security in U.S. government.

FT; AA/AS; CSU.

HSEC 110 Intelligence Analysis and Security Management
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces students to the topic of intelligence analysis and its relationship to the security management of terrorist attacks and other threats. Students examine the structure and operation of the U.S. intelligence community and the use of intelligence in national decision-making. Other topics include intelligence support of Homeland Security measures, counterintelligence, accountability and civil liberties, and intelligence activities of other governments. This course is intended for students employed or seeking employment with the Department of Homeland Security as well as anyone interested in the role of intelligence agencies in U.S. government.

FT; AA/AS; CSU.

HSEC 120 Transportation and Border Security
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides an in-depth view of modern border and transportation security. Topics include security for seaports, ships, aircraft, trains, trucks, pipelines, and busses. The course focuses on the analysis of legal, economic, political, and cultural aspects of transportation security. This course is intended for students employed or seeking employment with the Department of Homeland Security as well as anyone interested in the field of transportation security.

FT; AA/AS; CSU.

HUMA-Humanities

HUMA 101 Introduction to the Humanities I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This interdisciplinary course is designed for students interested in meeting general education requirements in humanities. The course develops students' understanding and appreciation of humankind's cultural heritage from the Upper Paleolithic (ca. 40,000 BCE) to approximately 1400 CE. A survey is made of the literature, philosophy, music, painting, architecture, and sculpture of both Western and non-Western civilizations.

FT; AA/AS; CSU; UC.

HUMA 102 Introduction to the Humanities II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This interdisciplinary course is designed for students interested in meeting general education requirements in humanities. The course develops students' understanding and appreciation of humankind's cultural heritage from approximately 1400CE to the present time. A survey is made of the literature, philosophy, music, painting, architecture, and sculpture of both Western and non-Western civilizations.

FT; AA/AS; CSU; UC.

HUMA 106 World Religions
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the basic elements of the religions of the world, their similarities and differences, and their impact on believers and society. The course includes a study of the historical development, doctrines, rituals, sects, and scriptures of the major religions of the world. Some analysis of ancient religious traditions and tribal religious beliefs and practices may be included. This course is intended for all students interested in humanities and the study of world religions.

FT; AA/AS; CSU; UC.

HUMA 201 Mythology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This interdisciplinary course introduces students to the major images and themes of the myths of widely separated peoples of the world throughout history. By analyzing various archetypal patterns found in the great civilizations and tribal cultures of the world, students understand both the uniqueness of each culture's world view and the commonality of human mythological conceptions. Literature and the arts are used to demonstrate these cultures' mythic ideas. This course is meant for students in the Humanities and for those interested in the myths of the world.

FT; AA/AS; CSU; UC.

JOUR-Journalism

JOUR 202 Introduction to Mass Communication
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DJRN 100 or FJMP 101.
This course is a survey of mass communication in the United States. Emphasis is placed on the historical and contemporary impact of the media on society and culture as well as on the ways that social institutions shape the media. Students examine media related issues as they relate to social and cultural constructs, economics, technology, law and ethics, and social issues. This course is designed for journalism majors and all students interested in the relationship between mass media and society.

FT; AA/AS; CSU; UC; C-ID: JOUR 100.

JOUR 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of journalism. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

LFGD-Lifeguarding

LFGD 101 Introduction to Open Water Lifeguarding

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: EMGM 105A with a Grade of "C" or better, or equivalent or LFGD 101A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Health and Safety. Must pass the USLA standard 500 meter swim test and an 8-minute one-mile run.
This course is not open to students with previous credit for FIPT 160
This introductory-level course provides a foundation in the theoretical background, procedures, and manipulative skills necessary for service as an ocean and inland beach lifeguard. Topics include lifeguarding history, training, education, standardized procedures, environmental protection, ethics, physical and biological characteristics of the beach environment, rescue techniques, facilities and equipment, recordkeeping, public relations, and legal issues. The content of the course follows United States Lifesaving Association (USLA) standards. It is intended for students currently seeking employment as open water lifeguards.

FT; AA/AS; CSU.

LFGD 101A Emergency Medical Care of the Sick and Injured

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 309A or 309B
This course trains students in the emergency medical skills needed by public safety personnel. Topics include emergency care procedures, such as examining the victim; observing surroundings; determining case histories; maintaining an airway; performing resuscitation and cardiopulmonary resuscitation (CPR); controlling bleeding; and treating cerebrovascular injuries, shock, and seizures. Students also learn about childbirth; manual lifts and carries; and improvising and providing transportation. This course meets present public safety emergency care requirements.

FT; AA/AS; CSU.

LFGD 301 Advanced Open Water Lifeguard Training

168 - 190 hours lab; 3.5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: LFGD 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Health and Safety. Must be sponsored by a regional lifeguard agency.
This course is not open to students with previous credit for FIPT 260, FIPT 360, or FIPT 360A
This advanced-level course prepares seasonal lifeguards for year-round positions. Topics include municipal rules and regulations, equipment operation, lifesaving procedures, law enforcement, emergency management, report writing, and leadership. The content of the course follows the standards of the United States Lifesaving Association.

FT; AA/AS.

LFGD 320 In-service Lifeguard Training Modules

192 - 240 hours lab; 4 units
Grading: Pass/No Pass Only
Prerequisite: LFGD 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 362B
This in-service lifeguard training course updates, improves, and assesses the knowledge, skills, and abilities of current lifeguard personnel. During the course students complete Emergency Medical Technician recertification. Other topics include water rescue and drowning prevention; beach management and law enforcement; leadership; vessel rescue; maritime enforcement; marine firefighting; swiftwater rescue; Self-Contained Underwater Breathing Apparatus (SCUBA) rescue; technical rope rescue; Hazardous materials (hazmat) handling; weapons of mass destruction; and multiple victim/mass casualty incident command.

FT.

LFGD 330 All-Terrain Vehicle Operations

4 - 6 hours lecture/12 - 18 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: LFGD 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 365
Health and Safety. Students must be sponsored by a public safety agency.
This course provides training in the operation and responsibilities of All-Terrain Vehicles (ATVs) used in beach lifeguard operations. Topics include terminology, legal considerations, basic maintenance, riding operations, and pre- and post-operation inspections.

FT; AA/AS.

LFGD 335 Rescue Watercraft Operations

32 - 40 hours lab; 0.5 units
Grading: Letter Grade Only
Prerequisite: LFGD 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Health and Safety. Students must be sponsored by a public safety agency.
This course is not open to students with previous credit for FIPT 063, FIPT 163, or FIPT 366A.
This course trains open water lifeguards in the operation and crew responsibilities of the rescue watercraft (RWC). Topics include boating law, safety, technology, maintenance, and operation.

FT; AA/AS.

LFGD 392L Special Topics in Open Water Lifeguarding

24-243 hours lab; 0.5-4.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 395 or 395L
This course provides training in various kinds of lifeguarding practices. Fundamental skills and techniques used by lifeguards in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include various kinds of lifeguarding techniques, vehicle or equipment operation, or emergency management, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

LFGD 392S Special Topics in Open Water Lifeguarding

1 hours lecture/7 - 20.5 hours lab; 0.2 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for FIPT 395S
This course provides training in various kinds of lifeguarding practices. Fundamental skills and techniques used by lifeguards in the regular execution of their duties are taught from a variety of different focus areas that may vary from term to term. Focus areas may include various kinds of lifeguarding techniques, vehicle or equipment operation, or emergency management, among others. Focus areas are listed in the class schedule and student transcripts.

FT; AA/AS.

LIBS-Library Science

LIBS 101 Information Literacy and Research Skills

16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in:
ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides an overview of information resources and the skills required to use them effectively. Emphasis is placed on locating, navigating, and evaluating various information resources and the applicability of research skills in both personal life and future academic endeavors. Topics include examining library resources such as print and electronic indexes, books, and periodicals; electronic databases; online and in-person library services; effective internet searching; and developing research strategies. This course is intended for students who wish to acquire research skills for academic, career, or personal use.

FT; AA/AS; CSU; UC.

MARK-Marketing

MARK 100 Principles of Marketing
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an overview of the foundations, principles, processes, and goals of marketing. Topics include ethics and social responsibility; global marketing and world trade; corporate marketing strategies; and emerging technologies. Marketing strategies include product planning, development, pricing, distribution, and promotion. This course is intended for students majoring in business or others working in a business environment such as managers and supervisors.

FT; AA/AS; CSU.

MATH-Mathematics

MATH 119 Elementary Statistics see STAT C1000 Introduction to Statistics

MATH 15A Prealgebra Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of prealgebra skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in mathematics concepts, arithmetic operations, algebraic expressions, mathematical properties, and their application to prealgebra-specific mathematical problems. This course is designed for students who need to refresh their pre-algebra skills or need additional support in subsequent mathematics courses.

MATH 15B Elementary Algebra and Geometry Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of elementary algebra and geometry skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in mathematics concepts, arithmetic operations, algebraic expressions, mathematical properties, and their application to elementary algebra- and geometry-specific mathematical problems. This course is designed for students who need to refresh their elementary algebra and geometry skills or need additional support in subsequent mathematics courses.

MATH 15C Intermediate Algebra and Geometry Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of intermediate algebra and geometry skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in mathematics concepts, arithmetic operations, algebraic expressions, mathematical properties, and their application to intermediate algebra- and geometry-specific mathematical problems. This course is designed for students who need to refresh their intermediate algebra and geometry skills or need additional support in subsequent mathematics courses.

MATH 15D Geometry Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of geometry skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in geometric shapes such as triangles, circles, and quadrilaterals; unit conversions; and calculations of perimeter, area, and volume. This course is designed for students who need to refresh their geometry skills or need additional support in subsequent mathematics courses.

FT.

MATH 15E Trigonometry Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of trigonometry skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in angle concepts; trigonometric functions, identities, and equations; vectors; complex numbers; and application problems. This course is designed for students who need to refresh their trigonometry skills or need additional support in subsequent mathematics courses.

FT.

MATH 15F College Algebra Refresher
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
This course is a review of college algebra skills needed for success in subsequent mathematics courses. Students receive instruction and academic support in linear, polynomial, exponential, logarithmic, and other functions; non-linear inequalities; matrices; systems of equations; and linear programming. This course is designed for students who need to refresh their college algebra skills or need additional support in subsequent mathematics courses.

FT.

MATH 44 Supervised Tutoring in Math
1 - 162 hours other; 0 units
Grading: Non-credit Course
This no grade, no credit course is used as an attendance tracking mechanism for students receiving tutoring in the Math Center. The course is designed to prepare students to succeed in the corequisite and subsequent subject matter courses. This course may be taken four times with a different corequisite subject matter course.

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MATH 104 Trigonometry
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement M40 or M50 based on California Title 5 regulations; or students with Milestone M30 must enroll in Mathematics 104X (Mathematics 104 and Mathematics 15D learning community).
This course is a study of the numerical, analytical, and geometric properties of right and oblique triangles, of trigonometric and inverse trigonometric functions, and their applications. The course content includes right angle trigonometry, radian measure, circular functions, graphs of circular functions and their inverses, trigonometric identities, equations involving trigonometric and inverse trigonometric functions, an introduction of the complex plane, vectors and their operations, and the trigonometric form of complex numbers. This course is designed as a preparation for calculus and it is intended for the transfer student planning to major in mathematics, engineering, economics, or disciplines included in the physical or life sciences.

FT; AA/AS; CSU.

MATH 116 College and Matrix Algebra
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement Milestone M40 or M50 based on California Title 5 regulations. Students with a milestone M30 must enroll in MATH 116X (Mathematics 116 and Mathematics 15C learning community).
This course is designed to strengthen the algebra skills of students seeking Business or Natural Science degrees who are required to take an applied calculus course. Topics in the course include the theory of functions; graphing functions; exponential and logarithmic functions; solving equations involving algebraic, exponential and logarithmic functions; solving systems of linear equations; matrix algebra; modeling; and applications problems. Analytical reading and problem solving skills are required for success in this course.

FT; AA/AS; CSU; UC.

MATH 118 Math for the Liberal Arts Student
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations.
This course covers a selection of topics from logical reasoning, quantitative literacy, the history of mathematics, statistics, probability, number theory, problem-solving techniques, and applications of mathematics to the liberal arts curriculum. Emphasis is placed on the development of an understanding and life long appreciation for critical thinking and mathematical problem solving. This is a general education mathematics course designed for students majoring in the liberal arts.

FT; AA/AS; CSU.

MATH 121 Basic Techniques of Applied Calculus I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement Milestone M40 or M50 based on California Title 5 regulations. Students with a milestone M30 must enroll in MATH 121X (Mathematics 121 and Mathematics 15F support course).
This course examines the study of calculus using numerical, graphical, and analytical methods to analyze calculus problems encountered in real-world applications in business, natural/life sciences, and social sciences. Topics include limits, derivatives, and integrals of algebraic, exponential, and logarithmic functions, curve sketching, optimization, and areas under and between curves and partial derivatives and optimization of multivariable functions. This is the first course in a sequence of mathematics courses for students intending to major in business, economics, or natural and social sciences.

FT; AA/AS; CSU; UC.

MATH 122 Basic Techniques of Calculus II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 121 with a Grade of "C" or better, or equivalent
This second course in a math sequence covers methods of integration, multivariable functions and optimization problems, differential equations, Taylor series development and application, derivatives and integrals of trigonometric functions, and their usage in solving problems encountered in real-world applications in business, life and social sciences and economics. This course is intended for students majoring in business, natural science, social science and economics.

FT; AA/AS; CSU; UC.

MATH 141 Precalculus
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Trigonometry with a grade of C or better or appropriate placement Milestone M50 based on California Title 5 regulations. Students with a milestone M30 or M40 must enroll in Mathematics 141X (Mathematics 141 and Mathematics 15B learning community).
This course is a study of numerical, analytical, and graphical properties of functions. The course content includes polynomial, rational, irrational, exponential, logarithmic, and trigonometric functions. Additional topics include: inverse functions, complex numbers, polar coordinates, matrices, conic sections, sequences, series and the binomial theorem. This course is designed as a preparation for calculus and is intended for the transfer student planning to major in mathematics, engineering, economics, or disciplines included in the physical or life sciences.

FT; AA/AS; CSU; UC.

MATH 150 Calculus with Analytic Geometry I
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 141 with a Grade of "C" or better, or equivalent or Milestone M60. Students with a milestone below M60 must enroll in Mathematics 150X (Mathematics 150 and Mathematics 15E learning community).
This course is an introduction to university-level calculus requiring a strong background in algebra and trigonometry. The topics of study include analytic geometry, limits, differentiation and integration of algebraic and transcendental functions, and applications of derivatives and integrals. Emphasis is placed on calculus applications involving motion, optimization, graphing, and applications in the physical and life sciences. This course incorporates the use of technology. Analytical reading and problem solving are strongly emphasized in this course. This course is intended for students majoring in mathematics, computer science, physics, chemistry, engineering, or economics.

FT; AA/AS; CSU; UC; C-ID: MATH 210.

MATH 150L Calculus I Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 141 with a Grade of "C" or better, or equivalent
Corequisite: MATH 150
This course is a workshop, project-oriented course dealing with exploration and development of the calculus topics introduced in Calculus and Analytic Geometry I. This course directly supports the calculus lectures by having hands-on, collaborative assignments where technology is strongly incorporated throughout all the in-class assignments. Students work individually and in small groups on explorations and applications thus extending the material presented in an introductory, university-level course. Topics including geometric, analytic and numeric applications of limits, derivatives and integrals as well as calculus applications found in the physical and life sciences. This course is intended for all students currently enrolled in Calculus with Analytic Geometry I.

FT; AA/AS; CSU; UC.

MATH 151 Calculus with Analytic Geometry II
64-72 hours lecture; 4 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 150 with a Grade of "C" or better, or equivalent
This is the second course in the calculus and analytic geometry sequence. This course covers more advanced topics in analytic geometry, differentiation and integration of algebraic and transcendental functions, infinite series, Taylor series, and parametric equations. This course also covers a general introduction to the theory and applications of power series, techniques of integration, and functions in polar coordinates, as it serves as a basis for multivariable calculus and differential equations, as well as most upper division courses in mathematics and engineering. This course is intended for the transfer student planning to major in mathematics, computer science, physics, chemistry, engineering or economics.

FT; AA/AS; CSU; UC.

MATH 245 Discrete Mathematics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 122 with a Grade of "C" or better, or equivalent or MATH 151 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the theory of discrete mathematics and introduces elementary concepts in logic, set theory, and number theory. The topics covered include propositional and predicate logic, methods of proof, set theory, Boolean algebra, number theory, equivalence and order relations, and functions. This forms a basis for upper division courses in mathematics and computer science, and is intended for the transfer student planning to major in these disciplines.

FT; AA/AS; CSU; UC.

MATH 252 Calculus with Analytic Geometry III
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Prerequisite: MATH 151 with a Grade of "C" or better, or equivalent
This course includes the algebra and geometry of 2 and 3 dimensional Euclidean vectors, the algebra and calculus of multivariable functions including composition of functions, limits, continuity, partial differentiation, gradients, higher order derivatives, the chain rule, constrained and unconstrained optimization including Lagrange's theorem, multiple integrals, integrals over paths and surfaces, and integral theorems of vector analysis. This course is intended as a general introduction to the theory and applications of multivariable calculus. This course is essential for most upper division courses in mathematics and forms part of the foundation for engineering and physics. The course is intended for the students interested and/or planning to major in mathematics, physics, astronomy, engineering, computer science, physical chemistry, operational research, or economics.

FT; AA/AS; CSU; UC; C-ID: MATH 230.

MATH 254 Introduction to Linear Algebra

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: MATH 151 with a Grade of "C" or better, or equivalent

This course serves as an introduction to the theory and applications of elementary linear algebra, and is the basis for most upper division courses in mathematics. The topics covered in this course include matrix algebra, Gaussian Elimination, systems of equations, determinants, Euclidean and general vector spaces, linear transformations, orthogonality and inner product spaces, bases of vector spaces, the Change of Basis Theorem, eigenvalues, eigenvectors, the rank and nullity of matrices and introduction to linear transformations. This course is intended for the transfer student planning to major in mathematics, physics, engineering, computer science, operational research, economics, or other sciences.

FT; AA/AS; CSU; UC; C-ID: MATH 250.

MATH 255 Differential Equations

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: MATH 252 with a Grade of "C" or better, or equivalent and MATH 254 with a Grade of "C" or better, or equivalent

This course covers first order and higher order ordinary differential equations and their applications. Topics include linear first order and higher order equations, homogeneous and nonhomogeneous equations with constant or variable coefficients, and systems of ordinary differential equations. Methods used to solve equations include substitution methods, integrating factors, reduction of order, variation of parameters, power series solutions, and Laplace transforms. This course is an introduction to the theory and applications of differential equations and is the basis for many upper division courses in engineering, physics, and mathematics. It is intended for the transfer student planning to major in mathematics, engineering, operational research, physics, or other physical science subjects.

FT; AA/AS; CSU; UC.

MLTT-Medical Laboratory Technician Training

MLTT 61 Directed Clinical Practice in Clinical Chemistry

160 hours other; 3 units

Grading: Letter Grade Only

Prerequisite: MLTT 210 with a Grade of "C" or better, or equivalent and MLTT 211 with a Grade of "C" or better, or equivalent and MLTT 212 with a Grade of "C" or better, or equivalent and MLTT 213 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: All prerequisites must be completed within five years prior to enrollment.

Obtain Permission Number from Instructor Required to verify recency of prerequisite coursework.

This course is not open to students with previous credit for MLTT 51

This course provides clinical laboratory practice and experience in general and specialized chemistry. Various instrumentation, as well as bench and manual methods, will be introduced. Emphasis is placed on technique, accuracy, and precision. This practicum will take place at a clinical affiliate site that will be assigned by the Medical Laboratory Technician Training Program Director. This course is intended for students majoring in Medical Laboratory Technology.

FT; AA/AS.

MLTT 62 Directed Clinical Practice in Clinical Hematology, Urinalysis and Coagulation

160 hours other; 3 units

Grading: Letter Grade Only

Prerequisite: MLTT 210 with a Grade of "C" or better, or equivalent and MLTT 211 with a Grade of "C" or better, or equivalent and MLTT 212 with a Grade of "C" or better, or equivalent and MLTT 213 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: All prerequisites must be completed within five years prior to enrollment.

Obtain Permission Number from Instructor Required to verify recency of prerequisite coursework.

This course is not open to students with previous credit for MLTT 52

This course provides laboratory practice and experience in hematology, urinalysis, and coagulation. Various instrumentation, as well as bench and manual methods, will be introduced. Emphasis is placed on technique, accuracy, and precision. This practicum will take place at a clinical affiliate site that will be assigned by the Medical Laboratory Technician Training Program Director. This course is intended for students majoring in Medical Laboratory Technology.

FT; AA/AS.

MLTT 63 Directed Clinical Practice in Clinical Immunology and Immunohematology

160 hours other; 3 units

Grading: Letter Grade Only

Prerequisite: MLTT 210 with a Grade of "C" or better, or equivalent and MLTT 211 with a Grade of "C" or better, or equivalent and MLTT 212 with a Grade of "C" or better, or equivalent and MLTT 213 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: All prerequisites must be completed within five years prior to enrollment.
Obtain Permission Number from Instructor Required to verify recency of prerequisite coursework.
This course is not open to students with previous credit for MLTT 53

This course provides clinical laboratory practice and experience in serology and blood banking, including syphilis serology and general immunology. Various instrumentation, as well as bench and manual methods, will be introduced. Emphasis is placed on technique, accuracy, and precision. This practicum will take place at a clinical affiliate site that will be assigned by the Medical Laboratory Technician Training Program Director. This course is intended for students majoring in Medical Laboratory Technology.

FT; AA/AS.

MLTT 64 Directed Clinical Practice in Clinical Microbiology

160 hours other; 3 units

Grading: Letter Grade Only

Prerequisite: MLTT 210 with a Grade of "C" or better, or equivalent and MLTT 211 with a Grade of "C" or better, or equivalent and MLTT 212 with a Grade of "C" or better, or equivalent and MLTT 213 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: All prerequisites must be completed within five years prior to enrollment.
Obtain Permission Number from Instructor Required to verify recency of prerequisite coursework.
This course is not open to students with previous credit for MLTT 54

This course provides laboratory practice and experience in microbiology. Various instrumentation, as well as bench and manual methods, will be introduced. Emphasis is placed on technique, accuracy, and precision. This practicum will take place at a clinical affiliate site that will be assigned by the Medical Laboratory Technician Training Program Director. This course is intended for students majoring in Medical Laboratory Technology.

FT; AA/AS.

MLTT 210 Clinical Chemistry and Laboratory Operations

32-36 hours lecture/96-108 hours lab; 4 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 131 with a Grade of "C" or better, or equivalent and BIOL 230 with a Grade of "C" or better, or equivalent and BIOL 235 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent and CHEM 130 with a Grade of "C" or better, or equivalent and CHEM 130L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number from Instructor required to verify course prerequisites recency that all courses have been completed within 5 years prior to enrollment.
This course is not open to students with previous credit for MLTT 201

This course introduces the theory and practice underlying the basic methodologies used in clinical chemistry and the basic principles of laboratory operations. Laboratory Clinical Chemistry topics include principles and methodologies common to the clinical laboratory to include specimen handling, measurement of biochemistry, data analysis and pathology. Laboratory operations topics include quality assessment, safety, laboratory mathematics, and instrumentations. This course is intended for students majoring in Medical Laboratory Technology to perform clinical chemistry and laboratory operations at an entry level competency.

FT; AA/AS; CSU.

MLTT 211 Clinical Hematology Urinalysis And Body Fluids

32-36 hours lecture/96-108 hours lab; 4 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 131 with a Grade of "C" or better, or equivalent and BIOL 230 with a Grade of "C" or better, or equivalent and BIOL 235 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent and CHEM 130 with a Grade of "C" or better, or equivalent and CHEM 130L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number from Instructor required to verify course prerequisites recency that all courses have been completed within 5 years prior to enrollment.

This course is not open to students with previous credit for MLTT 201 and MLTT 202.

This course covers the methodologies and procedures in the laboratory disciplines of hematology and urinalysis. Learning modules for course completion includes physiology, pathophysiology and laboratory analysis of blood, body fluids, bone marrow and urine. This course is intended for students majoring in Medical Laboratory Technology to perform clinical hematology and urinalysis at an entry level competency.

FT; AA/AS; CSU.

MLTT 212 Clinical Microbiology

32-36 hours lecture/96-108 hours lab; 4 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 131 with a Grade of "C" or better, or equivalent and BIOL 230 with a Grade of "C" or better, or equivalent and BIOL 235 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for MLTT 203.

Obtain Permission Number from Instructor required to verify course prerequisites recency that all courses have been completed within 5 years prior to enrollment.

This course covers clinical laboratory methodologies and practices of microbiology. Topics for entry level clinical laboratory competency includes the preanalytical procedures of specimen collection, transport and processing; bacteriology, mycology, parasitology and virology analytical procedures. This course is intended for students majoring in Medical Laboratory Technology to perform clinical microbiology at an entry level competency

FT; AA/AS; CSU.

MLTT 213 Blood Bank and Immunology

32-36 hours lecture/96-108 hours lab; 4 units

Grading: Letter Grade Only

Prerequisite: BIOL 107 with a Grade of "C" or better, or equivalent or BIOL 131 with a Grade of "C" or better, or equivalent and BIOL 230 with a Grade of "C" or better, or equivalent and BIOL 235 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent or CHEM 152L with a Grade of "C" or better, or equivalent and CHEM 130 with a Grade of "C" or better, or equivalent and CHEM 130L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number from Instructor required to verify course prerequisites recency.

This course is not open to students with previous credit for MLTT 202 and MLTT 204.

This course covers the clinical laboratory principles of the immunohematology and immunology.

Immunohematology learning outcomes include donor screening, blood product collection, transfusion testing and quality management practices. Immunology learning objectives covers the knowledge and laboratory practicalities of the immune system physiology, immunoglobulins and complement functionalities, infectious diseases serologies, and transplantation. This course is intended for students majoring in Medical Laboratory Technology to perform immunohematology and immunology at an entry level competency.

FT; AA/AS; CSU.

MUSI-Music

MUSI 100 Introduction to Music

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is designed to develop aural and analytical musical skills. Emphasis is placed on conceptual, contextual, and stylistic elements of music from various periods and cultures, and encompassing a range of genres and styles. This course is designed to support students in all majors who are interested in satisfying the general education requirements for Arts and Humanities.

FT; AA/AS; CSU; UC; C-ID: MUS 100.

MUSI 103 History of Rock Music

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course surveys the origins and development of Rock music from the 1940s to the present including its roots and related genres. The course focuses on the evolution of different styles within the Rock genre as well as the social, political, economic, and cultural contexts of Rock music. This course is intended for all students interested in the history of Rock music.

FT; AA/AS; CSU; UC.

MUSI 108 The Business of Music
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a comprehensive survey of the music business. Course content emphasizes the various areas of the music business, the functions of each area and the relationships between the areas. Topics include songwriting; music publishing; copyrighting; music licensing; unions and guilds; agents and managers; artists and management; the record industry; artists' recording contracts; studios and engineers; and music in radio, television and advertising. This course is intended for students majoring in music or anyone interested in the music industry.

FT; AA/AS; CSU.

MUSI 109 World Music
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This music survey course explores the music cultures of South Asia; East Asia; Southeast Asia; the Middle East; Africa; the Americas, Europe, and the Pacific. Musical practices and perspectives from several music cultures are studied with an emphasis on understanding and appreciation from non-ethnocentric viewpoints. Listening perception is developed through lectures and multimedia presentations. This course is intended for students majoring in music or anyone interested in music and culture.

FT; AA/AS; CSU; UC.

MUSI 111 Jazz History
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a survey of the history and development of Jazz in the United States. Emphasis is placed on the origins of Jazz, the variety of styles that developed throughout the twentieth and twenty-first centuries, current trends, and outstanding performers and composers. This course is intended for all students interested in the history of Jazz.

FT; AA/AS; CSU; UC.

MUSI 118 Asian & Pacific Music
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces various traditional & popular Asian & Pacific musics including India, the Middle East, East Asia, Southeast Asia, Central Asia, and Oceania. Areas of emphases include learning about types of musical instruments, ensembles, musical styles, relevant history & geography, cultural contexts, and functions of music in traditional societies. This course is intended for anyone interested in Asian & Pacific music & culture.

FT; AA/AS; CSU; UC.

MUSI 119 Music in Latin America & North America
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces various traditional musics of both Latin America & North America including origins in Sub-Saharan Africa & Western Europe and Native American musics of the Americas. Areas of emphasis include learning about types of musical instruments, ensembles, musical styles, relevant history & geography, cultural contexts, functions of music in traditional societies, and cultural retention and syncretism in order to understand how the music and culture of these areas of the world are both related and distinct. This course is intended for any student interested in music and culture of Latin America & North America.

FT; AA/AS; CSU; UC.

MUSI 124A Piano Class I
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 115A or MUSI 116A.

This course explores the process of making music at the piano. The focus of the course is to provide a musical experience for students to continue a life-long pursuit of self-expression. This course also emphasizes developing fundamental techniques needed to play the piano. The concept of music theory is also included. Students learn piano techniques and applicable music theory by playing music on the piano though simple solo and ensemble pieces. This course is designed for all students interested in learning to play the piano.

FT; AA/AS; CSU; UC; C-ID: MUS 170.

MUSI 124B Piano Class II
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 124A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 115B or MUSI 116B
This course further explores the process of making music at the piano as the second semester of piano studies. Students learn piano techniques and applicable music theory by playing music on the piano with additional sight-reading and intermediate piano solo and ensemble music. The course is designed for all students who are interested in further expanding piano studies.

FT; AA/AS; CSU; UC; C-ID: MUS 171.

MUSI 132A Classical Guitar I
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: MUSI 150A with a Grade of "C" or better, or equivalent
This is the first of a two-semester sequence of courses that present the study of classical guitar. The beginning course introduces basic skills to students who have had little or no experience with the guitar. This course focuses on developing right and left-hand technique and sight-reading. Lectures are followed by practical application on the instrument. The course is intended for students who are interested in learning the fundamentals of classical guitar and elementary music skills.

FT; AA/AS; CSU; UC.

MUSI 132B Classical Guitar II
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 132A with a Grade of "C" or better, or equivalent
This is the second in a two-semester sequence of study of classical guitar. In this course students are introduced to a set of broad-ranging technical skills including mastery of the fretboard, chord chart reading, and sight-reading. This course also introduces level-appropriate literature, including works from several periods and styles, with an emphasis on interpretation skills. Lectures are followed by practical application on the instrument. Students apply the skills and techniques developed in this class in live performances. This course is intended for students who are interested in learning classical guitar and music skills.

FT; AA/AS; CSU; UC.

MUSI 148A Music Theory I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 150A with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: MUSI 268A
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 158A.
This course is a study of music, including structural, historical and stylistic analysis of music of Western classical music, World music, jazz, and popular music. The class will discuss the cultural, social and technical significance of the musical literature, examining rhythms, intervals, chords, cadences, melodies, phrases, notes and scales. Students will develop four-part writing skills using diatonic triads and seventh chords, and learn how to read and compose with figured bass, lead sheet chord symbols and standard musical notation. The history of notation and practice will be discussed as students develop skills in notation software and handwritten notation. This course is intended for music majors.

FT; AA/AS; CSU; UC; C-ID: MUS 120.

MUSI 148B Music Theory II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 148A with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: MUSI 268B
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 258B.
This course series continues in its study of diatonic music including the structural, historical and stylistic analysis of music of Western classical music, World music, jazz, and popular music. The class will discuss the cultural, social and technical significance of the musical literature, examining how melody, structure, harmony, and chord progressions, have an impact on the listener. The course will include analysis of Baroque and Classical pieces of music and an examination of large-scale events and form. The course will also include identifying, creating, and composing with the modes of the major scale. Students will continue to develop four-part writing skills using triads and seventh chords, non-harmonic tones, suspensions, retardations, figured bass, 6/4 chords, modulations and tonicizations. The history of notation and practice will be discussed as students develop skills in notation software and handwritten notation. This course is intended for music majors.

FT; AA/AS; CSU; UC; C-ID: MUS 130.

MUSI 150A Basic Musicianship
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is the study and practice of musical literacy. Emphasis is placed on the development of perceptions in sight and sound as related to the symbols of rhythmic, melodic, and harmonic notation. Topics include skill development in notating notes, intervals, scales, key signatures, rhythms, and chords. Students also identify terms used to indicate navigation, tempo, and dynamics. This course is designed for music majors and musicians.

FT; AA/AS; CSU; UC; C-ID: MUS 110.

MUSI 190 Introduction to Music Technology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in: MUSI 150A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 80 or MUSC 162
This course is a study of music/audio as it applies to computer music/audio applications, sequencing Musical Instrument Digital Interface (MIDI), hard disk recording, and recording. Students design and create music/audio projects using microphones, recorders, mixing boards, synthesizers, and samplers. This course is designed for all students interested in music and audio technology.

FT; AA/AS; CSU.

MUSI 201 Recording Arts
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
This course is a study of advanced acoustics and electronic theory as applied to recording, mixing, and sound processing. Emphasis is placed on the various applications of advanced recording, microphone use, and mixing, such as editing, effects processing, production, and other techniques used in the recording process. This course is intended for advanced students who work with recording equipment.

FT; AA/AS; CSU.

MUSI 202 Computer Music
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
This course is a study of the application of contemporary digital technology to the practice of music / audio applications. Emphasis in this course is on acquisition of computer skills to access and manipulate musical data via MIDI (musical instrument digital interface), hard disk audio files and other digital formats. These skills allow students to digitally sample sounds, control synthesizers and samplers, access and alter audio files, sequence music, transcribe and print musical scores and conceive new techniques for computer music. This course is designed for students who are interested in continuing their education in the recording studio.

FT; AA/AS; CSU.

MUSI 204 Audio System Design and Maintenance
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
In this course students learn to design, operate, and maintain audio systems. Lessons and assignments target commercial and residential audio systems and their design, function, installation, operation, and maintenance. This course is intended for students majoring in Audio Production and Engineering or anyone interested in the operation and maintenance of audio systems.

FT; AA/AS; CSU.

MUSI 205A Audio Production Projects I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
This course provides instruction in music technology applications. Students will do projects that develop skills in audio engineering and music production. Students will also create a portfolio of recordings and/or productions in a recording studio or home studio using music and audio technology equipment, applications, and techniques. Topics include recording studio technical skills; pre-production preparation; the recording and production process; mastering and mixing; and self and peer assessment. This course is intended for students majoring in audio production and engineering, those developing their own home studio, or anyone seeking employment in the audio industry.

FT; AA/AS; CSU.

MUSI 205B Audio Production Projects II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 190 with a Grade of "C" or better, or equivalent
Advisory: MUSI 150A with a Grade of "C" or better, or equivalent
This course is a continuation of instruction in audio and music technology applications. Students will do projects that further refine their technical skills in audio and music productions. Students will also expand on a portfolio of audio and music recordings and productions in a recording studio or home studio using audio and music technology equipment, applications, and techniques. Topics include advanced recording studio technical skills; pre-production preparation; the recording and production process in a variety of contexts; mastering and mixing; portfolio development; and self and peer assessment. This course is intended for students majoring in audio production and engineering, those developing their own home studio, or anyone seeking employment in the audio industry.

FT; AA/AS; CSU.

MUSI 217A Gospel Choir I
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 122
This course is the first in a series of four performance ensembles that exposes students to various types and styles of gospel music from an African American perspective. Students learn to sing gospel pieces in a chorus setting at an introductory level. Other topics include performance and stage deportment; historical development of gospel music; and self-critiques of choral performances. This course is for students majoring in music or anyone with an interest in gospel music or singing.

FT; AA/AS; CSU; UC.

MUSI 217B Gospel Choir II
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: MUSI 217A with a Grade of "C" or better, or equivalent
This course is the second in a series of four performance ensembles that exposes students to various types and styles of gospel music from an African American perspective. Students learn to sing gospel pieces in a chorus setting at a beginning level. Other topics include performance and stage deportment; historical styles of gospel music; and critiques of choral performances. This course is for students majoring in music or anyone with an interest in gospel music or singing.

FT; AA/AS; CSU; UC.

MUSI 217C Gospel Choir III
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: MUSI 217B with a Grade of "C" or better, or equivalent
This course is the third in a series of four performance ensembles that exposes students to various types and styles of gospel music from an African American perspective. Students learn to sing gospel pieces in a chorus setting at an intermediate level. Other topics include performance and stage deportment; historical and contemporary styles of gospel music; and critiques of individual and choral performances. This course is for students majoring in music or anyone with an interest in gospel music or singing.

FT; AA/AS; CSU; UC.

MUSI 217D Gospel Choir IV
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: MUSI 217C with a Grade of "C" or better, or equivalent
This course is the fourth in a series of four performance ensembles that exposes students to various types and styles of gospel music from an African American perspective. Students learn to sing gospel pieces in a chorus setting at an advanced level. Other topics include performance and stage deportment; choreography; vocal solo techniques; historical and contemporary styles of gospel music; and critiques of individual and choral performances. This course is for students majoring in music or anyone with an interest in gospel music or singing.

FT; AA/AS; CSU; UC.

MUSI 224A Piano Class III
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 124B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 215A and MUSI 215B or MUSI 216 or MUSI 216A.
This course further explores the process of making music at the piano as the third semester of piano studies. Emphasis is placed on piano technique and music theory including music notation reading, scales, chords, harmonization, and performance of intermediate level piano literature and four-part scores. This course is designed for all students who are interested in intensive piano studies.

FT; AA/AS; CSU; UC; C-ID: MUS 172.

MUSI 224B Piano Class IV
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 224A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 215B or MUSI 216B
This course is an advanced study of practical and theoretical keyboard techniques at the fourth semester of piano studies. Emphasis is placed on advanced skill development of repertoire, keyboard technique, sight-reading, transposition, harmonization, creative composition, improvisation, ensemble playing, and modulation techniques. This course is designed for music majors and all students who want to deepen their piano skills.

FT; AA/AS; CSU; UC.

MUSI 257A Guitar Ensemble I
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Limitation on Enrollment: Tryout or Audition.
This course is not open to students with previous credit for MUSI 255 or MUSI 256A.
This course is a beginning-intermediate guitar ensemble for the study and performance of selected guitar ensemble works. Students practice and perform a wide variety of works from different historical areas, and develop their skills in reading music, guitar technique and interpretation. Attendance at rehearsals and performances is required. This course is designed for students majoring music who want to advance their ensemble skills by participating in an ensemble group.

FT; AA/AS; CSU; UC; C-ID: MUS 185.

MUSI 257B Guitar Ensemble II
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: MUSI 257A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 256B.
This course is an intermediate guitar ensemble for the study and performance of selected guitar ensemble works. Students practice and perform a wide variety of works from different historical areas, and develop their skills in reading music, guitar technique and interpretation. Attendance at rehearsals and performances is required. This course is designed for music majors wanting to advance their skills in ensemble groups.

FT; AA/AS; CSU; UC; C-ID: MUS 185.

MUSI 257C Guitar Ensemble III
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: MUSI 257B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 256C.
This course is an intermediate guitar ensemble for the study and performance of selected guitar ensemble works. Students practice and perform a wide variety of works from different historical areas, and develop their skills in reading music, guitar technique and interpretation. Attendance at rehearsals and performances is required. This course is designed for students majoring music who want to advance their ensemble skills by participating in an ensemble group.

FT; AA/AS; CSU; UC; C-ID: MUS 185.

MUSI 257D Guitar Ensemble IV
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Prerequisite: MUSI 257C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSI 256D.
This course is an advanced guitar ensemble for the study and performance of selected guitar ensemble works. Students practice and perform a wide variety of works from different historical areas, and develop their skills in reading music, guitar technique and interpretation. Attendance at rehearsals and performances is required. This course is designed for students majoring music who want to advance their ensemble skills by participating in an ensemble group.

FT; AA/AS; CSU; UC; C-ID: MUS 185.

MUSI 268A Ear Training I
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 150A with a Grade of "C" or better, or equivalent
Advisory: MUSI 148A with a Grade of "C" or better, or equivalent
The course is designed to facilitate perception, performance, and identification of melodic, harmonic, and rhythmic patterns in music. This course consists of sight singing scales, melodies & rhythms, notating melodies, harmonies & rhythms, and identifying chords & intervals. The emphasis is on the development of basic skills in sight singing and dictation: the sight singing and notating of short diatonic melodies containing seconds, thirds, fourths, fifths & octaves, the identification of major, minor, augmented & diminished triads in root position, harmonic dictation of primary triads in major keys, and rhythmic dictation with duple, triple & quadruple subdivisions of the beat. This course is designed for the music majors and students interested in enhancing technical knowledge and skills in music.

FT; AA/AS; CSU; UC; C-ID: MUS 125.

MUSI 268B Ear Training II
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: MUSI 268A with a Grade of "C" or better, or equivalent
This course is the second of a four-course sequence in ear training. Emphasis is placed on continued development of skill in sight singing major and minor melodies which contain seconds, thirds, fourths, fifths, sixths, sevenths, octaves and the tritone; melodic dictation containing triadic arpeggiations; harmonic identification of all diatonic triads in root position and inversions and in major and minor keys; rhythmic dictation with duple, triple, and quadruple subdivisions of the beat in simple and compound meters; notation of two-part and four-part dictation; and identification of errors in melodic phrases. This course is designed for the student pursuing music as a major or for the student interested in enhancing technical knowledge and skills.

FT; AA/AS; CSU; UC; C-ID: MUS 135.

NAIS-Native American and Indigenous Studies

NAIS 100 Introduction to Native American and Indigenous Studies
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an overview of the history, cultures, and struggles of the Indigenous of the United States. Emphasis is placed on examining the knowledge produced by the lived experiences of Native Americans in relation to colonization and racial and spiritual identity and affirmation. Topics include the critical evaluation of the role of race and racism in Indigenous communities and experiences as well as the relevance of resistance and racial and social justice to United States institutions and structures. This course is intended for students interested in the fields of American Indian Studies, Ethnic Studies, or exploring the history and experiences of Native Americans.

FT; AA/AS; CSU; UC.

NAIS 150 Introduction to Federal Indian Law
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course provides an overview of the concepts of Federal Indian Law, including a history and modern analysis of the discipline from European contact to the present. Emphasis is placed on the legal relationship between Indian Nations and the federal government and the role that treaties played in the development of this relationship. Topics include the examination of tribal sovereignty, the Doctrine of Discovery, the federal trust responsibility, and criminal and civil jurisdiction in Indian Country. This course is intended for students interested in the field of American Indian Studies or exploring the history and experiences of Native Americans.

AA/AS; CSU; UC.

NAIS 200 American Indian Spirituality
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to American Indian spirituality. Emphasis is placed on examining the sources and qualities of American Indian spirituality and how it contrasts with notions of religion in Western Civilization. Topics include exploring the creation stories and oral traditions of Indian nations as well as examining how the deprivation of access to spiritual practices and resources has negatively impacted Native communities. This course is intended for students interested in the field of Native American studies or exploring the history and experiences of Native Americans.

FT; AA/AS; CSU; UC.

NAIS 220 Native Americans and Environmental Issues

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is an overview of the historical and current relationships that Native Americans developed with their natural environment. Emphasis is placed on how these relationships were holistic and spiritually-based relationships have been detrimentally impacted by contact with Western Civilization. Topics include an analysis of how Climate Change has affected Indian communities and how Tribal Governments exercise tribal sovereignty to protect their environmental resources. This course is intended for students interested in the field of Native American Studies or exploring the history and experiences of Native Americans.

FT; AA/AS; CSU; UC.

NAIS 240 Native American Educational Issues

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course examines American educational policies and practices regarding Native Americans and Indian Nations' responses designed to improve the educational outcomes of their students. Emphasis is placed on traditional Native learning models in contrast to American educational models. Topics include the negative impact of Indian boarding schools, the formation of tribally-controlled colleges, and the development of Native American Studies discipline. This course is intended for students majoring in Native American Studies and all those interested in exploring the history and experiences of Native Americans.

FT; AA/AS; CSU; UC.

NAIS 260 Native American Language Preservation and Revitalization

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is an overview of the history, struggles, and practices that Native American communities experienced and implemented to preserve and revitalize their Indigenous languages. Emphasis is placed on the spiritually vital role Indian languages play in Indian communities and the cultural harm Indian communities suffer from the reduction or loss of their Indigenous language. Topics include federal policies aimed at suppressing Indian Nations as well as Native American-initiated language preservation and revitalization strategies and programs. This course is intended for students majoring in Native American Studies and all those interested in exploring the history and experiences of Native Americans.

FT; AA/AS; CSU; UC.

NUTR-Nutrition

NUTR 150 Nutrition Science and Global Food Issues

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a multidisciplinary scientific examination of the effects of nutrition on health, including global problems of food and nutrition. Topics in this introductory course include the socio-economic, political, ecological, biological, and chemical processes involved in procuring food; digesting, absorbing, transporting, metabolizing, and storing nutrients; the role of the microbiota; how endocrine and immune functions affect hunger, appetite and metabolic health; and the interactions between nutrients, genetics, and the environment. Students in the course critically examine diverse eating patterns in the context of disease prevention, nutritional needs throughout the life cycle, and healthful food sources for nutrients and food groups. Students also utilize computer technology to analyze dietary intake and evaluate nutritional status. Current topics in nutrition are critiqued using the scientific method. This course is intended for students majoring in nutrition, exercise science, dietetics, nursing, medicine, as well as anyone interested in learning more about their health.

FT; AA/AS; CSU; UC; C-ID: NUTR 110.

NUTR 153 Cultural Foods

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for CACM 150.

This course examines the regional, ethnic, cultural, religious, historical and social influences on food patterns and cuisine, as well as how food is viewed as an expression of cultural diversity. Traditional foods of geographic areas and cultures, geographic factors in food availability, global food issues, dietary habits, religious influences and an overview of nutritional problems of ethnic groups are discussed and assessed. Connection is drawn between major historical events and how and why these events affected and defined the culinary traditions of different societies. Also presented are nutrition consequences of ethnic food choices, sanitation and safety practices, and applications of food and nutrition services. This course is for students interested in a career in nutrition, culinary, hospitality management, and those with an interest in ethnic cuisine.

FT; AA/AS; CSU; UC.

NUTR 155 Advanced Nutrition

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: NUTR 150 with a Grade of "C" or better, or equivalent and BIOL 107 with a Grade of "C" or better, or equivalent and CHEM 100 with a Grade of "C" or better, or equivalent and CHEM 100L with a Grade of "C" or better, or equivalent or CHEM 152 with a Grade of "C" or better, or equivalent and CHEM 152L with a Grade of "C" or better, or equivalent

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course is an in-depth study of the functioning of nutrients in the basic life processes from a biochemical and cellular approach. Emphasis is placed on the investigation of certain diets in relation to disease, current legislation relating to nutritional issues, and consumer nutritional practices. This course is intended for Nutrition and Allied Health majors.

FT; AA/AS; CSU; UC.

NUTR 170 Nutrition and Fitness

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a practical study of sports and nutrition. Emphasis is placed on the role of nutrition and enhanced performance. Students evaluate their nutritional needs during various stages of exercise. Topics include carbohydrate loading, use of supplements, determination of body composition. This course is intended for nutrition majors, athletes and all students interested in health and fitness.

FT; AA/AS; CSU.

NUTR 290 Independent Study

48 - 162 hours other; 1-3 units

Grading: Letter Grade or Pass/No Pass

Limitation on Enrollment: Obtain Permission Number from Instructor

This course is for students who wish to conduct additional research, a special project, or learning activities in the field of nutrition. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

OCEA-Oceanography

OCEA 101 The Oceans

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYN 120
This course is a study of the major features and processes of the world's oceans. Topics include the origin and history of ocean basins; atmospheric and ocean circulation; and the dynamics of waves, tides, and coastlines. Students explore the oceans as a resource for people and analyze and evaluate human impacts on marine environments. This course is intended for all students interested in the world's oceans.

FT; AA/AS; CSU; UC.

PADM-Public Administration

PADM 200 Introduction to Public Administration

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course explores the theory and practice of public administration and social policy. Topics include an examination of all levels of governmental structures, organizational theory, public policy decision-making processes, performance assessment, Human Resource Management (HRM), leadership, budgeting, administrative law, intergovernmental relations, and ethics as they apply to the field of public administration. This course is intended for students majoring in Public Administration and all students interested in politics, social policy, and the administration of public agencies.

FT; AA/AS; CSU; UC.

PADM 270 Public Administration and/or Law Internship / Work Experience

54 - 216 hours other; 1-4 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course provides on-the-job learning experiences for students employed in a public administration- or law-related job or internship. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related learning objectives. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period. This course is intended for students interested in government and public service and/or law.

FT; AA/AS; CSU.

PADM 420 Ethics in Public Service

3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an examination of ethics and ethical decision making in the context of public service. Content and examples are drawn from the public and nonprofit sectors, but the principles and techniques covered in the course apply to ethics in any organization. Topics include the history and context of ethical thought, ethical theories, codes and standards of ethics, ethical decision making, leadership ethics, and personal ethics development. Emphasis is placed on ethical dilemmas and other issues that commonly arise in the fields of public administration, law enforcement, emergency medical services, and emergency management. This course is intended to meet upper division general education requirements for students enrolled in baccalaureate degree programs.

FT; AA/AS; CSU.

PARA-Paralegal

PARA 100 Introduction to Law and Ethics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 100 or LEGL 100A and LEGL 100B or PARA 100A and PARA 100B or BUSE 180 or ADJU 105
This introductory course for students entering the Paralegal program provides an overview of the paralegal's role in the workplace and legal system as well as the various legal specialties offered within the Paralegal program. Topics include controversies within the profession, ethics and responsibilities, sources of law, the federal and state court systems, civil litigation, and an introduction to law office technology, legal writing and research, and legal specialty areas. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 105 Legal Research
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 105, ADJU 107, or BUSE 181.
This core course introduces students to legal research. Topics include research methods; primary and secondary sources; official and unofficial opinions; binding and persuasive authority; the Shepard's system of validating cases and statutes; internet research; and an introduction to LexisNexis and Westlaw. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 110 Legal Writing & Communications
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 110
This paralegal core course covers legal writing and oral communication. Topics include case analysis, legal reasoning, brief writing, legal memoranda, reports, and correspondence. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 115 Civil Litigation - Procedures
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 109, LEGL 115, or BUSE 183
This course introduces students to the civil litigation process. Students examine the basic principles of civil procedures as applicable to both plaintiffs and defendants in the California court system. Other topics include jurisdiction, venue, discovery, and preparation of pleadings. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 120 Tort Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 120, ADJU 110, or BUSE 184
This core course introduces students to the broad area of civil wrongs and their appropriate remedies. Topics include tort law principles in the traditional areas of intentional torts, negligence, strict liability, product liability, nuisance, and commonly employed defenses. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 140 Law Office Technology

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent or PARA 221 with a Grade of "C" or better, or equivalent

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for LEGL 140

This course examines systems and procedures for the use of law office technology. Students learn how paralegals use computer systems and legal software applications to make their jobs easier and improve their value to employers. Topics include personnel issues; file management; computer systems; timekeeping and billing; case management, calendaring, and docket control; litigation support; and legal ethics. This course is intended for students majoring in Paralegal or others interested in law office technology.

FT; AA/AS; CSU.

PARA 145 Federal Court Practices and Procedures

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent

Advisory: PARA 105 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for LEGL 145, ADJU 112, or BUSE 186

This course presents legal practices and procedures utilized in federal court. Topics include criminal, civil, bankruptcy, and appellate procedures. The course emphasizes rules of practice to help students develop the skills legal assistants utilize in law offices. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 150 Criminal Litigation and Procedure

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for LEGL 150, ADJU 113, or BUSE 187

This course provides students with an understanding of criminal litigation practice and procedure. Topics include the criminal court system; criminal investigation and prosecution; discovery and investigation; pre-trial motions; trial preparation and procedures; and post-trial motions and relief. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 155 Employment Law

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent

Advisory: PARA 110 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent

PARA 105 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for LEGL 155

This course provides an overview of the legal relationship between employer and employee. It also provides a basic understanding of employment-related laws and the impact those laws have on employers and employees. Students learn about both the federal and state regulatory environment as it applies to employment law. Topics include pre-employment concerns; legal aspects of the employer/employee relationship; discrimination issues and actions; terminations; and ethical issues in employment law. This course is intended for students majoring in Paralegal or anyone interested in employment law.

FT; AA/AS; CSU.

PARA 160 Bankruptcy Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: PARA 105 with a Grade of "C" or better, or equivalent or PARA 110 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 160
This course introduces students to bankruptcy law and procedures. Topics include commencement of a case; preparation of schedules; operation and liquidation procedures; adversary matters; litigation in bankruptcy court; and debtors' and creditors' rights and obligations. This course is intended for students majoring in Paralegal or anyone interested in bankruptcy law.

FT; AA/AS; CSU.

PARA 165 Family Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 165
This course introduces students to domestic relations law and its application to family situations. Topics include formation of the marital relationship; dissolution; child custody and support; adoption; abortion; paternity; and domestic violence. This course is intended for students majoring in Paralegal or anyone interested in family law.

FT; AA/AS; CSU.

PARA 170 Corporate Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 170
This course introduces students to the various forms of business enterprises, including sole proprietorships, partnerships, and corporations. The course focuses on the legal steps and forms needed to create, maintain, and dissolve each type of business, but with an emphasis on corporations. This course is intended for students majoring in Paralegal or anyone interested in corporate law.

FT; AA/AS; CSU.

PARA 175 Estates, Trusts, and Wills
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 175
This course is an introduction to the responsibilities and duties that paralegals perform under estate attorney supervision. Topics include estate administration legal principles; terminology; procedural steps; and current federal and state tax consequences. This course is intended for students majoring in Paralegal or others interested in estate administration.

FT; AA/AS; CSU.

PARA 180 Contract Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 180
This course provides students with the knowledge and skills for drafting and interpreting different types of contracts. Topics include elements of a contract, performance and breach issues, defenses to formation and enforcement, contract remedies, and third-party contracts. This course is intended for students majoring in Paralegal.

FT; AA/AS; CSU.

PARA 200 Elder Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: PARA 105 with a Grade of "C" or better, or equivalent or PARA 110 with a Grade of "C" or better, or equivalent or ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 200
This course introduces students to legal issues that affect older people. Topics include financial and estate planning; health care; personal planning and protection; and consumer protection. This course is intended for students majoring in Paralegal or those seeking employment in law firms handling elder law and senior care housing facilities.

FT; AA/AS; CSU.

PARA 205 Environmental Law

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 205
This course introduces students to the emerging field of environmental law through a critical review of basic legal concepts and their social, economic, and environmental effects. Topics include various sources of environmental law; legal remedies; planning acts; environmental protection acts; environmental assessment acts; and hearing boards and their operation. This course is intended for students majoring in Paralegal or anyone interested in environmental law.

FT; AA/AS; CSU.

PARA 210 Immigration Law

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: PARA 105 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 210
This course provides an overview of the laws of immigration and naturalization. Topics include the history of immigration, the evolution of this country's policies toward aliens, and the interplay of the three administrative agencies which administer immigration and naturalization laws: the Justice Department, Labor Department, and State Department. This course is intended for students majoring in Paralegal or anyone interested in immigration law.

FT; AA/AS; CSU.

PARA 220 Intellectual Property Law

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 220
This legal specialty course provides the student with an in-depth analysis of the law pertaining to the fields of intellectual property: trademarks, copyrights, patents, trade secrets, and unfair competition. The methods by which each topic is created and protected will also be explored. This course is intended for students majoring in Paralegal or anyone interested in intellectual property law.

FT; AA/AS; CSU.

PARA 221 Legal Secretary Skills and Procedure

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: PARA 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CBTE 221
This course is an introduction and orientation to the law office and procedures according to federal and state legal systems. Topics include the structure of the courts; law office practices and procedures; legal terminology and vocabulary; preparation of court documents; and an introduction to legal research, legal calendaring, and client contact. This course is designed to prepare students for a position in a law office or law related field.

FT; AA/AS; CSU.

PARA 225 Real Estate Law
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 225
This legal specialty elective course is an introduction to real estate law and practice. Topics include property rights; types of land ownership/estates; the effects of easements and rights-of-way on title and use of real estate; agreements for leasing; agreements for sale; financing; conveyancing; title insurance; settlement procedures; recording; and post-closing matters that deal with residential, commercial, condominiums, and planned communities. Ethics will be discussed throughout the course in relation to specific scenarios that may occur during the practice of real estate law. This course is intended for students majoring in Paralegal or anyone interested in real estate law.

FT; AA/AS; CSU.

PARA 230 Consumer Law
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Advisory: PARA 120 with a Grade of "C" or better, or equivalent and PARA 180 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for LEGL 230
This legal specialty course examines issues particular to consumer transactions in formation, substance, and remedies. Topics include common law consumer issues; Federal Trade Commission (FTC) and state statutory approaches to consumer protection; constitutional limits on advertising regulation; use of consumer protection statutes in discrimination and civil rights cases; the reach and effectiveness of data breach regulation; Internet-based fraud; the Fair Credit Reporting Act; privacy and identity theft; and spam and spyware. Students examine the evolution of consumer law, its relationship to economic and social policies, and its practical application. This course is intended for students majoring in Paralegal or others interested in consumer law.

FT; AA/AS; CSU.

PARA 270 Paralegal Internship / Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: PARA 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Obtain Permission Number from Instructor
This course provides career preparation skills and applied learning experiences for students working under the supervision of an attorney in a law office, government agency, or other legal setting. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related learning objectives. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

FT; AA/AS; CSU.

PARA 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is not open to students with previous credit for LEGL 290
This course is for students who wish to conduct additional research, a special project, or learning activities in a specific discipline/subject area and is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

PERG-Personal Growth

PERG 110 Introduction to College
24-27 hours lecture; 1.5 units
Grading: Letter Grade or Pass/No Pass
This course introduces the knowledge and skills necessary to survive and thrive during the first year in college. Students examine higher education structures, the opportunities and resources available, and the requirements to successfully complete a certificate, degree and transfer. Emphasis is placed on the transition to college learning and college life, self-reflection and self-advocacy, goal setting, academic policies, major selection and educational planning. Students develop and apply critical analysis skills, information literacy, and successful attitudes and behaviors in joining a college community. This course is intended for first time and re-entry college students.

FT; AA/AS; CSU; UC.

PERG 120 College Success and Lifelong Learning
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for PERG 127.
This course teaches success strategies to enhance academic and lifelong learning skills. Students explore topics such as discovering self-motivation, accepting personal responsibility, mastering self-management, employing interdependence, gaining self-awareness, goal setting, decision-making strategies, critical and creative thinking, personal health topics, interpersonal communication, developing emotional intelligence, and learning and personality theories, as well as other techniques for maximizing their abilities to succeed as lifelong learners. Students apply these topics as they relate to their personal and professional self-development and to the discovery of many new options for improving all aspects of their lives. This course is intended for new college students or those seeking to develop their academic and lifelong learning skills.

FT; AA/AS; CSU; UC.

PERG 130 Career - Life Planning
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is designed for students interested in self-exploration, career transitions, and career-life planning in order to achieve success in a diverse society. Various assessments are utilized through a systematic approach to career development by examining values, interests, skills, and personality types. Other topics include life roles, personal self-management, decision making, and goal setting throughout the lifespan. This course is intended for students who are considering a career change or are undecided about their future career field or college major.

FT; AA/AS; CSU; UC.

PERG 140 Life Skills and Personal Adjustment
16-18 hours lecture; 1-3 units
Grading: Letter Grade or Pass/No Pass
In this course students develop their emotional, social, educational, and professional life skills. It is a practical study of the principles and application of strategies that assist in the development of coping and life skills. Topics include self-esteem and compassion, self-discipline, self-responsibility, self-assertion, and living a consciously balanced life in pursuit of defined educational, career, and life goals. This course is intended for students beginning college or anyone seeking to balance educational, career, and life goals.

FT; AA/AS; CSU.

PERG 160 Stress Management & Well-Being in the Modern World
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ELAC 35 with a Grade of "C" or better, or equivalent
This course is an opportunity to explore, assess, and evaluate stress management and holistic well-being across the lifespan. The course explores the mind-body relationship (psychophysiology) of stress, stressors across the lifespan, coping skills, and interventions. Emphasis is placed on managing stress and anxiety in the modern world. Topics include well-being in relation to career, physical and mental health, finances, relationships, and community connection. This course is designed for students seeking help with stress management, holistic well-being, and life balance.

FT; AA/AS; CSU.

PHIL-Philosophy

PHIL 100 Logic and Critical Thinking
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course explores the relationship of communications and critical thinking with a focus on good reasoning and impediments to its mastery. It emphasizes the development of skills in logical analysis including familiarity with the more common fallacies. This course is designed for students learning to apply principles of critical thinking to the practical problems of everyday life.

FT; AA/AS; CSU; UC.

PHIL 101 Symbolic Logic
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the elements of symbolic logic, sentential calculus and quantification theory. Topics include identity, definite descriptions, natural deduction and structure of language. This course is intended for philosophy majors and students pursuing studies in computer science.

FT; AA/AS; CSU; UC; C-ID: PHIL 210.

PHIL 102A Introduction to Philosophy: Reality and Knowledge
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an introductory study of the aims, methods, types and problems of philosophy and philosophical inquiry. Emphasis is placed on the nature of reality and knowledge. Materials for this survey of philosophy may draw from classical and contemporary thinkers. Students are encouraged to articulate, analyze, and evaluate their own beliefs/positions in the context of meaningful philosophical inquiry. This course is intended for anyone concerned with human existence and humanity's place in the universe.

FT; AA/AS; CSU; UC; C-ID: PHIL 100.

PHIL 102B Introduction to Philosophy: Values
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course provides an introductory study of the aims, methods, types, and problems of philosophy focusing on values and their place in an individual's daily life. Materials for this survey may be drawn from classical and contemporary thinkers. Students are encouraged to articulate, analyze, and evaluate their own beliefs/positions in the context of meaningful philosophical inquiry regarding value theory. This course is for anyone interested in the origin and justification of values and their application to everyday life.

FT; AA/AS; CSU; UC; C-ID: PHIL 120.

PHIL 104A History Of Western Philosophy: Ancient to Medieval
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an introduction to the issues and problems exemplified in the process of meaningful philosophical activity related to the history of western philosophy from the pre-Socratics to the close of the Medieval age. Students in this course survey representative theories and philosophical reflections related to the history of early western philosophy. Students are encouraged to engage in independent research, analysis and formulation. This course is intended for students pursuing studies in History and Humanities, and anyone interested in the history of western philosophy.

FT; AA/AS; CSU; UC.

PHIL 107 Reflections on Human Nature
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an introductory study of the issues and problems exemplified in the process of meaningful philosophical activity relating to the topic of human nature. Students in this course survey representative theories and philosophical reflections relating to the notions of human nature, the individual person, and human characteristics in general. Material for this survey may be drawn from classical and contemporary thinkers or scientific and religious orientations. Students are encouraged to engage in independent research, analysis and formulation. This course is intended for students pursuing studies in behavioral and/or social sciences.

FT; AA/AS; CSU; UC.

PHIL 109 Issues in Social Philosophy
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is an introduction to the issues and problems exemplified in the process of meaningful philosophical activity related to social philosophy. Students in this course survey representative theories and philosophical reflections related to the notions of social ethics and concepts in social philosophy such as types of government, the issues of sovereignty, natural law and natural rights, the philosophy of law, and issues of justice. Students are encouraged to engage in independent research, analysis and formulation. This course is intended for students pursuing studies in pre-law, and/or political, behavioral or social sciences, and anyone interested in social philosophy.

FT; AA/AS; CSU; UC.

PHIL 131 Environmental Ethics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent and PHIL 100 with a Grade of "C" or better, or equivalent
This course allows students to gain an understanding of the field of moral philosophy as it pertains to environmental issues. Ethical theories are analyzed through application to issues such as: population growth, future generations, biodiversity, animal rights, pollution, energy use and consumption. This course is intended for students interested in Sustainability, Environmental Science, Philosophy, Biology, Sociology, Geology, Ecology, and Peace Studies.

FT; AA/AS; CSU; UC.

PHIL 205 Critical Thinking and Writing in Philosophy
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This critical thinking and writing seminar in Philosophy is designed to enhance the student's critical thinking, writing, and research skills in preparation for upper division academic activity. Issues addressed in this class may involve various areas of human experience and aspiration: metaphysical, cosmological, scientific, political, ethical, aesthetic, and religious. Together with the application of basic principles of deduction and induction, special attention is given to identifying and avoiding fallacies in reasoning, and to techniques and aids to research, reasoning, and writing. This course is designed for students who want to hone their writing and critical thinking skills in Philosophy.

FT; AA/AS; CSU; UC.

PHYN-Physical Science

PHYN 100 Survey of Physical Science
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Concurrent enrollment in: PHYN 101
This course is an introductory survey of the fundamental concepts of astronomy, geology, chemistry and physics. Emphasis is placed on the interrelationships among these disciplines and the ways in which the physical sciences affect modern life. This course is intended for students with a general interest in the physical sciences.

FT; AA/AS; CSU; UC.

PHYN 114 Weather and Climate

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course is an introduction to weather and climate. Emphasis is placed on the principles of solar radiation and energy transfer, atmospheric structure and composition, cloud development, precipitation, atmospheric pressure, and winds. Topics include the origin and development of storms, the greenhouse effect, and Earth's changing climate. The scientific method is illustrated as it relates to analyzing meteorologic problems. This course is appropriate for students with an interest in weather and climate.

FT; AA/AS; CSU; UC.

PHYN 290 Independent Study

48 - 162 hours other; 1-3 units

Grading: Letter Grade or Pass/No Pass

Advisory: PHYN 100 with a Grade of "C" or better, or equivalent and PHYN 101 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number from Instructor

This course is for students who wish to conduct additional research, a special project, or learning activities in the field of physical science. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

PHYS-Physics

PHYS 125 General Physics

64-72 hours lecture/48-54 hours lab; 5 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: MATH 104 with a Grade of "C" or better, or equivalent or MATH 116 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for Physics 120A, Physics 124A, Physics 125A, Physics 180A, Physics 181A or Physics 195

This course is an introductory survey of the concepts and principles of physics. Emphasis is placed on developing an understanding of the properties of matter, mechanics, heat, and sound. This course is intended for students taking liberal arts and/or pre-professional courses that do not require physics with calculus.

FT; AA/AS; CSU; UC; C-ID: PHYS 105.

PHYS 126 General Physics II

64-72 hours lecture/48-54 hours lab; 5 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: PHYS 125 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYS 120B, 124B, 125B, 181B, 195B or 196.

This second course in a two-part introductory survey explores the concepts and principles of physics. Topics include electricity, magnetism, light, and modern physics. This course is intended for students taking liberal arts and/or pre-professional courses that do not require physics with calculus.

FT; AA/AS; CSU; UC; C-ID: PHYS 110.

PHYS 180A General Physics I

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: MATH 121 with a Grade of "C" or better, or equivalent or MATH 150 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYS 120A and PHYS 125A or PHYS 124A.

This course is an introductory survey of the concepts and principles of physics. Emphasis is placed on developing an understanding of the properties of matter, mechanics, heat and sound in order to make calculations and solve fundamental physics problems. This course is designed for students interested in biological sciences.

FT; AA/AS; CSU; UC; C-ID: PHYS 105.

PHYS 180B General Physics II

64-72 hours lecture; 4 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: PHYS 180A with a Grade of "C" or better, or equivalent and MATH 121 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for PHYS 120B and 125B or credit or concurrent enrollment in PHYS 124B.

This course is an introductory survey of the concepts and principles of physics. Emphasis is placed on developing an understanding of the properties of electricity, magnetism, light and modern physics in order to make calculations and solve fundamental physics problems. This course is designed for students interested in biological sciences.

FT; AA/AS; CSU; UC; C-ID: PHYS 110.

PHYS 181A General Physics Laboratory I
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: PHYS 180A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYS 121A
This laboratory course is a hands-on study of the properties of matter, mechanics, heat and sound through laboratory experiments. This course is designed for students interested in the biological sciences.

FT; AA/AS; CSU; UC; C-ID: PHYS 105.

PHYS 181B General Physics Laboratory II
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Prerequisite: PHYS 180A with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: PHYS 180B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYS 121B
This laboratory course is a hands-on study of the principles of electricity, magnetism, light and modern physics through laboratory experiments. This course is designed for students interested in the biological sciences.

FT; AA/AS; CSU; UC; C-ID: PHYS 110.

PHYS 195 Mechanics
64-72 hours lecture/48-54 hours lab; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: MATH 150 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: MATH 151 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYS 195A and 196A
This is the first of a three-semester calculus-based general physics sequence designed for scientists and engineers. Topics include linear kinematics, Newton's Laws, energy, rotational kinematics, rigid-body rotation, momentum, fluid mechanics, gravity, oscillatory motion, and thermodynamics. This course is intended for students majoring in the physical sciences or engineering.

FT; AA/AS; CSU; UC; C-ID: PHYS 205.

PHYS 196 Electricity and Magnetism
64-72 hours lecture/48-54 hours lab; 5 units
Grading: Letter Grade Only
Prerequisite: PHYS 195 with a Grade of "C" or better, or equivalent and MATH 151 with a Grade of "C" or better, or equivalent
Advisory: MATH 252 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Phys 195B and 196B.
This is the second course of a three-semester calculus-based general physics sequence. Topics include the basic principles and applications of electrostatics; magnetostatics; time-varying electric and magnetic phenomena; direct and alternating current circuits; elementary electronics; and electromagnetic waves. Emphasis is placed on the mathematical analysis of physical problems. Laboratory work on various aspects of electric and magnetic phenomena emphasizing direct current (DC) and alternating current (AC) circuits is included. This course is intended for students majoring in the physical sciences or engineering.

FT; AA/AS; CSU; UC; C-ID: PHYS 210.

PHYS 197 Waves, Optics and Modern Physics
64-72 hours lecture/48-54 hours lab; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PHYS 196 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Physics 195C and 196C
This is the third semester of a three semester calculus-based Physics course designed for prospective scientists and engineers. Topics include the fundamental principles of physics of waves, the behavior of light, and an introduction to relativity, quantum physics and the atomic and nuclear properties of matter.

FT; AA/AS; CSU; UC; C-ID: PHYS 215.

POLI-Political Science

POLI 102 Introduction to American Government see POLS C1000 American Government and Politics

POLI 101 Introduction to Political Science
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the field of political science. Emphasis is placed on the concepts and methodologies used in the study of political institutions, political participation, public opinion, and the international political system. Other topics include a survey of political theory and the history of American political ideology and culture. This course is intended for students majoring in Political Science and those interested in the field of political science.

FT; AA/AS; CSU; UC; C-ID: POLS 150.

POLI 103 Comparative Politics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for POLI 130
This course is an introduction to comparative politics. Emphasis is placed on analyses of various political systems using the fundamental concepts and methodologies of comparative politics. This course is designed for political science majors and anyone interested in comparative and/or international politics.

FT; AA/AS; CSU; UC; C-ID: POLS 130.

POLI 121 American Political Development
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course provides an overview of American political development. Students engage in a historical analysis of the evolution of governmental institutions in the United States, and study how political ideas, political practices, and political actors (including ethnic groups, women, political parties, interest groups, and social movements) shape and are shaped by these institutional factors. This course is intended for transfer students, political science majors, or students interested in the American political system.

AA/AS; CSU; UC.

POLI 140 Contemporary International Politics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of world politics including the various approaches to international relations and international political economy. Emphasis is placed on the roles of nationalism, nation-states, transnationalism and international organizations in the making of contemporary world politics as well as on issues of national security, power and diplomacy, economic competition, international law and the environment. This course is intended for students majoring in political science or anyone with an interest in world politics.

FT; AA/AS; CSU; UC; C-ID: POLS 140.

POLS-Political Science

For additional Political Science courses see POLI

POLS C1000 American Government and Politics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for POLI 102
Part 1 (Identical): This course is an introduction to government and politics in the United States and California. Students examine the constitutions, structure, and operation of governing institutions, civil liberties and civil rights, political behaviors, political issues, and public policy using political science theory and methodology. Part 2 (Local): This course is intended for transfer students, political science majors, or students interested in American government. (Formerly POLI 102).

FT; AA/AS; CSU; UC; C-ID: POLS 110.

PSMA-Public Safety Management

PSMA 401 Foundations in Public Safety Management Practices

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course focuses on public safety organizations and the functions of management within these organizations. It examines the history, current forces, and trends facing public safety managers. The history, development, growth, and future of various interdependent public safety entities is examined from an interdisciplinary perspective. Topics include an overview of contemporary practices, finance, legal issues, public policies, leadership trends, ethics and diversity, group dynamics, and human resources in the field of public safety management. Course work includes the Federal Emergency Management Agency (FEMA) IS-271.A: Anticipating Hazardous Weather & Community Risk which provides emergency managers and other decision makers with background information about weather, natural hazards, and preparedness. This training includes, weather basics, weather forecasting, threats analysis and hazards planning, fact sheets for weather and non-weather-related hazards, warning partnership information, human behavior and community response. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 405 Contemporary Public Safety Practices

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is an investigation of contemporary strategic public safety practices. The goal is to provide Emergency Management (EM) leaders with skills critical to engage the leadership challenges associated with the local emergency management organization and the immediate local community. Emphasis is on best practices generally associated with successful organizations and applying them to the field of public safety. Topics include the role of hazard and risk management, quality control, and customer service in public safety organizations. Discussion also covers contemporary views of public safety integration and consolidation, as well as public and private partnerships. Course work includes the Federal Emergency Management Agency (FEMA) IS-2200: Basic Emergency Operations Center Functions designed to introduce the role, design, and function of the Emergency Operations Center (EOC) and the supportive relationship as a National Incident Management System (NIMS) Command and Coordination component of the Multiagency Coordination System. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 410 Public Safety Finance

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course explores the financial issues facing Emergency Management Directors employed in public safety management. Emphasis is on practical applications to facilitate informed discussions and decision making for appropriate emergency preparedness. Focuses on the role of the financial needs in public safety government positions: financial analysis, forecasting, planning, and control; asset management; capital budgeting; and identifying financial responsibilities for local, tribal, state, territorial and federal government partners identified for emergency preparedness. Course work includes the California Specialized Training Institute (CSTI) G611F EOC Section Overview Finance / Admin course requirements. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 415 Public Safety Legal Issues and Public Policy

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is an analysis of the law as it relates to the management of public safety organizations. Principles of legal obligations, limitations, liabilities, and immunities are examined and discussed, both in general terms and, where applicable, in terms of how they differ in the governmental organization, treatment of public employers and employees. The objective is to develop an appreciation of the legal responsibilities of a public safety administrator within local, tribal, state, territorial and federal government partners. Course work includes the California Specialized Training Institute (CSTI) Emergency Management Concepts and G557 Rapid Needs Workshop focusing on plans and procedures for responding to the initial four hours of a disaster. Content includes prevent planning, intelligence gathering, and situational awareness distribution. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 420 Human Resources in Public Safety Management

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course provides students with a basic knowledge of the human resources requirements related to the roles and responsibilities of an manager including developing plans for providing employee accommodation, developing hiring procedures, establishing personnel assignments, describing methods of facilitating and encouraging professional development, developing an ongoing education training program, developing promotion procedures, developing proposals for improving employee benefits, and developing a measurable accident and injury prevention program. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 425 Strategic Planning in Public Safety Management

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is designed to ensure public safety managers have properly prepared for all elements in the emergency planning process. The course is designed to examine current strategic plans for public safety organizations and identify contemporary strategic issues facing the public sector. Focus includes creating organizational change and provides a troubleshooting process for organizations to reduce barriers for successful strategic plan desired outcomes. Every year, the United States experiences more severe weather than any other country in the world. In order to reduce deaths, injuries, and property losses, emergency managers must work closely with the NWS and the news media to provide effective warnings that can be received and understood by people at risk. The course explores social dimensions of warning response; developing effective warning messages; developing an effective community warning process; and working with the news media to create a weather warning partnership. Course work includes the G191: Emergency Operations Center/Incident Command System Interface , G611P: EOC Section Overview: Planning and Intelligence and G272 Warning Coordination, G358: Evacuation and Re-Entry Planning. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 430 Public Safety Leadership and Communications

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course analyzes leadership theories, skills, and techniques for communication used in public safety management. The objective is to define and explain basic concepts of leadership; analyze personal leadership knowledge, skills, and abilities; and evaluate leadership performance in the current public safety environment. Topics include leadership theories and styles, roles of the leader in the emergency management environment, including planning, organizing, leading, controlling and communications necessary in a complex emergent environment. Emphasis includes transferable leadership traits for public safety managers deployed in a unified response to large scale disaster or community crisis. Course work includes the Federal Emergency Management Agency (FEMA) IS-247.B: Integrated Public Alert and Warning System (IPAWS) for Alert Originators and California Specialized Training Institute (CSTI) L0105: Public Information and Warning courses. This course increases awareness of the benefits of using Integrated Public Alert and Warning System (IPAWS) for effective alerts and warnings; skill to draft more appropriate, effective, and accessible alert and warning messages; the importance of training, testing, and exercising with IPAWS. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 435 Native American Relations for Public Safety

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course provides emergency management/response personnel, tribal government employees, and tribal leaders with a deeper understanding of emergency operations. Special emphasis is placed on the implementation of an integrated emergency management and operations during an expanded emergency. Emphasis focuses on the foundation for reducing or preventing potential losses from natural or other hazards with an understanding of reducing potential losses from natural or other hazards using mitigation opportunities and techniques, examples of mitigation success stories, and an overview of available Federal Emergency Management Agency (FEMA) Mitigation Programs. Primary emphasis is on helping tribal emergency managers implement a Continuity of Operations program to ensure continuity of community essential functions across a wide range of emergencies and events. Topics include legal basis for continuity, continuity planning, determining essential functions, essential records management, and pan flu implications for continuity operations. Overall course content aims to assist emergency managers and tribal leaders understand how effective emergency management can improve the sustainability of their tribal community and better protect tribal citizens, lands, culture, and sovereignty for tribal nations. Coursework includes the Federal Emergency Management L0583 Emergency Management Overview for Tribal Leaders course. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 440 Whole Community Approach – Government Partners, Non-Profit and Allied Organizations in Public Safety

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is designed to analyze the "Whole Community Approach" with focus on the relations among the levels of government and the connections between governments, non-profit organizations and faith-based organizations recognized in emergency preparedness. Topics concentrate on development and alternatives in shared responsibilities for funding and providing services maximizing relationships between local, tribal, state, territorial, and federal government in partnerships with local community resources. Emphasis includes engagement of the community resources ensuring inclusion for children, individuals with disabilities and others with access and functional needs, those from religious, racial, and ethnically diverse backgrounds, and people with limited English proficiency needs are met during an emergency or community crisis. Students will understand the community elements of an emergency plan in action. Coursework includes the California Specialized Training Institute (CSTI) G197: Integrating Access & Functional Needs into Emergency Management and G108: Community Mass Care and Emergency Assistance courses. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 445 Global Perspectives in Emergency Management

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course examines global issues for public safety managers including frequency of disasters, future threats, impact of climate change on communities, binational border issues and enforcement that impact emergency management domestically and internationally in the government, non-profit, and private sectors. Emphasis is focused on policies, regulations and politics surrounding future challenges communities will likely encounter in the 21st century. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 450 Disaster Planning and Control, Recovery in Emergency Management

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course examines concepts and principles of community risk assessment, planning and response to fires and natural and human-caused disasters, including the NIMS Incident Command Systems (ICS), mutual-aid and automatic response, training and preparedness, communications, civil disturbances, terrorist threats/ incidents, hazardous materials planning, mass casualty incidents, earthquake preparedness, and disaster mitigation and recovery. Emphasis includes inclusive policy and strategy-level decision-making, throughout the disaster cycle. Course work includes the California Specialized Training Institute (CSTI) 235: Emergency Planning and G205: Recovery from Disaster: The Local Community Role courses. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 455 Community Risk Reduction for Fire and Emergency Services in Emergency Management

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course provides a theoretical framework for the understanding of the ethical, sociological, organizational, political, and legal components of community risk reduction, and a methodology for the development of a comprehensive community risk-reduction plan. The course objective is to empower students with the knowledge of how to prevent, reduce and mitigate community risk. Course work includes the California Specialized Training Institute (CSTI) G393: Mitigation for Emergency Managers course. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 460 Foundations in Emergency Medical Services

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is an overview of the design and operation of Emergency Medical Systems (EMS), delivery of services and the echelons of care. The history of EMS, the interface of public and private organizations, and review of the various personnel who comprise these systems will be examined in relation to their impact on the health care delivery system. Analyzing the role of local, state, federal, tribal governments and private for profit corporations in delivery of emergency medical services in thoroughly examined. Because EMS is both an evolving system and a technical field, change is constantly occurring both in the clinical aspects of patient care and in the delivery of EMS services. This course examines the changes in EMS over the past few years including the significant changes in the scope of practice and education of EMS providers, reimbursement for EMS services as the result of the Affordable Care Act and federal legislation and federal agency activity related to EMS. The course explores an in depth overview of changes in disaster response, with a special emphasis on National Incident Management System integration and the expanding role of prehospital providers as an integrated part of the health care system including the role of the community paramedic. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 465 Management of Emergency Medical Services

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This is an upper-level baccalaureate course for students interested in the practice and principles of emergency medical services systems management and the processes that contribute to the effectiveness of day-to-day operations within an EMS organization. This course introduces the EMS professional to topics that include government structure, strategic planning, injury prevention, risk management and safety, customer service, human resources management, financial management, fleet management, career development, quality management, data collection and research, labor relations, and special operations. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 470 Legal, Political, and Regulatory Environment of Emergency Medical Services

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course introduces the EMS professional to the legal aspects of emergency medical services. Students explore issues in malpractice, consent and refusal of treatment; OSHA; employment issues; and risk management. EMS students gain insights into the legal liabilities in emergency medical services. A thorough examination of the following topics are analyzed including the basic framework of the United States legal system, negligence, history of EMS law, safety considerations, staffing, compensation and benefits, operational laws, funding laws, legal pitfalls of discipline, terminations, layoffs, records retention, national EMS representation, professional organizations and lobbying for change. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 475 Administration, Public Policy, and Public Relations in Law Enforcement

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is designed to evaluate the principles and applications of police administration, discretion, accountability, affirmative action, public relations, new technologies, and changing constitutional criminal procedures. The course examines crime prevention strategies that target the underlying local problems that generate recurring offenses. This includes analyzing the results of problem-oriented projects centered targeting high-crime places, deterring high-activity, repeat offenders and protecting victims of repeat offenses. The course interprets how to improve crime analysis, measuring program effectiveness, and securing productive partnerships with community residents and academic researchers. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 480 Psychology and the Law

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course will use psychological concepts and methods to aid in the understanding of how psychology intersects with the legal system. Topics include theories of criminal behavior, ethics of forensic psychology, victimization, law enforcement, the jury trial, witnesses, verdict and sentencing, mental illness, corrections, and family law. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 485 Advanced Criminal Investigation for Law Enforcement

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

Students learn advanced applications of the principles of criminal investigation including the analysis of investigative techniques, criminal patterns and modus operandi, interviewing and interrogation strategies, collection and management of evidence, surveillance, and crime scene investigation. The course covers theories, philosophies and concepts related to suppression of crime. Students learn practical approaches to evidence identification; documentation of the location of evidence; crime scene sketching; and the collection and handling of evidence from the crime scene to the crime laboratory, and to presentation in court. The course includes lab exercises designed to reinforce important investigative skills. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSMA 490 Applied Research Project in Public Safety Management

96-108 hours lab; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an intensive capstone study of public safety management that integrates knowledge gained through previous coursework and builds on that foundation through integrative analysis, practical application, work-based learning opportunities applying designed to apply critical thinking. This course is designed to assist students in developing their ability to utilize applied research techniques in public safety settings. Emphasis will be placed on problem identification, the collection and analysis of primary data, and writing a formatted research report. Emphasis is on local, regional challenges of current and future issues in Public Safety Management. The course aims to integrate leadership and management concepts for current and future emergency management, public safety members and first responders. This capstone course is designed to integrate and synthesize the student's entire course of study in the Bachelor of Science: Public Safety Management Program. Opportunities include work-based learning opportunities for specific project needs with local emergency management community partnerships. This course is intended for upper division students majoring in Public Safety Management.

FT; AA/AS; CSU.

PSYC-Psychology

PSYC 101 General Psychology has been renumbered to PSYC C1000 Introduction to Psychology

PSYC 31 Social and Behavioral Sciences Statistics Support

16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Corequisite: PSYC 258
Limitation on Enrollment: This course is not open to students with previous credit for POLI 31
This course provides additional hands-on experience in basic mathematical and statistical concepts. Students review key terms and definitions and practice foundational skills. This course is intended for students who require additional support to succeed in transfer-level Social and Behavioral Science statistics course.

FT.

PSYC 123 Adolescent Psychology

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an exploration of an explosive period in human development. Topics include the physical, cognitive, and emotional development of the adolescent. Students study the stresses experienced during the teenage years and investigate methods of coping with the individual adolescent. This course is intended for students interested in psychology or human development.

FT; AA/AS; CSU; UC.

PSYC 133 Psychology of Women
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the psychology of women, the nature of women's lives, and the various roles that women play. Emphasis is placed on an historical, ethnic, and cross-cultural treatment of women in the United States and abroad. Topics include women's sexuality, health, lifespan development, and socio-political status in the world today. This course is intended for psychology and women's studies majors.

FT; AA/AS; CSU; UC.

PSYC 135 Marriage and Family Relations
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the behaviors related to courtship, engagement, marriage, and family life. Emphasis is placed on the historical, cross-cultural, and social perspectives of families. Topics include interpersonal communication, economic management, and sexuality as they relate to the family. This course is intended for psychology and child development majors as well as all students interested in the psychology of interpersonal communication.

FT; AA/AS; CSU; UC.

PSYC 137 Human Sexual Behavior
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the psychological, social, and physiological dimensions of human sexual behavior. Emphasis is placed on the diversity of human sexual development and current research. This course is designed for psychology majors and all students interested in human sexual behavior and related issues.

FT; AA/AS; CSU; UC.

PSYC 155 Introduction to Personality
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the fundamental personality theories. Emphasis is placed on the personal life experiences of each of the major personality theorists, their research and assessment methods, and applications of their theories. This course is designed for psychology majors and anyone seeking a stronger understanding of psychological theory.

FT; AA/AS; CSU; UC.

PSYC 161 Introduction to Counseling
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introductory study of the history and complexity of the counseling relationship. Emphasis is placed on the skills required to be an effective counselor. Topics include various counseling approaches and settings as well as related legal and ethical issues. This course is intended for psychology majors and anyone interested in the therapeutic aspects of counseling psychology.

FT; AA/AS; CSU.

PSYC 166 Introduction to Social Psychology
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Social psychology examines how individuals are influenced by their social environment. Special attention is given to social cognition and perception, self-justification, conformity, group dynamics, prejudice, aggression, prosocial behavior and applied social psychology. Emphasis will be placed on developing critical and integrative ways of thinking about theory and research in social psychology. This course is for anyone who is interested in the subject of social psychology.

FT; AA/AS; CSU; UC; C-ID: PSY 170.

PSYC 201 Academic and Career Opportunities in Psychology
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent
Advisory: 30 units of college course work
This course is a study of career options in the field of Psychology. Emphasis is placed on the identification of career-related strengths and interests and information on post-baccalaureate options in psychology and related fields. This course is designed for students interested in majoring in psychology.

FT; AA/AS; CSU.

PSYC 211 Learning
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PSYC 210
This course is a study of the basic principles and research in animal and human learning. Topics include scientific versus nonscientific approaches to behavior studies, operant and respondent conditioning, observational and cognitive learning, and motivation as related to self-control. This course is designed for students majoring in psychology or interested in the field.

AA/AS; CSU; UC.

PSYC 230 Psychology of Lifespan Development
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent
This course is a study of the psychological development of humans in all their sociocultural diversity from conception to death. Emphasis is placed on the major theoretical paradigms related to growth and change and the variety of factors that shape similarities and differences in life. This course is intended for students majoring in psychology.

FT; AA/AS; CSU; UC.

PSYC 245 Abnormal Psychology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a comprehensive survey of recognized patterns of abnormal behavior. Emphasis is placed on the theoretical models as they relate to assessment, diagnoses, etiology, treatment, and prognosis of recognized disorders. Topics also include legal and ethical issues related to abnormal psychology. This course is designed for psychology majors and all students interested in abnormal psychology.

FT; AA/AS; CSU; UC.

PSYC 255 Introduction to Psychological Research
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent and PSYC 258 with a Grade of "C" or better, or equivalent or STAT C1000 with a Grade of "C" or better, or equivalent or BIOL 200 with a Grade of "C" or better, or equivalent
This course is an introduction to scientific methodology in psychology. Emphasis is placed on descriptive, experimental, and applied research. Students use the American Psychological Association writing style for empirical report writing. This course is intended for psychology majors and majors with components of the research process.

FT; AA/AS; CSU; UC; C-ID: PSY 200.

PSYC 258 Behavioral Science Statistics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement Milestone M40 or M50 based on California Title 5 regulations. Students with Milestone M30 must enroll in LCOM 258X (PSYC 258 and PSYC 31 Learning Community).
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introductory study of statistics for the behavioral sciences. Emphasis is placed on acquainting students with the concepts underlying statistical methods and research approaches; basic statistical analyses; and principles. Topics include data collection; descriptive and inferential statistics; sampling distributions; measures of central tendency, dispersion, relative standing, and relationship; probability; prediction; hypothesis evaluation; and tests for treatment effects. This course is intended for students majoring in the behavioral/social sciences or those interested in applied statistics.

FT; AA/AS; CSU; UC; C-ID: SOCI 125, PSYC 258 + 259 = MATH 110, PSYC 258 + 259R = MATH 110.

PSYC 259 Behavioral Science Statistics Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: PSYC 258 with a Grade of "C" or better, or equivalent
This laboratory course offers students practice in using statistical analysis software for the behavioral sciences. Emphasis is placed on data entry, graphing, hypothesis testing and statistical analyses. This course is intended for psychology and other behavioral science majors and anyone interested in using statistical analysis software for research purposes.

FT; AA/AS; CSU; C-ID: PSYC 258 + 259 = MATH 110.

PSYC 260 Introduction to Physiological Psychology

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent
This course is a study of the biological bases of behavioral and cognitive processes. Emphasis is placed on neuroanatomy and neurophysiology as a means for understanding how basic neurological processes impact perception, movement, consciousness, sexual behaviors, ingestive behaviors, emotions, learning, memory, communication, and neurological and psychological disorders. This course is designed for students majoring in psychology and all students interested in physiological psychology.

FT; AA/AS; CSU; UC; C-ID: PSY 150.

PSYC 283 Introduction to Cognitive Psychology

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: PSYC C1000 with a Grade of "C" or better, or equivalent
This course is a study of the theory and research on cognitive processes. Emphasis is placed on perception, attention, learning, memory, language, thought, visual cognition, problem solving, and applications of cognitive psychology. This course is intended for students majoring in psychology and all students interested in cognitive processes.

FT; AA/AS; CSU; UC.

PSYC 290 Independent Study

48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of psychology. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

PSYC C1000 Introduction to Psychology

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PSYC 101
Part 1 (CCN Identical): This course is an introduction to psychology, which is the study of the mind and behavior. Students focus on theories and concepts of biological, cognitive, developmental, environmental, social, and cultural influences; their applications; and their research foundations. Part 2 (Local): This course is designed for students planning to take advanced courses in social and behavioral sciences or anyone interested in learning more about the mind, behavior, and mental health. (Formerly PSYC 101).

FT; AA/AS; CSU; UC; C-ID: PSY 110.

REAL-Real Estate

REAL 101 Real Estate Principles

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of the economics and transfer of land ownership. Emphasis is placed on the roles and responsibilities of the broker, the owner and the purchaser in the buying and selling of property. This course is designed for students majoring in real estate and anyone interested in the principles of real estate. This course applies toward the State's educational requirements for the real estate salesperson’s license examination and as an elective for the broker’s license exam. This course is intended for current or future real estate professionals.

FT; AA/AS; CSU.

REAL 115 Real Estate Finance

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of real estate finance. Emphasis is placed on the types of real estate lenders, the sources of income for lending purposes, and buyer qualifications. This course is designed for students majoring in real estate and for anyone interested in real estate finance. This course applies toward the State's educational requirements for the broker's examination and as an elective for the real estate salesperson's license exam. This course is intended for current or future real estate professionals.

FT; AA/AS; CSU.

REAL 120 Real Estate Practice
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course examines the principles of real estate practice as they pertain to day-to-day operations in a real estate office. Topics include listings, valuations, prospecting, selling, financing, exchanges, taxation, and specialized brokerage operations. Professional and ethical activities are stressed. This course applies toward the State's educational requirements for both the broker's and the real estate salesperson's examination. This course is intended for current or future real estate professionals.

FT; AA/AS; CSU.

SERV-Service Learning

SERV 277C Service Learning in the Community
32-36 hours lecture; 2 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for ANTH 277C
Students in this course develop and implement service learning projects in the college's local community. Students work under the supervision of college faculty and in cooperation with a community agency or other organization. Students gain hands-on experience in assessing the needs and expectations of a community organization; collaborating and planning; and developing, implementing, and evaluating a project. Students meet at minimum once each week during regular class sessions to receive support, training, and feedback. This course is intended for anyone interested in public service, project development, teaching, communication, or environmental sustainability.

FT; AA/AS; CSU.

SERV 277D Service Learning on Campus
32-36 hours lecture; 2 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for ANTH 277D
Students in this course develop and implement service learning projects on the college campus. Students work under the supervision of college faculty and in cooperation with a college department, program, office, or other organization. Students gain hands-on experience in assessing the needs and expectations of a college organization; collaborating and planning; and developing, implementing, and evaluating a project. Students meet at minimum once each week during regular class sessions to receive support, training, and feedback. This course is intended for anyone interested in project development, teaching, communication, or environmental sustainability.

FT; AA/AS; CSU.

SERV 277E Service Learning in International Communities
16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
Students in this course develop and implement service learning projects to help the local community they are visiting during their study abroad program. Students work under the supervision of college faculty and in cooperation with community organizations and agencies. Projects may include collaboration with community activities, public agencies, or educational services in the focus community. Students gain hands-on experience in assessing the needs and expectations of a community organization; collaborating and planning; and developing, implementing, and evaluating a project. Students meet at minimum once each week during regular class sessions to receive support, training, and feedback. This course is intended for anyone interested in international project development, teaching, communication, or environmental sustainability.

FT; AA/AS; CSU.

SOCO-Sociology

SOCO 101 Principles of Sociology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introductory study of the basic concepts, theoretical approaches, and methods of sociology. Topics include the scientific study of social interaction, structure, and organization; groups; socialization and the self; social stratification; culture and diversity; social change; and global dynamics. Topics and examples emphasize present-day America, including cross-cultural and multicultural analysis. This general education course is intended for students interested in the social sciences and those considering careers in counseling, teaching, social work or nursing.

FT; AA/AS; CSU; UC; C-ID: SOCI 110.

SOCO 110 Contemporary Social Problems
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course requires students to identify and analyze present day social problems in the United States, with emphasis on sociological factors involved, including cross-cultural and multicultural analysis. Students use scientific methods and criteria for evaluating proposals for social betterment. This course is useful for students pursuing careers in criminology, counseling, education, law, and medicine.

FT; AA/AS; CSU; UC; C-ID: SOCI 115.

SOCO 145 Health and Society
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in: ENGL C1000 with a Grade of "C" or better, or equivalent
This course presents a broad introduction of sociological concepts and ideas related to the study of health and illness in the United States (US). Emphasis is placed on the relationship between social forces and health, the cultural meanings associated with health and illness, and the social behavior of health care professionals and patients. Further focus includes the political and economic consequences and effects surrounding health care and the structure of social institutions that constitute the health care industry. In addition, race, gender, age, social class, sexuality, and disability are a focal point of analysis throughout this course as these identities influence the experience of health and illness. This course is designed for sociology majors and/or those interested in better understanding health and illness as social experiences in the US.

FT; AA/AS; CSU; UC.

SOCO 201 Advanced Principles of Sociology
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the origins of sociological theory. Principal contributors are presented and examined in detail, with special attention to their model of human action, the nature of empirical fact, and implications for public policy. With an emphasis on critical analyses of science and the humanities, this course is designed to provide a standard theory foundation for transfer students majoring in the arts, sciences, or social sciences.

AA/AS; CSU; UC.

SOCO 207 Introduction to Race and Ethnicity
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course is a sociological analysis of race, ethnicity, racism, and discrimination. Students examine the cultural, political, and economic practices and institutions that support or challenge racism and discrimination and racial and ethnic inequalities. Other topics include the historical and contemporary patterns of interaction between various racial and ethnic groups. This course is intended for students majoring in sociology or ethnic studies, or those interested in race and ethnicity.

FT; AA/AS; CSU; UC.

SOCO 220 Introduction to Research Methods in Sociology
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: SOCO 101 with a Grade of "C" or better, or equivalent
Advisory: PSYC 258 with a Grade of "C" or better, or equivalent
This course introduces students to the fundamental elements of sociological research. Topics include the role of theory in research, issues of ethics, key steps of research design, a review of data collection methods, quantitative and qualitative analyses, and development of a research report. This course is intended for students majoring in Sociology or other fields of social science.

FT; AA/AS; CSU; UC; C-ID: SOCI 120.

SOCO 223 Globalization and Social Change

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

Advisory: SOCO 101 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent

This course evaluates the social and political changes brought on by globalization among industrialized, industrializing, and underdeveloped nations. It presents arguments and theories for and against globalization supplemented with empirical examples. The course is useful for those considering careers in law, politics, business, teaching, or non-profit organizations dealing with human rights issues, political advocacy, or international affairs.

FT; AA/AS; CSU; UC.

SOCO 290 Independent Study

48 - 162 hours other; 1-3 units

Grading: Letter Grade or Pass/No Pass

Limitation on Enrollment: Obtain Permission Number from Instructor

This course is designed for students who wish to conduct additional research, a special project, or learning activities in the field of sociology. It is not intended to replace an existing course in the discipline. In this course students have a written contract with their instructor for activities such as: preparing problem analyses, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

AA/AS; CSU.

SOCO 410 Sociological Perspectives on Public Safety

3 units

Grading: Letter Grade Only

Limitation on Enrollment: Special Admission - must be admitted to program.

This course addresses structural inequities in public safety policies, programs, and practices from an intersectional lens to increase cultural humility and mitigate the harmful impacts of bias on disproportionately impacted communities. Emphasis is placed on how emergency management and law enforcement can foster community interactions to address social, structural, economic, and cultural inequities while aiming for community trust. Application includes theories, policies, and best practices for risk management based on local culturally-specific community needs. Aspects of privilege and disadvantage that shape public safety in domestic and global contexts will be explored. Focus will be placed on upending barriers to community safety for disproportionately impacted populations who are marginalized by race, ethnicity, gender, social class, age, citizenship status, religion, sexuality, and ability. Through an interdisciplinary social science lens, we will examine the following questions: How might we reimagine public safety so that we can prevent harm? How have historical legacies of oppression contributed to equity gaps in public safety? What actions must we take to ensure that public safety institutions consider diversity, equity, inclusion, and anti-racism in their practices? This course is intended to meet upper division General Education requirements for students enrolled in baccalaureate degree programs.

FT; AA/AS; CSU.

SPAN-Spanish

SPAN 101 First Course in Spanish

80-90 hours lecture; 5 units

Grading: Letter Grade or Pass/No Pass

Limitation on Enrollment: This course is not open to students with previous credit for or concurrent enrollment in SPAN 100

This interactive course introduces students to the Spanish language and the cultures of the Spanish speaking world. Students use basic Spanish language structures and vocabulary to speak, listen, read, and write in cultural context at the novice level. This course is intended for all students interested in gaining proficiency in the Spanish language for academic purposes and/or personal enrichment.

FT; AA/AS; CSU; UC; C-ID: SPAN 100.

SPAN 102 Second Course in Spanish

80-90 hours lecture; 5 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: SPAN 101 with a Grade of "C" or better, or equivalent or two years of high school Spanish

Limitation on Enrollment: This course is not open to students with previous credit for or concurrent enrollment in SPAN 100.

This interactive course is the second in the Spanish language series. Students use increasingly complex Spanish language structures to speak, listen, read, and write in cultural context at the novice-high level. This course is intended for all students interested in gaining proficiency in the Spanish language for academic purposes and/or personal enrichment

FT; AA/AS; CSU; UC; C-ID: SPAN 110.

SPAN 201 Third Course in Spanish

80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: SPAN 102 with a Grade of "C" or better, or equivalent or three years of high school Spanish
This interactive course is the third in the Spanish language series. Students use increasingly complex language structures and vocabulary to develop the functional competence required to communicate beyond survival needs and to discuss and express opinions on abstract topics related to the arts, lifestyle, linguistics, and literature at the intermediate level. This course is intended for students majoring in Spanish and anyone interested in gaining proficiency in the Spanish language for academic purposes and/or personal enrichment.

FT; AA/AS; CSU; UC; C-ID: SPAN 200.

SPAN 202 Fourth Course in Spanish

80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: SPAN 201 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for SPAN 200
This interactive course is the fourth in the Spanish language series. Emphasis is placed on the use of complex language structures and vocabulary to communicate beyond casual conversation and to express opinions and offer hypothetical possibilities related to abstract issues and plans, cultural norms and values, and interpersonal relationships. Students are encouraged to think critically by analyzing linguistic structures and making cross cultural comparisons related to the Spanish speaking world. This course is intended for students majoring in Spanish and anyone interested in gaining proficiency in the Spanish language for academic purposes and/or personal enrichment.

FT; AA/AS; CSU; UC; C-ID: SPAN 210.

SPAN 210 Conversation and Composition Spanish I

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: SPAN 102 with a Grade of "C" or better, or equivalent
This course further develops oral comprehension and fluency as well as written communication at a mid-intermediate level in Spanish through culturally relevant materials. Students increase vocabulary, dramatize everyday topics of conversation, interpret and describe materials, and compare and contrast Latin American and Spanish cultures with U.S. culture both orally and in writing. Writing strategies are emphasized and literature is introduced. This course is intended for students who want to enhance their skills in the Spanish language.

FT; AA/AS; CSU; UC.

SPAN 211 Conversation and Composition Spanish II

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: SPAN 210 with a Grade of "C" or better, or equivalent
This course further develops oral comprehension and fluency as well as written communication at an advanced-intermediate level in Spanish through culturally relevant materials. Students further increase vocabulary; dramatize everyday topics of conversation; interpret and describe materials; and compare and contrast Latin American and Spanish cultures with U.S. culture both orally and in writing. Pre-reading strategies introduced in the prerequisite course are used as a basis upon which to build course emphasis in reading. In addition, more literature is introduced. This course is intended for students who want to further enhance their skills in Spanish.

FT; AA/AS; CSU; UC.

STAT-Statistics

For additional Mathematics courses see MATH

STAT C1000 Introduction to Statistics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: Placement as determined by the college's multiple measures assessment process or completion of a course taught at or above the level of intermediate algebra. Students with a Milestone M30 must enroll in STAT C1000 and Mathematics 15A.
Limitation on Enrollment: This course is not open to students with previous credit for MATH 119
Part 1: This course is an introduction to statistical thinking and processes, including methods and concepts for discovery and decision-making using data. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-squared, and t-tests; and application of technology for statistical analysis including the interpretation of the relevance of the statistical findings. Students apply methods and processes to applications using data from a broad range of disciplines. Part 2 (Local): This is a clarification of information listed in Part 1. This course covers descriptive and inferential statistics. The descriptive portion analyzes data through graphs, measures of central tendency and dispersion. The inferential statistics portion covers statistical rules to compute basic probability, including binomial, normal, Chi-squares, and t-distributions. This course also covers estimation of population parameters, hypothesis testing, linear regression, correlation, and ANOVA. Emphasis is placed on applications of technology, using software packages, for statistical analysis and interpretation of statistical values based on data from disciplines including business, social sciences, psychology, life science, health science, and education. This course is intended for transfer students interested in statistical analysis.

FT; AA/AS; CSU; UC; C-ID: MATH 110.

SUST-Sustainability

SUST 101 Introduction to Sustainability
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent or ENGL 105 with a Grade of "C" or better, or equivalent
This course introduces students to an interdisciplinary examination of the theory and practices of sustainability. Sustainability can be defined as meeting the needs of the present generation without compromising the ability of future generations to meet their own needs. Topics include restoring ecological and environmental health, creating just economic systems, and ensuring social justice. This course is intended for students interested in sustainability, environmental ethics, and peace studies.

FT; AA/AS; CSU; UC.

SUST 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is for students who wish to conduct additional research, a special project, or learning activities in the field of sustainability. It is not intended to replace an existing course in the discipline. In this course students will have a written contract with their instructor for activities such as: preparing problem analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

TAGA-Tagalog

TAGA 101 First Course in Tagalog
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
This course is the first in a three course sequence of Tagalog. Emphasis is placed on the Tagalog language and culture through speaking, listening, reading, and writing at the novice level. Other topics include basic language structures, appropriate forms of address, and vocabulary for communication. This course is intended for all students interested in the Tagalog language.

FT; AA/AS; CSU; UC.

TAGA 102 Second Course in Tagalog
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: TAGA 101 with a Grade of "C" or better, or equivalent
This course is the second in a three course sequence in Tagalog. In this interactive course, students reinforce and add to the culture and language concepts studied in the first semester course through speaking, listening, reading, and writing at the low-intermediate level. This course is intended for all students interested in the Tagalog language.

FT; AA/AS; CSU; UC.

TAGA 201 Third Course in Tagalog
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: TAGA 102 with a Grade of "C" or better, or equivalent
This intermediate course is the third in a three course sequence in Tagalog. In this interactive course, students increase mastery of the Tagalog language and Filipino culture through speaking, listening, reading, and writing at the intermediate level. More complex language structures and vocabulary for communication are examined and explored. This course is intended for all students interested in the Tagalog language.

FT; AA/AS; CSU; UC.

WORK 272 General Work Experience
54 - 162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
A program of on-the-job learning experiences designed to assist the student in developing occupational effectiveness. Employment need not be related to vocational or occupational major. One unit of credit may be earned for every 54 hours of work experience. A maximum of fourteen credit hours for all work experience subject areas may be earned during one enrollment period.

AA/AS; CSU.

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M.S.N., Azusa Pacific University

ODU, Michael
Vice President of Instruction
B.S., M.S. University of Central Florida
Ph.D. Florida Institute of Technology

OKUMOTO, Sadayoshi
Physics
B.A. University of California, Los Angeles
B.S., California Polytechnic State University
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Administration of Justice
B.A., University of California, San Diego
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Counselor
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M.A., San Diego State University

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History
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B.S., Northern Michigan University
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Ph.D., University of California, Davis

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English
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M.Ed., University of Hawai'i, Mãnoa
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M.A., Ph.D., University of California, San Diego

PETTI, Kevin
Health and Exercise Science/ Anatomy and Physiology
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B.A., Humboldt State University
M.A., San Diego State University
Ph.D., University of San Diego

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M.F.A., Edinboro University of Pennsylvania

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M.A., North Carolina State University

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M.A., University of Toronto
TESOL Certificate, University of California, San Diego, Extension

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B.A., Pitzer College
M.A., Columbia University
Ph.D. Candidate, Massachusetts Institute of Technology

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B.S., M.S., B.Ed., Ph.D., Guru Nanak Dev University, Amritsar India
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A.S. Fire Science, Palomar College

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Chemistry
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SMITH, Daniel
Aviation Maintenance Technology
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B.S., Embry-Riddle Aeronautical University
FAA Airframe & Powerplant Certificate

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B.S., Southern Nazarene University
M.S., Ph.D., University of Oklahoma

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M.S., Stanford University

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M.A., San Diego State University

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B.S., San Diego State University
M.S., Nicholls State University

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B.A., Trinity International University
M.A., Trinity International University

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B.S., University of Illinois
M.A., San Diego State University

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Business
B.S., Arizona State University
M.B.A, University of North Texas

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M.A., University of South Dakota

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B.S., M.S., National University

WOODS, Linda
Dean of Math, Biological, Exercise & Physical Science
B.S., Berkeley
M.S., Ph.D., UC San Diego

WU, Judy
Mathematics
B.S., Washington University
M.Ed., Harvard Graduate School of Education
M.A., San Diego State University

YOUNG, Joseph
Automotive Technology
A.S., San Diego Miramar College
ASE Certified Master Technician
Volvo Expert Technician

San Diego Miramar College Faculty and Administrators Emeritus

Steve Adams
Joe Annino
Robert Arend
Robert C. Bacon
Richard Bettendorf
Lonny Bosselman
Ray Bowling
Ed Brunjes
David Buser
James E. Cargill
Rick Cassar
Eugene Chamberlin
Norris A. Charles
William Charman
Lisa, Clarke
Larry Cooke
Deidra Coppadge
John J. Couture
Robert Crosby
Fredrick Deutsch
Kathleen R. Doorly
Daniel Dramer
Gisella Duarte-Cosman
Peter Elias
Kenneth Fawcett
Fran Fehlman
Daphne E. Figueroa
Diana Fink
S.M. Franklin
Robert Fritsch
Gin Gee
Parvine Ghaffari
Vernal Goodman
Rex Gorton
Ruth Gray
Stephen Greene
Buran Haidar
P. Darrel Harrison
Robert D. Henderson
Mark Hertica
Eldon Hoover
Patricia Hunter
Ralph Jacobs
Leslie Klipper
Jerry LaFrance
Linda Lee
Clarence J. Lewis
Morris W. Magoski
Ray McFarlane
Dale Mathews
Joan Messenger
Arashmidos Monjazeb
Eric M. Mosier
Martin Moss
Sally Nalven
David Navarro
Gregory Newhouse
Wheeler North
Roger Olson
Corrie Ort
James Palmer
Judy Patacsil
Larry Pink
William S. Puett
Rayley Quon
Jay Root
David Sanderlin
Susan Schwarz
June Scopinich
Susan Scott
John S. Shablow
Wayne Sherman
Richard Shultz
Dorothy Simpson
Sandra Slivka
Sandra Smith
Mary Strobbe
Donald Taylor
Joan Thompson
Dan Trubovitz
Terry Truitt
Alan Viersen
Martin Walsh
Helen Webb
James L. Weber
Dan Willkie

San Diego Miramar College Classified Professionals

ABBOTT, John
Senior Student Services Assistant, Admissions & Records

ACAIN, Adrian
Administrative Technician, Athletics

AGONAFER, Sara
Senior Clerical Assistant, Public Safety

AGUILAR, Jessica
Student Services Technician, International Students

AQUINO, Dennis
Production Services Assistant, Reprographics

AQUINO, Stacy
Student Assistance Technician, Financial Aid

ARMENTA, Lynda
Accounting Supervisor, Student Accounting

ARREOLA, Atala
Custodian I, Facilities

AUD, Joanna
Instructional Lab Technician, Biology

AYERSMAN, Helena
Senior Student Services Assistant, EOPS

BARNET, Roberto
Utility Worker, Facilities

BARTOLOMEI, Juli
Senior Clerical Assistant, Academic Senate

BATENGA, Ray
Stock Clerk II, Bookstore

BENNET, James BENTON, Robert
Custodian I, College Police/ Parking Facilities

BEUMAHER, Samantha
Student Services Technician, Counseling

BOYD, Reginald
Student Services Supervisor I, Admissions & Records

BROWN, Michael
Instructional Lab Technician/Auto Diesel, Auto/Diesel

BUENAVISTA, Alfredo
Custodian I, Facilities

BURTON, Cequine
Food Service Worker, Food Services

BUSTAMANTE, Giovanna
Instructional Lab Technician/Child Development, Child Development

CABRERA, Reylyn
Instructional Lab Technician/ Learning Resources, Academic Success Center

CADENA, Sara
Custodian I, Facilities

CAMPBELL, Lynne
Senior Clerical Assistant, Facilities

CARRANZA, Gloria
Student Services Assistant, Admissions & Records

CASTILLEJOS, Jenelle
Business Office Support Supervisor, Business Office

CAVA, Lily
Bookstore Location Supervisor, Bookstore

CEJA, Juan
Gardener/Groundskeeper, Facilities

CHAU, Van
Instructional Assistant/Office Systems, Independent Learning Center (ILC)

CONTRERAS, Miguel
Senior Custodial Crew Leader, Facilities

CORDERO, Melanie
Program Support Technician, EOPS

CUARAO, Luis Jr.
Research Associate, PRIE, Library & Technology

DANA, Dan
Custodian I, Facilities

DAUGHERTY, Beth
Administrative Assistant II, College Police/Parking

DAVENPORT-ALLEN, Leslie
Nursing Center Supervisor, Health Services

DE LA CRUZ NEVAREZ, Jill
Student Services Assistant, Career & Life Design Services

DE LOS REYES, Edgar
Student Services Assistant, Financial Aid

EINSTINE, Precy
Senior Food Service Worker, Food Services

EMERY, Christoph
Grounds Crew Leader, Groundskeeping

EMERY, Micah
Custodian, Facilities

ERLANDSEN, Neal
Senior Student Services Assistant, Outreach

ESCAMARILLA-RIOS, Teresita
Food Service Worker, Food Services

FARMER, Ronald
Custodian I, Facilities

FELIX, Ron
Student Services Technician – Military, Admissions – Military Education

FERIA, Adam
Accounting Specialist, Student Accounting

FUERTE, Eileen
Student Services Technician, Veterans/Admissions & Records

GALVAZ, Danny
Custodian I, Facilities

GARCIA-LORENZO, Epifanio
Gardener/Groundskeeper, Facilities

GINES, Noel
Custodian I, Facilities

GONZALEZ, Armando
Student Services Technician, Veterans/Admissions & Records

GREEN, Carrie
Instructional Lab Technician, Child Development

GUERRERO CEVALLO, Gloria
Custodian I, Facilities

GUTOWSKI, Dan
Administrative Services Supervisor, Hourglass Park Support Services

GUTIERREZ-HERNANDEZ, Israel
Program Support Technician, EOPS

HAAS, Trevor
Tree Maintenance Gardener, Facilities

HALLIGAN, Rachel
Instructional Lab Technician, Biology

HAMILTON, Wade
Irrigation Technician, Facilities

HANKINSON, Joseph
Student Support Services Officer, Student Life & Activities

HENSHAW, Maureen
Senior Food Service Worker, Food Services

HERIVAUX, Stanley
Stock Room Supervisor, Receiving/Stockroom

HERMAN, John
Custodial Crew Leader, Facilities

HERNANDEZ, Chantal
Acting Outreach Coordinator, Outreach

HERNANDEZ, Louis
Program Support Technician, EOPS

HILL, Kurt
Director, Campus Technology Services, Instructional Computer Support

HOLMES, Heather
Special Projects Managers, SCBC

HOSFIELD, Paul
Custodian I, Facilities

HOWARD, Lisa
Clerical Supervisor, Public Safety

IDANO, Adrian
Custodian I, Facilities

JIMENEZ, Martha
Senior Student Services Assistant, Evaluations Office

JOHNSON, Cristopher
Instructional Laboratory Technician, Physical Sciences

JOSEPHSON, Jeffrey
Instructional Assistant, Automotive Technology

JUNGNITSCH, Bert
Instructional Assistant/Learning Resources DSPS, DSPS

KAPITZKE, Denise
Director, Administrative Services, Business Office

KING, Edward
Senior Accounting Technician, Business Office

KINLEY, Roy
Facilities Supervisor/Landscape, Facilities

KRAMER, Abigail Terese
Instructional Laboratory Technician, Biology

KUNST, Malia
Executive Assist to President, President's Office

LA RUE, Kimberly
Graphic Artist/Photographer, Communications

LE, Calvin
Instructional Lab Technician, Chemistry

LOEWENBERG, John
Instructional Lab Technician, Automotive Technology

MANALASTAS, Emilia
Instructional Lab Technician, Biology

MANZO, Anna Liza
Hourglass Park Supervisor, Hourglass Park Support Srvs

MARQUEZ, Sandra
Administrative Assistant IV, Student Affairs

MARTINEZ, Rachel
Administrative Assistant V, Vice President, Student Services

McCORKELL, Francine
Instructional Support Supervisor, Independent Learning Center (ILC)

McGILL, Meredith
Student Services Assistant Technician, Outreach

MOORE, Dianika
Administrative Assistant IV, Student Development & Matriculation

MOORE, Jeanette
Administrative Assistant IV, Liberal Arts

MORALES- RIVERA, Saribel
Administrative Technician, Enrollment Services

MORENCE, Cheyanna
Administrative Technician, Public Safety

MOSQUEDA, Lindy
Student Services Assistant, Transfer Center

NEFF, Arnice
Administrative Technician, Career Education

NELSON, Alice
Student Services Supervisor I, Counseling

NGO, Vincent
Financial Aid Director, Financial Aid

NGUYEN, Tam Quy
Media Clerk, Library

NGUYEN, Tien
Instructional Lab Technician, Chemistry

NICHOLSON III, John
Instructional Assistant, Automotive Technology

NIPP, Rebecca
Administrative Technician, DSPS

ORTEGA Jr., Alejandro
Job Placement Coordinator, Technical Careers, Workforce Initiative

PACHECO, Bill
Instructional Lab Technician/ Learning Resources, Audiovisual Media Center

PADILLA PEREZ, Daniela
Student Services Technician, Outreach

PALOMBO, Marco
Athletic Equipment Attendant, Hourglass Park Support Srvs

PARK, John
Instructional Assistant, Learning Resources, DSPS

PARKS, Shelly
Student Support Officer, Basic Needs

PARNSONTHORN, Cattleya
Media Technician, Library

PASAG, Michelle
Administrative Technician, Business Office

PEÑA, Jennifer
Acting Associate Dean of Career Education

PHAYMANY, Pamela
Media Clerk, Library

PHILLIPS, Lorna
Medical Office Assistant, Health Center

PINEDA, Sanita
Food Services

PLATTS, Cleon
Student Services Assistant, Admissions & Records

QUIS, Stephen
Public Information Officer, Communications

RAND, Bettie
Bookstore

RANKIN, Darrell
Facilities Supervisor/Custodial II, Facilities

REICHARD, Betty Anne
Instructional Lab Technician Biology

RICO, Maria
Student Assistant Technician/ Financial Aid, Financial Aid

ROBINSON, Janee F.
Senior Student Services Assistant, Evaluations

ROSAS, Herminio
Gardener/Groundskeeper, Facilities

SACRO, Val
Administrative Assistant IV, Library & Technology

SALTIS, Emmanuel
Financial Aid Officer, Financial Aid

SAMPAGA, Carol
Administrative Assistant V, Vice President, Instruction

SANMUR, Donna
Administrative Technician, Library

SHERK, Brian
Gardener/Groundskeeper, Facilities

SMITH, Angela N.
Instructional Lab Technician/Child Development, Child Development

SMITH, William
Web Designer, Web Support Services

SOLARES, Diana
Administrative Technician, Public Safety

SORIANO, Christian
Administrative Technician, Vice President, Instruction

SPATAFORE, Robert
Accounting Technician, Student Accounting

STACK, Dana
Director, Admissions & Records, Admissions & Records

STAMOS, William
Instructional Lab Tech/Computer Science, Instructional Computing Support

STERLING, Rakena
Custodian I, Facilities

STILLSON, Daniel
Gardener/Groundskeeper, Facilities

SUTHASITH, Tepraseuth
Athletic Trainer, Athletics

TADDEO, Jonathan
Athletic Groundskeeper, Hourglass Park Support Srvs

TAKESHITA, Haruko
Senior Account Clerk, Student Accounting

TANG, Shuk (Mandy)
Accounting Technician, Student Accounting

TELO, Lorena
Administrative Technician, Business Office

TESTON, Kimberly
Special Projects Manager/Adjunct Faculty, SCBC

THOMPSON, Bryce
Instructional Lab Technician, Chemistry

TOWNSEND, Jacqueline
Senior Food Service Worker, Food Services

TRUJILLO, Maira
Custodian I, Facilities

TRUONG, Anh Thu
Instructional Assistant, Math Lab

UM, Minh Chon (Stephen)
WPro/Dup Support Services Supervisor, Reprographics

VANVOORHIES, Brent
Network Specialist, Instructional Computing Support

VELAZQUEZ, Maria
Custodian I, Facilities

VO, Lynna
Student Assistant Technician/ Financial Aid, Financial Aid

WHITSETT, Elizabeth
Administrative Technician, Business Office

WILSON, Sharilyn
Administrative Technician, Vice President, Instruction

WIMS, Victor
Custodian I, Facilities

WOODS, DeAndrea
Senior Student Services Assistant, Counseling

YOUNG, Sean
Instructional Lab Technician/Auto, Auto Technology

ZHANG, Xi
Research and Planning Analyst, PRIE, Library & Technology

San Diego Miramar College Campus Map

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SAN DIEGO MIRAMAR COLLEGE

10440 Black Mountain Road • San Diego, CA 92126 • sdmiramar.edu

K1-205...Accounting
N.....Administration
A-224....Administration of Justice Office
K1-207...Admissions
S-2.....Advanced Transportation Tech
P-1.....Ned Baumer Aquatic Center
H.....Arts & Humanities Building
K2-108...Assessment Center
K1-208...Associated Students
L-111.....Audio Visual
F-1.....Aviation
K1-105...Bookstore
M.....Business & Math Building
N-101....Business/Management Services
K1-104...Cafeteria
K1-305...CalWORKs
K1-308...Career & Job Services Center
F-2.....Child Development Center
T.....College Police/Parking Permits
A-1.....Continuing Education
K1-203...Counseling
K1-204...DSPS
C-1.....Diesel Tech
W.....Distribution & Computing Center
I.....English Building
K1-305...EOPS
K1-207...Evaluations
K1-312...Financial Aid
R.....Fire Technology & EMT
J-1.....Gymnasium
K2-102...Health Services Center
L-102.....High Tech Center
J.....Hourglass Field Athletics Complex
L-104.....Independent Learning Center
L-200.....Library/LRC
K2-101...Outreach
L-101.....PLACe Tutorial Center
N-204....President's Office
A-2.....Public Safety
N-104....Receiving/Stockroom
N-102....Reprographics/Staff Mailroom
S-5.....Science Technology Center
K1-210...Student Affairs
K-2.....Student Resources & Welcome Center
K1-306...Transfer Center
K1-207...Veterans Affairs
N-203....Vice President, Instructional Services
N-203....Vice President, Student Services
M-107B.Work Experience

