SAN DIEGO CITY COLLEGE

2025–2026 CATALOG

Fall 2025, Spring 2026, Summer 2026

1313 Park Blvd.,
San Diego, CA 92101
619-388-3400
www.sdcity.edu

Ricky Shabazz, Ed.D.
President

San Diego City College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges, 428 J St., Suite 400, 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 City College!

President's Message

You Belong Here!



Dear Students,

On behalf of the administration, faculty, and classified professionals at San Diego City College, I congratulate you for your pursuit in higher education and welcome you to the Knights family.

San Diego City College has provided a tradition of academic excellence, student success, and social justice since 1914. You will study among peers who are engaged in and out of the classroom in ways that will change the world. Our faculty and classified professionals engage in discussions that are driven by the idea of making the world a better place — one community at a time.

As a City College Knight, you have access to resources and student support services to ensure you graduate and transfer to the four-year institution of your choice. Your journey will begin in a community equipped with everything you need to make your academic goals a reality.

Be sure to connect with our various student support services and learning communities. Visit our website to learn more.

Again, congratulations on furthering your education, and I look forward to seeing you on campus.

Sincerely,

Ricky Shabazz, Ed.D.
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.

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District Administration

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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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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

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Vice President, Instruction	**Matilda Chavez**
Vice President, Student Services	**Marciano Perez, Jr.**
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Dean, Inclusion, Diversity, Equity, Anti-Racism, Accessibility, and Sustainability	**Claudia P. Diaz Carrasco**
Dean, Institutional Effectiveness	**Susan Allen Murray, Ph.D.**
Dean, School of Arts, Humanities, Communications, and Telecommunications	**Andrew MacNeill, Ed.D.**
Dean, School of Behavioral and Social Sciences, and Consumer and Family Studies	**Manuel Velez, *Acting Dean***
Dean, School of Business, Information Technology, Cosmetology, Engineering, and Trades	**Jesse Lopez**
Dean, School of Mathematics, Sciences, and Nursing Education	**Leticia Lopez, Ph.D.**
Dean, School of Health, Exercise Science, and Athletics	**Aaron Detty**
Dean, Outreach and Enrollment Services	**Genevieve Esguerra**
Dean, Student Affairs	**Adan Sanchez, Ed.D.**
Acting Dean, Student Development and Matriculation	**Bernice Lorenzo, Ed.D.**
Associate Dean, Nursing Education	**Dometrives Armstrong, D.N.P., M.S.N., F.N.P., P.H.N., R.N.**
Associate Dean, Strong Workforce	**Sasha Knox, Ed.D.**
Director, Administrative Services	**Roxann Solis**
Director, Development and Entrepreneurship	**Erin Flanagan**
Director, Disability Support Programs & Services (DSPS)	**Darren J. Walters, M.S., CRC Counselor**
Director, Enrollment Services	**Dora Meza**
Director, EOPS/CARE/NextUp	**Mireya Gutierrez-Aguero, Ed.D**
Director, Financial Aid	**Wendy Wang**

Coordinator, Mental Health	**Leslie Easton, LCSW**
Coordinator, MESA Program	***Vacant***
Coordinator, Student Health Clinic	**Rachel Kelley, MSN, FNP-BC, PHN, RN**
Coordinator, Basic Needs	**Nydia Dominguez**
Coordinator, Undocumented Resource Center	**Magaly Corro Flores**
Director, Title III HSI STEM	***Vacant***
Director, Tutorial Services	**Anourack (Lance) Soukhaseum**
Director, TRIO/Upward Bound	**Elizabeth Vargas**
Coordinator, Affirmative Action Officer/Title IX Deputy	**Amber Eckert**
Coordinator, CalWORKS	**Mariam Mena**
Coordinator, CARE/EOPS	***Vacant***
Coordinator, Career Center	**Nesha Savage, Ed.D.**
Co-Coordinator, Guided Pathways	**Elsa Cristina Carrillo, Ed.D.**
Co-Coordinator, Guided Pathways	***Vacant***
Coordinator, NextUp/EOPS	**Oscar Duran**
Acting Director, Outreach and Promise	**Clarissa Padilla**
Coordinator, Job Placement	**Roger Sanchez**
Director, College Operations	**Jay Purnell**
Coordinator, Occupational, Environmental Health & Safety	**John Boyce**
Coordinator, Professional Learning	**Marco Anzures**
Coordinator, San Diego Outreach & Promise Program	***Vacant***
Coordinator, Student Affairs	**Lori Oldham**
Coordinator, Transfer Center	**Dr. Erin Charlens**
Supervisor, Accounting/Student Accounting	**Regie Balintec**
Supervisor, Admissions and Records	**Alyssa Antonio**
Supervisor, Business Office Support	**Lydia Bakit**

Supervisor, Campus Events and Operations	**Ginger Broussard**
Supervisor, Counseling/Evaluation	**Josolyn Hill, Ed.D.**
Supervisor, Digital Print Production/Mail Room	**Patricia Fernandez**
Director of Campus Facilities and Operations	**Jay Purnell**
Supervisor, Facilities	**Steven Devers**
Supervisor, Financial Aid	**Alisia Rincon**
Supervisor, Independent Learning Center (ILC)	**Majeda Nasrawi**
Supervisor, Institutional Research	**Brittney Carroll**
Supervisor, Instructional Support, Library	**Daniel Gonzalez**
Supervisor, Office of Classroom Technology Management and Multimedia (OCTM)	**Majeda Nasrawi**
Acting Supervisor, Receiving/Stock Room	**John Parker, DBA**
Supervisor, Technical Support Group (TSG)	**Al Cordeiro**
Supervisor, VA/Veterans Service Center	**Carolina Guardado**
Supervisor, Welcome Center	**Clarissa Padilla**
Articulation Officer	**Elizabeth Norvell**
Public Information Officer	**Cesar Gumapas**

Accreditation

San Diego City College is accredited by the Accrediting Commission for Community and Junior 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. City College is also approved by the California State Department of Education. In addition, certain programs at City College hold special accreditation:

The Associate Degree in Nursing program at San Diego City College is approved by the California Board of Registered Nursing and accredited by the Accreditation Commission for Education in Nursing (ACEN), 3390 Peachtree Road NE, Suite 1400, Atlanta, GA 30326.

City College is accredited by the Office of Private Postsecondary Education for the training of veterans, as well as 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, California State University, and by other universities and colleges.

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

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.

The San Diego Community College District

The San Diego Community College District is charged with educating all adults 18 years of age and older in the City of San Diego. The District provides education at several levels, from adult basic education through baccalaureate level college degree programs. The District has three fully accredited colleges, City, Mesa, and Miramar. The District also has a separately accredited noncredit Continuing Education Program. The District is governed by a Board of Trustees consisting of five voting members elected by the people of San Diego and a student trustee elected by District college students. The Chancellor is the Chief Executive Officer in charge of day to day operations.

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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 is a public, two-year community college administered by the San Diego Community College District. Serving as the educational cornerstone of downtown San Diego, the college comprises 60 acres and is 1/5 of the downtown footprint. The college offers more than 200 majors and certificate programs and 1,800 classes each semester to more than 13,000 students.

Chronology

1914

City College was the first community college in San Diego (San Diego Junior College) with 34 students and 4 instructors. City College was the fifth community college established in California.

1921

City College moved from the high school to share facilities with the State Normal School, the four-year teachers' college, which became San Diego State University.

1939

San Diego Evening Junior College was created by splitting the institution into two entities, day and evening. With the industrial growth in San Diego, the Evening College was needed to meet the demand for college courses for daytime working people.

1946

City College moved back to San Diego High School and reorganized into three branches: San Diego Vocational High School, San Diego College Arts and Sciences, and San Diego Evening Junior College.

1953–54

The first parcel of land, a single city block between Russ Boulevard and A Street, from 14th to 15th Streets, was purchased for the permanent home of what is now San Diego City College. The first buildings constructed were the "A" and "T" buildings.

1970s

Increasing enrollment resulted in a major expansion project bounded by Russ Boulevard, 17th, 12th and C Streets. The "L," "C," "S," "M," "E," "D" and "F" buildings were constructed.

1972

San Diego voters authorized a separate Community College District.

1988

A Facilities Master Plan was developed to recommend modifications to the existing facility, to meet current and future needs.

1989

City College celebrated its 75th Anniversary.

1992

The new 3,000 square foot Fitness Center opened with full fitness and exercise facilities.

1998

City College leased to San Diego Unified School District the property on which Garfield High School and a 420-space parking structure is built. City students shared use of the parking and the College can offer classes in the facility.

2000

Construction completed on the 8,000 square foot. Educational Technology Center (ETC). The ETC is fully equipped with state-of-the-art media and teleconferencing equipment.

2002

The 67,000 square foot Learning Resource Center (LRC) replaced the 30-year-old library. The facility offers the most advanced research and learning tools available with 300-internet connected computers, multiple electronic databases, plasma displays, a collection of more than 67,000 books and over a thousand periodicals. The three-level LRC also houses the Office of Classroom Technology and Multimedia Center, the Independent Learning Center, and CitySITE – a center for faculty and staff development.

2005

A new Facilities Master Plan was approved by the Board of Trustees and projects a 20-year build-out to accommodate 25,000 students.

2005

The 2,000-seat, 55,000 square foot Harry West Gymnasium "P" building opened. Dedicated to beloved Coach West, students enjoy three regulation basketball courts, six badminton courts, three volleyball courts, intercollegiate team rooms, workout facilities, and new classrooms.

2007

Eight high-tech classrooms added to the LRC lower level, with additional offices and meeting space.

2009

The 27,800 square foot Academic Success Center "L" building opened to provide a one-stop service area for students, including: Tutorials, Math and English Centers, and the EOPS, MESA (Math, Engineering, & Science Achievement), New Horizons, Puente, Umoja, and CalWORKs Programs.

2010

The new 88,000 square foot "V" building CTC – Career Technology Center – opened. This five-level building at 16th & C Streets houses Cosmetology, Nursing, Photography and Digital Arts, a Student Gallery, the College Police and an 11-story 700-car parking structure.

2013

The 66,000 square foot Mathematics and Social Sciences "MS" building opened. This five-story facility houses Psychology, Sociology, Anthropology, Alcohol and Other Drug Studies, Human Services, Peace Studies, Gender Studies, the Institute for Human Development, the Corporate Education Center and the District's Military Education program. A seven-story, 400-stall parking garage is adjacent to the building.

2014

In spring, the 98,000 square foot Life Sciences and Physical Sciences "S" building opened. The four-story building includes classrooms, labs, an outdoor teaching garden, a rooftop observation deck and a planetarium. In fall, the 128,000 square foot Arts & Humanities and 62,000 square foot Business and Technology buildings welcomed new students for classes in the Visual Arts, English, Speech, Foreign Languages, Business Studies, and Computer Systems. A new art gallery and sculpture garden hosts fine arts exhibits and events.

2015

The 15,000 square foot "M" building renovation provided new homes for the Office of Student Affairs, and a working and gathering space for Associated Students Government and student clubs. Facilities operations are located on the lower floor.

2016

In spring, the 31,155 square foot Center for the Media and Performing Arts "C" building opened with contemporary new spaces for Dance, Drama & Theater, Music, and Radio, TV & Film programs. Students now enjoy a cutting-edge, fully digital TV studio and recording studios for producing its weekly, student produced "Newscene" news show.

2018

In Fall 2018, the "A" building opened after an extensive remodel with an emphasis on Student Services.

2021

In spring, construction of the 10,000 square foot Early Education Center was completed. The new space includes classrooms for infant, toddler, and preschool children; faculty offices; a kitchen; lobby/reception area; and a faculty conference room. Other features include a 14,000 square foot playground space, equipment storage, and a parking/drop off area.

San Diego City College Foundation

Foundation Board

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Yolanda Tanner
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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 Learning Outcomes

(also referred to as Institutional Competencies)

The Institutional Student Learning Outcomes (ISLOs) for San Diego City College reflect the college's General Education philosophy and describe the knowledge, skills, abilities, and attitudes students will develop as a result of their overall experience at SDCC. Achievement of ISLOs is marked by the successful completion of an Associate's degree, completion of transfer curriculum and/or a Certificate of Completion. A single course is not expected to meet all the ISLOs; rather, it is the successful completion of a combination of courses in a specific program of study that enables the student to achieve the ISLOs.

SDCC has identified the following ISLOs, based upon established Institutional Core Competencies:

1. **Communication/Interpersonal Skills**

   Students will be able to communicate effectively in a variety of settings using oral and written communication modalities.

2. **Critical Thinking**

   Students will be able to apply critical thinking skills in order to analyze data, text and issues.

3. **Analysis/Computation**

   Students will be able to apply mathematical concepts to perform computations and analyze and interpret data.

4. **Cultural Sensitivity/Global Awareness**

   Students will be able to successfully interact with individuals representing a wide range of backgrounds, analyze varying cultural beliefs and behaviors, and identify social, political and economic issues relevant to the local community, the state, the nation, and the world.

5. **Information Management/Literacy**

   Students will be able to obtain data from various sources, as well as organize, process and analyze data for relevancy.

6. **Personal Responsibility**

   Students will be able to demonstrate self-awareness and navigate effectively between one's own value system, professional obligations and responsibilities as a member of society.

7. **Civic and Environmental Responsibility**

   Students will be able to relate the natural environment to human health and happiness and evaluate the effect of human activity on the welfare of the global environment.

Mission

San Diego City College has as its highest priority student learning and achievement. The college provides lower division and general education courses that lead to certificates, associate degrees or transfer to a four-year college or university; career technical education programs that meet specific industry needs, upgrade the employment skills of students and fulfill licensing requirements of the state of California as well as contribute to the economic development of our region; basic skills instruction to assist all students in meeting their educational goals; and essential student support services for all students.

Values

San Diego City College is a multicultural institution committed to providing open access to all who can benefit from instruction and to meeting the diverse and ever-changing educational, cultural, and economic needs of the urban core and surrounding communities of San Diego. We are committed to the tradition of academic freedom and responsibility, to employee empowerment, and to maintaining a climate that promotes learning, understanding and respect for students, faculty, staff, community, and the environment. The following are core tenets of our value system:

- The development of informed, active individuals who will be engaged in the global community, lifelong learners, social justice advocates, and literate in information technology;
- Institutional community involvement, community development and community service;
- Equity, inclusiveness and diversity in all of its manifestations;
- High quality instructional programs emphasizing creative and critical thinking;
- Essential student support services, including co-curricular and cultural activities;
- Environmental sustainability and a campus culture of conservation; and
- A continuous campus-wide cycle of assessment and program review with integrated planning and resource allocation.

Institutional Priorities

San Diego City College's Mission Statement is central to planning and decision-making. Derived from the mission statement, there exists more specific college goals, our Institutional Priorities. All ongoing and new initiatives are linked to these priorities. There currently are eight institutional priorities:

- **Student Success**
    - Support improved student learning, achievement of student learning outcomes, course completion, certificate and degree completion, transfer rates, and workforce competencies.
- **Innovative Approaches**
    - Provide state-of-the-art general education, transfer, and career technical programs by utilizing current technologies, innovative teaching and learning approaches, and delivery systems, and academic and student support services which include essential student support services, including co-curricular and cultural activities.
- **Equity, Inclusiveness, and Diversity**
    - Strengthen and support an inclusive and diverse campus culture which enhances student, faculty, and staff success and *closes equity gaps*. City College *promotes lifelong learning, social justice advocacy, and information technology literacy*.
- **Collaborative & Outreach Ventures**
    - Develop collaborative and outreach ventures that enhance student learning within the college, district and community, public and private agencies, businesses, and industry—locally, nationally, and globally.
- **Environmental Stewardship**
    - Strengthen a measurable environmental stewardship effort that implements sustainable practices and educates the campus community.
- **Institutional Accountability**
    - Demonstrate accountability through the integrated process of assessment, program review, planning, resource allocation, accreditation, and on-going evaluation.
- **Strategic Planning**
    - Links campus planning to District planning efforts.

Student Learning Outcomes

Student learning outcomes are defined for each program. Students should be aware that course outcomes link to the larger institution via program outcomes which map to institutional learning outcomes, institutional priorities and San Diego City College's mission.

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 Welcome Center for guidance.

English Language Acquisition (ELAC) Placement

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 the Welcome Center and Outreach 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

For English and math, 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. For ELAC, students who believe they have been misplaced should contact the ELAC Department Chair/Liaison to challenge the placement level.

SDCCE to College Bridge

CE Course/Course Completion Certificate	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
ESLA 436 Advanced Low 6	ELAC 145

CE Course/Course Completion Certificate	College Course/ Level Recommendation
ESLA 437 Advanced High 7	ENGL C1000X (ENGL C1000/31) 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***, Apprenticeship Students****, Rising Scholars, Parents of children under the age of 18. Students who have not completed 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 City 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 college Admissions Office located in Enrollment Services. The decision to grant an acceptance will be based on all evidence received prior to the deadlines. The application forms are available online.

International Student Admissions Office A-241

San Diego City College

1313 Park Blvd.

San Diego, CA 92101

619-388-3476

General Information

1. An international student must register for and maintain a minimum of 12 units each semester while at San Diego City 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 City 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 City 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 Board 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. Administrative 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 any student who meets appropriate general and departmental criteria. Honors classes are designed to provide strongly motivated students with a more in-depth or cross-disciplinary curriculum and a highly interactive classroom experience.

The Honors core curriculum, "A World of Ideas," is intended for prospective transfer students who are interested in a multicultural, multinational perspective in their courses. The goal of the program is to facilitate and increase transfer to the University of California, California State University, and distinguished private universities, as well as to enhance employability for vocational students.

Special transfer agreements also exist for City College Honors students at the following four-year colleges and universities: UCLA, UC Santa Cruz, UC Irvine, UC Riverside, USC, Pomona College, Occidental College, SDSU, Pepperdine University, Chapman University, Whitman College and Pitzer College. For information on eligibility requirements and course offerings, see the schedule of classes or call (619) 388-3512.

The Honors Program is open to all students (part-time or full-time, day or evening) and 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 the campus Honors Coordinator.

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.

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.

Off-Campus Programs

City College offers credit courses at various locations throughout San Diego such as the Educational Cultural Complex (ECC), and other educational and social service agency sites. These classes are open to all City College students and are designed to provide an opportunity for students to attend classes in the community that are short term, easily accessible, and have convenient parking. Off-Campus courses are listed in the class schedule each semester under the subject in which they are offered. Classes held at the ECC location are also listed in the ECC section of the class schedule. If you have questions about enrolling in off-campus classes, call the Off-Campus Programs office at 619-388-3924.

Study Abroad Programs

San Diego City College has offered students the opportunity to study in different countries around the world in order to develop global competencies and to increase cultural awareness while making progress towards completion of academic goals.

Classes are held at educational institutions in the host country. Field trips, excursions, and visits to sites of cultural and historical interest are components of the program. Housing arrangements include family homestays, student apartments, and/or residence halls. Financial aid and scholarships are available for students who qualify.

Semester Abroad Programs

These enhanced learning opportunities have been offered in countries such as Argentina, Australia, Costa Rica, France, Italy, Spain, and the United Kingdom. Courses are taught by faculty from California community colleges. Classes offered abroad meet general education requirements, are CSU and mostly UC transferable, and are selected to take advantage of the host country's history, environment, and culture.

Summer Abroad Programs

Programs from 10 days to 4 weeks have been available during the summer. Spanish immersion in Mexico and Costa Rica has been offered; as well as, photography in Italy and the United Kingdom, and graphic design and dance in Mexico.

Contact Information: Additional information can be obtained from the International Education Office.

Work Experience

Work Experience students can receive academic credit for their current employment or volunteer service. For registration information, call 619-388-3488 or contact the Work Experience Office in BT-215.

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 transcripts 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, Director Information and Privacy Grade.

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 City 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 City 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 City College

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

San Diego City College Program Area	San Diego City College Course	San Diego City College Units	High School Course (District)
Art – Graphic Design	DSGN 102	3	Graphic Design 1,2 or Graphic Design 3,4 or Honors Graphic Design 3,4 (SDUSD)
Child Development	CHIL 100	3	Developmental Psychology of Children 1,2 or Developmental Psychology of Children 1-2 (SDUSD)
Drama	DRAM 123	3	Tech Theatre 1,2 or Tech Theatre 3,4 (SDUSD)
Film, Journalism, and Media Production	FJMP 111	3	Cinematic Arts 1,2 (SDUSD)
Information, Network, and Web Technologies	INWT 100 INWT 101	4 3	Cybersecurity Linked Learning 1,2 (SDUSD)
Information, Network, and Web Technologies	INWT 140	3	Cybersecurity 3,4 (SDUSD)
Photography	PHOT 143	3	Photographic Imaging 1,2 (SDUSD)
Machine Technology	MACT 140	4	PLTW Computer Integrated Manufacturing 1,2 or PLTW Computer-Integrated Manufacturing Honors 1,2 (SDUSD)
Manufacturing Engineering Technology	MFET 101	3	Principles of Engineering 1,2 or Honors PLTW Principles of Engineering 1,2 (SDUSD)
Photography	PHOT 243	3	Photographic Imaging 3,4 (SDUSD)

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

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

San Diego City College Program Area	San Diego City College Course	San Diego City College Units	San Diego College of Continuing Education Course
Air Conditioning, Refrigeration, and Environmental Control Technology	AIRE 100 and AIRE 103	Total of 6	MECT 431 and MECT 432
Art – Graphic Design	DSGN 102	3	COMM 660, COMM 661, COMM 662, and COMM 663
Business Information Technology	PHOT 143 PHOT 180	3 3	COMM 650 COMM 651 and COMM 652
Business Information Worker	CBTE 140	2	OFSY 575
Child Development	CHIL 176	3	HMDV 575A and HMDV 575B
Child Development	CHIL 291A CHIL 291B CHIL 291C CHIL 291D	1 1 1 1	HMDW 594 HMDV 591 HMDV 586 HMDV 582
Electronics	ELDT 124 and ELDT 124L	Total of 5	ELRN 451
Electronics	ELDT 143 and ELDT 143L	Total of 4.5	ELRN 452
Film, Journalism, and Media Production	FJMP 110	3	COMM 667 and COMM 668
Information, Network, and Web Technologies	INWT 120 INWT 140 INWT 170	4 3 4	COMP 608 COMP 609 COMP 657

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.

Servicemembers Opportunity Colleges Degree Network System (SOC DNS)

San Diego City College is a member of the Servicemembers Opportunity Colleges Degree Network System (SOC DNS). As member, the college provides educational assistance to active duty service members and agrees to accept credit for educational experiences during military service as recommended by the American Council on Education (ACE). In addition, the college accepts credit from other non-traditional sources such as DANTES and CLEP examinations. The San Diego Community College District is committed to military personnel who may choose to participate in the SOC DNS Program network through the campus of San Diego City College. SOC DNS was established to better serve highly mobile service members and their families. For more information on these programs, contact the Military Education advisor at the following locations:

Marine Corps Air Station Miramar (MCAS)

858-536-4329

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

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
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
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	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	units UC: 8 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 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
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

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
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 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 121
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

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
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
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 &	SDCCD: 3 semester units	SDCCD GE: 3 semester units towards Area 4 &	SDCCD: POLS C1000

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
Politics 3, 4, or 5 *Exam taken after Spring 2025*	CSU: 3 semester units UC: 4 quarter/2.6 semester units	US-2[7] Cal-GETC: 3 semester units towards Area 4	
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 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.

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

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
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

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

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

EXAM AND REQUIRED SCORE	UNIT REQUIREMENTS FULFILLED	GENERAL EDUCATON (GE) REQUIREMENTS FULFILLED	MAJOR REQUIREMENTS FULFILLED
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 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 A-122, 619-388-3513, disAbility Support Programs & Services webpage and 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, Poppy Fitch at 619-388-6983, District Office in room 275.

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 Equal Employment Opportunity (EEO) Site Compliance Officer, Poppy Fitch at 619-388-6983. Appeals may be made to the District Equal Opportunity & Diversity Officer 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 Poppy Fitch at 619-388-6983. Students who want to file a disability discrimination grievance under the Americans with Disabilities Act (ADA) should contact the campus Site Compliance Officer (SCO) Poppy Fitch at 619-388-6983.

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)

CITY 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.

City 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 City College property are subject to BP 0505 regulations, which will be strictly enforced at all times. Student Health Services at City 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 619-388-3450.

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)
Poppy Fitch pfitch001@sdccd.edu (619) 388-6983
San Diego Mesa College (I4-408)

Campus 504 Officer
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)

Campus Site Compliance 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 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.

Student Services

Athletics

Location: P3-200, Telephone: 619-388-3486

San Diego City College is a member of the Pacific Coast Athletic Conference for the following sports: men's and women's soccer, men's and women's cross country, men's and women's basketball, softball, men's and women's tennis, baseball, women's volleyball, women's beach volleyball, and women's badminton.

The Pacific Coast Athletic Conference includes the following colleges: Cuyamaca, Grossmont, Imperial Valley, MiraCosta, Palomar, San Diego Miramar, San Diego Mesa, and Southwestern.

Students must meet academic requirements established by the California Community College Athletic Association and pass a physical examination before they are determined to be eligible to participate in Intercollegiate Athletics. Academic eligibility includes enrollment as a full-time student during the season of the sport, an educational plan on file in the first semester of competition and a minimum 2.0 grade point average by their sophomore season of play. For more information, contact the Athletic Office.

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.

CalWORKs/Believe Program

Location: L-121, Telephone: 619-388-3797

The CalWORKs Program offers support services to students who receive CalWORKs funding. Specialized services have been designed to support students in their education, career and personal goals while meeting their welfare to work requirements. Services include academic/vocational counseling, job placement, workshops, work study placement and verification of welfare to work hours. For more information, contact the CalWORKs office in the Academic Success Center or visit our CalWORKs website.

Campus Store

Location: D-104, Telephone: 619-388-3548, San Diego City College Bookstore

San Diego City College Campus Store provides digital materials and textbooks and supplies required for classes. Rental books are also available. The Campus Store provides study aids, snacks, school supplies, clothing, backpacks, gift items, greeting cards, emblematic items and general books. The Campus Store also buys back textbooks for cash.

Extended hours are offered at the beginning of each semester. Textbooks can also be purchased online. For additional information or special Campus Store hours, please contact the Campus Store or visit our website listed above.

City Scholars Program

Location: A-366, Telephone: 619-388-3675

The City Scholars Program at San Diego City College is designed to help justice system impacted students transition to college. The program provides formerly incarcerated students with matriculation support, personal growth courses, and academic advisement. It is under the supervision of the Dean of Student Development and Matriculation. City Scholar participants are assigned a counselor, meet monthly with a peer advocate, attend campus events, and participate in relevant workshops to enhance their personal development. The goal of the program is to ensure that students who are justice system impacted are given the support they need to achieve their academic goals.

Program Components:

- Orientation
- Counseling
- Academic/Cultural Enrichment Activities
- Mentoring

If you are interested in joining the City Scholars program, please visit Andre Jones in the Counseling Department.

Counseling Services

Location: A-366, Telephone: 619-388-3540

Counselors offer a variety of counseling services to students in order to assist and facilitate both personal, career, and academic student growth. The following services are provided to new, continuing, transfer, and returning students. Visit the Counseling webpage.

Academic Counseling

Students are encouraged to speak with counselors regarding any academic planning issues which may arise during their time at San Diego City College. Counselors will assist with identifying academic goals and developing computer generated student education plans through a scheduled appointment.

Career Counseling

Counselors offer guidance to those students who are uncertain of their career path. Students are encouraged to explore career possibilities through the guidance of career counselors, use of research materials and career assessment inventories.

Personal Counseling

Students can also receive personal counseling from the Counseling Department. Counselors will provide support to those students with issues arising from managing the stress of school life and personal life. Personal counseling sessions will be kept confidential.

Walk-in Counseling

A 5–15 minute session is available through the academic year to students with quick questions. Students may walk into the Counseling Department and speak with a counselor on a first come, first-serve basis.

Counseling Appointments

Counseling appointments are available to help students with career, educational, transfer planning, and to discuss personal issues related to academic goals.

Transfer Counseling

Through scheduled appointments students will learn how to successfully transfer to a four-year university. They will receive assistance in researching and choosing the right university based on their individual needs.

College Success/Career Planning

Courses are offered in Personal Growth listed in the schedule of classes.

Important Note: If the student's educational objective is to receive an Associate Degree or to satisfy transfer requirements to a four-year college or university, the student must send all official transcripts to the District. If the student's educational objective is only to receive a Certificate of Achievement and all certificate coursework is completed at City, Mesa, and/or Miramar College, full transcript evaluations are not required and will be automatically waived. If courses are being used from another college outside of the district, only transcripts from that institution must be submitted for evaluation.

City Times Media, Student Journalism

College Newspaper and Digital News Site

The award-winning college student newspaper and digital news site, City Times, provides students the opportunity for class workshops and hands-on experience in multimedia news writing, reporting, editing, and production of a wide range of digital and print content. Alumni from the program work in professional journalism organizations in San Diego and beyond as reporters, editors and producers. CT is one of the partners of the City Times Media platform, which can be found on the website and @sdcitytimes on social media. For degree and course information, see "Design" and/ or "Film, Journalism, and Media Production" in the Course Descriptions and the Degree Curricula and Certificate Programs. For more information, email CTM Student Media Adviser Nicole Vargas at nvargas@sdccd.edu. Call the program at 619-388-3880.

Legend Magazine

City College's Digital Journalism program is the only one of its kind in the district that offers a magazine production lab. DJRN 220 is a unique opportunity to experience the process of producing a magazine, start to finish, for the campus and surrounding community. Taking DJRN 220 is a great opportunity to develop published work that you can share as you begin your media career.

CityWorks

CityWorks is San Diego City College's creative arts annual anthology which features artwork, poetry and prose from students and the community. Each October, the staff seek artists, writers, poets, journalists, editors, graphic designers, photographers, and other creative people to seek submissions for the issue, which is published each spring. For more information, call 619-388-3522.

disAbility Support Programs and Services (DSPS)

Location: A-122, Telephone: 619-388-3513, disAbility Support Programs & Services

City 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. Students are encouraged to apply early for timely services.

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 3440, Service Animals.

Early Education Center

The Early Education Center is the college instructional lab for child observations, the study of child development, and early education practicums. The Center provides state-funded child-care services demonstrating high quality interactions, curriculum, and environments to meet the needs of the whole child. Families with children between 4 months and 5 years of age may apply for services. Eligibility and sliding scale fees are determined by state regulations. Please call 619-388-3205 or visit the Early Education Center website for more information. The Center is located at the north-east corner of campus at 16th Street and Russ Blvd. The infant toddler program license number is 376701496. The preschool license number is 376701495.

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 a guided self-placement tool.

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

Evaluations

Location: A-301, Telephone: 619-388-3466

The San Diego City College Evaluations Department provides services, including information and technical support, to help students achieve their certificate, degree, and transfer goals. Working closely with students, City 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 Forms and Documents webpage.

Extended Opportunity Programs and Services (EOPS)

Location: A-354, Telephone: 619-388-3209

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 funding. For detailed information on all services offered and application procedures, please contact the EOPS Office.

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) component. 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.

Students that are formerly incarcerated may receive service in the EOPS office. For detailed information on all services offered and application procedures, please contact the EOPS Office or visit our website.

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 City 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 your 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 City College's student equity goals

Services for Homeless Students under age of 25

San Diego City, Mesa and Miramar Colleges are committed to ensuring that all students have a fair and equal opportunity to obtain a high-quality education and complete their educational goals. As part of this commitment,

the colleges provide referral services for homeless youth through the Extended Opportunity Programs and Services (EOPS) office. Effective Spring 2017, the following services will be provided:

- Access to shower facilities on-campus during designated hours
- Referrals to student support services including financial aid, CalWORKs, DSPS, food pantries, and mental health services
- Referrals to outside agencies that support homeless shelters, housing referrals, etc. as needed
- Priority Registration, if eligible, starting Summer 2017 registration (requires submission of FAFSA or California College Promise Grant – CCPG application and verification of status)

Students that are homeless, formerly homeless or at-risk are encouraged to visit your college's EOPS office for more information.

Cooperative Agencies Resources for Education (CARE)

EOPS students who are single, head of household, parent or legal guardian of at least one child under the age of 18 and receive CalWORKs cash aid are encouraged to apply for the programs Cooperative Agencies Resources for Education (CARE) component. CARE provides additional support services to address those needs that are unique to single parents.

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). These applications are available in the EOPS Office and the FAFSA is available online. 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.

The NextUp Program

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. Students must meet eligibility requirements for EOPS, be under the age of 26, and in foster care on or after their 13th birthday.

Summer Readiness Program (SRP)

SRP is a summer orientation for first-time college students. Participating students attend classes four days each week for eight weeks. The course work includes material designed to develop and enhance college survival skills. In addition to the course work, a full complement of EOPS services is provided.

Applications are usually available in early January and accepted until the end of the first week of May. Interested applicants should contact the EOPS Office for details.

Financial Aid

Location: A-270, Telephone: 619-388-3501

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 net income, number of dependents, allowable expenses, indebtedness, and assets. The U.S. Department of Education, in cooperation with Congress and educational agencies, has established procedures which are used in making an evaluation of the amount families can be expected to contribute.

Application

On a yearly basis, all 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 Dream Act website.

A current Admission's Application to the College must be on file before we can process your FAFSA application. Complete the application using your personal information as it appears on your Social Security card or our office will not be able to process your financial aid application.

Academic transcripts from prior colleges attended are not required to be submitted before processing a financial aid application. Academic transcripts must be submitted directly to the District Records Office.

All inquiries such as disbursement of funds, document submission, appeals, etc., MUST be made on or before the deadline date. After the close of the academic year, we will no longer be able to process any financial aid application or disbursements.

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 availability of funds. Awards may be adjusted at any time upon notice of receipt of resources not previously reported or a change in enrollment status. Revisions to awards may be possible because personal financial circumstances are so unpredictable. If funding is available, aid for valid educational expenses not already covered in the student cost budget may be increased.

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" below)

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

Following is a basic description of the programs available. Contact the Financial Aid Office for detailed descriptions and eligibility requirements, or visit our website.

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 of "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 2023** (adjusted gross income and/or untaxed income)
1	$22,590.00 or less
2	$30,660.00 or less
3	$38,370.00 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

Important 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.

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

Contact the Financial Aid Office for other requirements.

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. Qualifying criteria may include that the student meet financial needs, a designated grade point average or other requirements to be eligible for consideration. For more information, visit the City Scholarships webpage.

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 may 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 Federal Student Aid.

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 619-388-3501.

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 request form to the Financial Aid office, along with all the required documentation described in the loan steps disclosed in the loan request form. In addition, a copy of the Educational Academic plan may be required.

Federal Direct 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. Checks will be payable to the parent. Parents must begin repayment within 60 days of receiving full dispensation 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.

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.

HUBU

Location: A-341, Telephone: 619-388-3609

The Hermanos Unidos/ Brothers United (HUBU) Learning Community focuses on improving the success rates of African American and Latino male students. HUBU aims to enhance the academic, social and cultural experiences of men of color at San Diego City College. The HUBU curriculum focuses on identity development, and its relevancy in understanding students' personal and academic goals.

The program's educational philosophy is centered around the concept of validation through pedagogy responsive to ethno-cultural groups and practices that deliberately engage students as full participants in the learning process.

Along with courses such as Personal Growth, English, Black/Chicano Studies, HUBU participants receive the following personalized services:

- Personal Development
- Mentoring
- Activities that promote student involvement on the campus and in the community.

For more information or to join, please contact Rasheed Aden via phone (619-388-3609) or email (aaden@sdccd.edu).

Learning Resource Center (LRC)

Phone: 619-388-3421

The San Diego City College's Learning Resource Center (LRC) serves the information and study needs of the City College community. Located in the R building on the southeast corner of campus at Park Boulevard and B Street, the LRC is comprised of the Library on the second (main) and third floors, the Independent Learning Center and the Office of Classroom Technology Management are on the first floor. Monitors on each floor are set to broadcast campus information. San Diego City College students will find that the LRC provides a multitude of services and scholarly research resources specifically selected to support their academic success. Below is a brief overview of our resources and services.

LRC / Library

Phone: 619-388-3421

The Library offers an extensive collection of both print and electronic scholarly books, reference resources, periodicals (scholarly journal, newspapers, magazines), and videos. Remote access is available to our e-books, e-periodical databases, and streaming video databases. Wireless internet access is available throughout the library.

San Diego City College students find help with their research and information needs at the Library's information Center (reference desk), by phone, email, or 24/7 online chat. They can also get help in-person or online via one-on-one and small-group appointments. Students may enroll in a transferable one-unit course, Information Literacy and Research Skills (LIBS 101). Scheduled tours, instructor requested research sessions, access to reserves, circulation services, group study rooms and interlibrary loan services between district colleges are also offered. Please see the San Diego City College Library website for more information.

LRC / Independent Learning Center

Phone: 619-388-3766

The Independent Learning Center (ILC) creates a welcoming environment for students pursuing independent learning experiences to augment their in-class activities and improve their academic skills. The ILC provides access to the Internet, a wide array of specialized software required for a variety of classes, adaptive software, and Microsoft Office Suite.

LRC / Office of Classroom Technology Management

Phone: 619-388-3418

The Office of Classroom Technology Management and Multimedia (OCTM) provides technical support and maintenance for smart classrooms and all campus-wide audiovisual equipment required for a modern college in the 21st century. In addition, OCTM manages and maintains the digital signage services campus-wide. Moreover, and in collaboration with the campus Business Office, OCTM addresses requests for technical assistance for campus-wide events.

Mental Health Counseling

Location: A-180, Telephone: 619-388-3055

Mental Health Counseling supports student success through focus on personal, social, and emotional well-being. Our culturally sensitive, trauma-informed services for students are confidential and free. Mental health counseling is designed to support overall wellness in a proactive, relaxed and caring atmosphere.

Teletherapy via Zoom for Healthcare and Face to Face (in person) sessions are offered (depending on current district policy). Counseling services are provided by Licensed Clinical Social Workers, Licensed Marriage and Family Therapists, Licensed Professional Clinical Counselors, Masters level staff and graduate interns/trainees and include:

- Individual strengths-based therapy
- Couples and family therapy
- Group therapy and educational workshops/ training for students, faculty and staff
- Crisis intervention and resource links (crisis and case management)
- Campus wide prevention and awareness events
- Cognitive behavioral based therapy and mindfulness training targeted at addressing specific school related problems such as test taking anxiety, math anxiety, panic disorder, etc.

- Faculty/Staff consultations and instructional collaborations to promote student success
- Collaborative Care Team support and disciplinary evaluations
- Collaboration with the Student Health Clinic and Basic Needs Program for wrap around care

Students can request an appointment via phone, Mental Health Counseling website or in person in A180.

For additional information, please see Student Health Center.

MESA Program

Location: T-393, Telephone: 619-388-3156

The Mathematics, Engineering, Science Achievement (MESA) Program enables educationally disadvantaged students to prepare for and graduate from a four-year college or university with a math-based degree in areas such as engineering, life and physical sciences, computer science, and mathematics. Through MESA, students develop academic and leadership skills, increase educational performance, and gain confidence in their ability to compete professionally.

MESA has particular interest in and focus on students from those groups who historically have had the lowest levels of attainment to four-year and graduate level programs. By closing this achievement gap, MESA students and graduates will be better able to make significant contributions to the socioeconomic well-being of their families and their communities.

In MESA you will find:

- A place to study with other students in your major
- Walk-in tutoring in math and science
- Easy access to computers and printing
- Reference textbooks and scientific calculators available for student use
- Current scholarship, internship, and research opportunities
- Counseling support for transfer and career exploration
- Activities sponsored by the San Diego MESA Alliance

If you are interested in joining the MESA program, please visit the MESA Center in room T-393.

Outreach

Location: A-250, Telephone: 619-388-3496

Our goal is to inform, support, and guide prospective students, families, agencies, and the community through interest, exploration, and enrollment to the institution. The Outreach Office will aim to empower students by providing the most up-to-date information, program contacts, and a clear pathway to successfully matriculate through the enrollment process.

Core Outreach Services:

- City InfoKNIGHTS
  - Mobile information sessions held in the community
- The City Experience
  - On campus tour of the campus and connection to the campus resources
- City Connect Sessions
  - Street outreach sessions delivered by ambassadors
- City Insight Sessions
  - A comprehensive program which reviews campus resources, academic programs, degree, and certificates

- City Con NEXT Sessions
    - Provide support to prospective students and families in the completion of the steps to enrollment

Connect with us:

- Email: cityoutreach@sdccd.edu
- Outreach Website
- Phone: 619-388-3496
- Social media:
    - Instagram & Twitter: SDcityOutreach

Performing Arts

The City College Department of Visual and Performing Arts present plays and dance performances to the public throughout the year. We provide a vibrant educational environment that cultivates creative learning experiences between students, teachers, and the community.

Puente Project

Location: A-341, Telephone: 619-388-3668

The Puente Project, co-sponsored by the University of California and the Community Colleges, is an academic preparation, retention and transfer program. Puente is a program in which students participate in three components:

- Writing—students enroll in English 101X for the Fall, English 205 for the Spring and Communications 103 the following Fall semester. Course materials focus on Chicanx/Latinx literature & experience to enhance writing skills.
- Counseling—academic, personal, transfer and career counseling is offered. Students enroll in Personal Growth 120 for the Fall semester and Personal Growth 130 for the Spring semester.
- Mentoring—students are exposed to various career options through their close involvement with mentors.

Materials utilized in the Puente Project come from the Chicanx/Latinx perspective. Classes are open to all students. If interested in participating, please stop by the Counseling Department and speak to the Puente counselor or visit our Puente Project website.

San Diego Promise Program

Location: A-313, Telephone: 619-388-3998

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 A-313 or visit our San Diego Promise website.

Eligibility

To be eligible for the San Diego Promise Program, students must meet all of the following criteria:

- Must be a first-time to college student*

- Must be a class of 2022 high school graduate** (H.S. Diploma or GED) OR identify with one of the following groups:
  - Foster Youth Student
  - Veteran of U.S. Armed Forces
  - Formerly Incarcerated Student
  - Undocumented Student
- Must be a California resident or AB 540 eligible
- Must complete a 2023-2024 financial aid application (FAFSA or CA Dream Act)
- Must be prepared to enroll in a minimum of 12 units each semester (does not apply to students with disability (DSPS) accommodation on file)

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

** First time to college, class of 2022 high school graduates (H.S. Diploma or GED) maybe eligible

To find out if you may qualify to participate in the San Diego Promise, please contact us via email at sdpromisecity@sdccd.edu or call us at 619-388-3998 or call 619-800-3464.

Student Accounting

Location: A-256, Telephone: 619-388-3458

The San Diego City College Student Accounting Office is located in A-256. You can pay for your classes, purchase a parking pass, and more.

Student Affairs/Campus Life

Location: M-200, Telephone: 619-388-3498

The Office of Student Affairs provides a variety of services designed to provide students with a well-balanced academic and extra-curricular college experience.
Student leadership, clubs and organizations, cultural events, graduation and other support services are offered through the Office of Student Affairs.

Associated Students Government (ASG)

The Associated Students is the governing body that finances, organizes, and directs many student-sponsored programs and activities at City College. Elections are held annually for Associated Student President and other officers. Any student registered for units at City College at the time of the election may vote in the elections.

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 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 the Board Policies & Administrative Procedures.

Associated Students Membership

Support your student body by purchasing an AS membership. The membership entitles you to special benefits and privileges. The revenues go back to support various campus events and activities. See the Associated Students office, M-200 for a list of current benefits.

Student Organizations

There are over 30 active student organizations on campus reflecting the diversity of interest of the student body. Students wishing to charter or register new organizations should contact the Student Affairs Office in M-200.

Student Health Center

Location: A-180, Telephone: 619-388-3540

Mental Health Center

Location: A-180, Telephone: 619-388-3055

The City College Student Health Center program consists of medical, nursing and mental health care. Mental health care and support is provided by Mental Health Counseling. The medical/nursing program provides preventive and primary health care, with linkages to community resources as needed. Students are welcome to call or email the office to schedule an appointment with the Student Health Center physician or nurse practitioners. Same day appointments may be available. Our services for students are confidential and free/low cost.

Ambulatory medical care is provided by the physician or nurse practitioners. This includes history and physical assessment of skin, muscle, joint, respiratory, gastrointestinal, endocrine and/or other system problems. Medical linkages are made to the community as indicated. Laboratory tests and prescription medications are provided at low cost, as ordered by the physician or nurse practitioner. First aid is provided for minor problems. For severe or life-threatening issues, emergency care is accessed through the Emergency Medical Transport System of San Diego.

For the protection of college students and personnel, students may be asked to supply health records. In addition, the college may require health consultations and physical examinations when they appear necessary. Legal injection of prescribed medications must occur in the Student Health Center for safety purposes. All students are strongly encouraged to obtain immunizations against communicable diseases as recommended by the State of California and San Diego Public Health Departments.

Student Accident Insurance/Claims

The Student Health Fee provides coverage for on-campus accidents or college-related injuries. All student campus injuries are processed through the Student Health Center in A-180 as soon as possible after the accident/injury has occurred.

For additional information on Mental Health Counseling, please refer to the Mental Health Counseling Center section.

Support Services

Food Services

The cafeteria serves both day and evening students:

D-120 Campus Cafe

serving coffee and espresso drinks, and hot grill items

D-120 Knights Store

providing grab and go items, and refreshing drinks

16th and C Store – MS Building Lobby

serving coffee and espresso drinks, and grab and go items

College Police Department

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.

The police business office is located in V-100. For information and general assistance, call 619-388-3461. For police assistance, call 619-388-6405. Emergency services are provided 24 hours a day 7 days a week. Learn more about College Police.

Police Escort and Related Services

The college police are available to provide safety escorts, 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 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

Emergency Calls

The college will not interrupt classroom instruction to deliver messages, except in extreme emergencies. All calls/inquiries should be referred to the College Police Dispatch at 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 ParkMobile! mobile app to pay by credit card. Pay and display permits and ParkMobile! 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.

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.

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 in the student portal.

Transfer/Career Center

Location: A-301, Telephone: 619-388-3722

Our mission is to assist students to successfully transition from San Diego City College to a four year institution or immediately into the career of their choice. We empower students in the transfer and career process to ensure a smooth and positive transition.

University Transfer/Career Services

The Transfer/Career Center is a resource center that assists students in planning their transition to a new career, new job, or transfer to a four-year university. The Center also administers guaranteed transfer admission programs to selected universities.

The Transfer/Career Center offers assistance in the following areas:

Service Offerings

- Transfer workshops
- University fairs
- Connection to College representatives
- University tours
- Transfer deadlines, information on CSU's, UC's, and private colleges
- Associate Degrees for Transfer (ADT)
- Career Preparation workshops
- Resume reviews
- Job search assistance
- Job placement
- Internship placement

Visit the Transfer/Career Center website.

Tutorial Services

Tutorial/Learning Center

The Tutorial/Learning Center is located in the Academic Success Center (L-205). The Center is dedicated to providing high quality academic support to students in art, science, vocational, and technological courses. The goal is for each student to become an independent learner, who will succeed in the collegiate setting.

Peer tutors are carefully selected and professionally trained for most college subjects. Many are bilingual to help with language barriers. They provide FREE walk-in and small group tutoring in most subject areas. Supplemental Instruction (SI) and Online tutoring are available on limited subjects.

All City and ECC students must sign up to receive tutoring services.

For hours of operation and additional information, visit the Tutorial/Learning Center website, or call 619-388-3685.

English Center

The English Center is located in the Academic Success Center (L-209). The Center offers peer tutoring in reading, writing, and critical thinking assignments in classes across the curriculum. Tutors can provide assistance on a wide

variety of assignments at any stage of the writing process. No appointments are taken; tutors see students on a walk-in basis. The Center is a free service to City College students. Hours, which may vary from semester to semester, are posted outside the Center.

Math Center

The Math Center, located in the Academic Success Center (L-208), understands the importance of student-success, as well as students' learning needs. Our mission is to provide a flexible student-centered environment that supports students' effort to complete college math requirements. We strive to provide multiple services and resources that are conducive for student learning. These services include, but are not limited to:

- Walk-in Tutoring: Math 34A – Math 252
- One-on-one Tutoring
- Small group Tutoring
- Math 15ABC Refresher Courses (short term)
- Weekly Math 96 Workshops
- Computer Access to MyMathLab, Aleks, etc.
- TI Graphing Calculator Access

The Math Center's hours of operation are Monday–Thursday 10:30am–7:00pm, Friday and Saturday 10:30am–2:30pm. The Math Center's services are free of charge to all current students taking a math class at City College. Important Note: Student Identification (CSID) is required for all who wish to utilize services in the Math Center.

For additional information visit the Math Center website.

Computer Services

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

Umoja

Location: A-341, Telephone: 619-388-3796

The Umoja Community is a learning community that seeks to engage, connect, educate, support, and encourage students through a program of math, English, and personal growth courses to prepare students for transfer to four-year colleges and universities. Course materials, discussions, and activities focus on African-American culture, literature, and experiences.

Program Components:

- Orientation
- Counseling
- Academic/Cultural Enrichment Activities
- Mentoring
- Supplemental Instruction/Tutoring
- Umoja Village
- Leadership Conferences

If you are interested in joining the Umoja Community, please visit Erin Charlens in room A-341.

Veterans and Service Members

Location: A-241, Telephone: 619-388-3504

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 or Associate Degree or transfer to a four-year institution. The Veterans 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 Enrollment Services Office for eligibility. An Active Duty Military ID card or DD214 are required for verification.

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.

Disabled Veterans

Veterans who qualify for educational benefits as disabled veterans may be entitled to special educational benefits. Veterans should visit the Veterans Administration Regional Office, 8810 Rio San Diego Drive, San Diego, CA, 92108, to determine their eligibility for disabled status (Telephone: 1-800-827-1000).

Veterans with disabilities are encouraged to pursue services offered through disAbility Support Programs and Services, A-122.

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 Financial Aid or the Cal Vet website.

Liability

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

All persons receiving educational benefits must report to the Veterans Office after enrollment **every semester** to continue their benefits. **In addition, a Student Education Plan (SEP) must be on file by the end of the first semester;** 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 U.S. Department of Veteran Affairs website for additional information and updates.

Withdrawal/Change of Classes

Veterans are required to notify the campus Veterans 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 VA benefits.

Veterans Academic Progress

A veteran student on Academic probation status will be dismissed 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 dismissed if he/she does not complete over 50% of attempted units in the subsequent semester. The College Veterans 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 Office for more information.

Readmission After Termination Status

Students who wish to be considered for readmissions 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," "D," or "P" has already been earned. Although District policy allows a student to repeat a course in which a "D" grade 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 it is required for their major or electives are available according to their education plan.

Transcripts

All official transcripts of prior college work and military schools, including copies of form DD214, DD2685, Joint Services 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 Office for necessary forms.

Veterans Service Center

The Veterans Service Center (VSC) in M-101 is open all year. The mission of the VSC is to provide a welcoming environment for all veterans, dependents, and active duty members. The VSC is designed to serve both men and women, from military transition to the completion of their academic goals. The VSC provides services in three primary areas: academics, community and wellness.

Welcome Center

Location: A-201, Telephone: 619-388-3998, Peer Mentor Services

The Welcome Center is open year-round for current and prospective students who need support navigating the enrollment and matriculation process. Assessment and Placement services are also available for students seeking

guidance in ELAC and/or Math placement. Current and prospective students have access to one-on-one drop-in support from staff and peer mentors.

Services

The Center aims to provide a supportive onboarding experience for students as they start and continue their educational journey.

- Admissions Application
- Financial Aid and Dream Act Application
- Promise Application
- Assistance with enrollment process
- Assessment/Placement
- mySDCCD, CANVAS
- Referrals to support services and resources available on campus
- Follow-up services
- Access to peer mentors
- Monthly workshops

Work Experience Program

Location: BT-215, Telephone: 619-388-3488

The Work Experience Program awards college credit for learning experiences that take place on a job or internship. The goals and assignments for completion of work experience courses are formulated with the student's workplace supervisor under the direction of the course instructor. More information on Work Experience courses is available in the Programs of Instruction section of the catalog under courses numbered 270. Course enrollment is limited and may not be available to all students.

To learn more about Work Experience or to apply for enrollment in a Work Experience course, visit room BT-215, or call 619-388-3488.

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 City College degrees:

  - Cybersecurity
  - Language Arts and Humanities
  - Nursing Education
  - Scientific Studies:
    - Biological Science
    - Mathematics and Pre-Engineering
    - Physical and Earth Sciences Specialization
  - Social and Behavioral Sciences
  - Visual and Performing Arts

- 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 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)	✓	✓	
	HIST 142 Women in United States History II (M,MMR)	✓		✓

	Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments
^	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)
^	BLAS 115	Sociology from a Black Perspective	(C)

	Course Subject and Number	Course Title	College
^	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)
^	ENGL 202	Introduction to Linguistics	(C, M)

	Course Subject and Number	Course Title	College
^	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)
^	PHIL 125	Philosophy of Women	(C, M)

	Course Subject and Number	Course Title	College
^	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

University Transfer

What is Transfer?

Transfer is the process of continuing your education at a baccalaureate-degree granting 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 degree just as if they had been taken at the four-year institution. City College students transfer to a wide variety of universities within California and throughout the world.

Transfer Services

Students are advised to plan transfer programs as early as possible and enroll in transferable courses in both general education and in courses that prepare for the specific university major. Questions related to transfer programs should be discussed with counselors or the Transfer/Career Center staff. Students interested in transfer should meet a counselor in the Counseling Department, A-366, or in the Transfer/Career Center, room A-301, to develop a Transfer Educational Plan which will identify the courses needed to transfer. For additional information about Transfer Services, call 619-388-3722.

The City 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/Career Counseling
- Guidance in researching and selecting a transfer institution
- Individual appointments with representatives from UC, CSU, and independent colleges and universities
- Transfer Workshops
- Transfer Admissions Agreements and Guarantees with selected universities
- A library of catalogs & 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 City College Transfer/Career Center in Room A-301 at 619-388-3722 or the Counseling Department in Room A-366 at 619-388-3540, or visit the Transfer Center website.

Steps to Transfer

Step 1: Career Exploration

Career Objective

Developing a career objective is a key part of your transfer journey, as it helps determine the type of degree you'll pursue and guides your major selection. See a counselor for guidance and support in your career exploration process

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 City 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 Department or Transfer/ Career Center for assistance in researching career fields.
- If you know what university you want to attend, you can go to the official website of the university and review majors under the "academics" or "undergraduate majors" section, or find their college catalog online, and select your major from the list of majors.
- If you think you might be interested in a particular major but are not sure, consider 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.

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 City 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, 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 tutition rate.

For more details on out-of-state colleges and transfer opportunities, visit: WICHE, Regional Admissions, and/or College Source.

Step 4: Application

Major Preparation

Some majors require specific lower-division courses to be admitted to a major upon transfer. For public universities in California, visit ASSIST for this articulation information. Articulation is the process whereby a course (or set of courses) offered at one institution is accepted as equivalent to or in lieu of a comparable course (or set of courses) at another institution. For current City College articulation agreements with private/independent universities, visit the Transfer Center website.

General Education Requirements:

General Education requirements are courses required of everyone regardless of major. Each university has different general education patterns. City students can choose from the following:

1. Complete specific general education requirements for an individual university, or
2. Complete the approved California General Education Transfer Curriculum (Cal-GETC) pattern of courses acceptable at all campuses of the CSU, most campuses of the UC, and some private institutions.

It is strongly advised that you work closely with a counselor to discuss how to approach your general education courses.

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. City College will provide a Cal-GETC certification to one university campus 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. Students do not have "catalog rights" to a certification pattern. Additional information on certification rules that are specific to the Cal-GETC pattern are discussed later in those sections.

Students who transfer without certification may have to meet additional GE requirements at the university. This often means taking additional courses after transfer.

Completion of the Cal-GETC pattern also fulfills the requirements for a Certificate of Achievement in General Education (see "General Education"). Students who complete one of these patterns and additional transfer coursework may also qualify to complete the City College associate degree in Liberal Arts & Sciences. The following Areas of Emphasis or Specialization are available:

- Language Arts and Humanities
- Scientific Studies Biological Science
- Scientific Studies Mathematics and Pre-Engineering
- Scientific Studies Physical and Earth Sciences Specialization
- Social and Behavioral Sciences
- Visual and Performing Arts

Electives

Electives are additional courses taken to meet the number of required units or to meet additional lower-division graduation requirements. Make sure the courses you select are transferable courses by referring to the course descriptions in this catalog.

Other Transfer General Education Options

Some transfer students are best served by following a general education pattern other than the Cal-GETC pattern. These typically include students who fall into one of the following three categories:

1. Students entering high unit majors such as an engineering or science discipline. Major preparation for the engineering and science fields typically consists of a high number of units. Most universities prefer (and some require) that these preparation for major courses be completed prior to transfer. Therefore, it may be more beneficial for students entering these majors to complete relatively fewer GE courses and more major preparation courses at the community college, while still meeting the minimum admission requirements of the university. Students should review the catalog or other published advising materials of the university and major to which they intend to transfer and then consult a City counselor for assistance in selecting appropriate courses.
2. Students transferring to a private/independent or out-of-state university. Some private/ independent and out-of-state universities accept Cal-GETC, but most do not. Instead, each university has its own unique GE pattern. City College has established articulation agreements with many of these institutions. These agreements specify the courses students can complete at City 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 (A-301) 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 pattern, 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 website.

Guarantee Admission Programs

City College offers a number of Guaranteed Admission Programs. Come to the Transfer Center for program requirements. Plan early as some agreements must be signed at least a year in advance of the transfer semester/ quarter. Interested students are strongly urged to meet with a Counselor for program details as requirements and eligibility often change.

Please refer to the Academic Requirements for Associate in Arts for Transfer (AA-T) or Associate in Science for Transfer (AS-T) for California State University (CSU) offered at San Diego City College.

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

Term of Transfer	Initial Filing Period
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 visit the website for 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 City 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 City

Graduation from City 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 City College.

File for General Education (GE) Certification

GE certification is a legal agreement between City College and a California public university (UC or CSU campus) that all of your lower division GE requirements have been completed. Certification can be awarded for completion or part of completion of the IGETC or CSUGE-Breadth patterns. Some California private/independent situations also accept IGETC or CSUGE-Breadth certification. IGETC or CSUGE-Breadth certification also fulfills the requirements for a General Education Certificate. You should file for GE certification when you are enrolled in your final GE courses and know which university you will be attending. Apply at the Evaluations Office in A-301.

Attend Graduation

You don't have to attend City 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 City 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.

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 on 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, 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 on 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.

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)			✓
POLI 121 American Political Development (C,M,MMR)	✓	✓	
POLS C1000 American Government and Politics (C,M,MMR)		✓	✓

Course	Area US-1: Development of American Institutions	Area US-2: US Constitution	Area US-3: California State & Local Governments

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.*

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.

California General Education Transfer Curriculum (Cal-GETC)

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. IGETC 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.

    - City College has established articulation agreements with many private and out-of-state universities. These agreements specify the courses students can complete at City 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 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)

City College offers a number of Guarantee Admission Programs. Come to the Transfer Center (A-301) 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.

Degree Curricula and Certificate Programs

ACCOUNTING - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Accounting associate degree prepares students for entrance into the accounting field. The degree provides students with basic accounting skills necessary to be successful in the industry. This degree is intended for students majoring in accounting, and students looking to update their accounting skill set.

For a current list of articulated courses to CSU or UC business major visit www.assist.org. Additional general education and graduation requirements for the associate degree are listed in the Academic Requirements section of the catalog. Students interested in careers as professional accountants should select the Business Studies San Diego State University Transfer Option.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Accounting Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 119	Business Communications (Active)	3.0

Complete a minimum of seven (7) units from the following: **Semester Units:** 7.0

ACCT 102	Basic Accounting (Active)	3.0
ACCT 119	Accounting Ethics (Active)	3.0
ACCT 120	Federal Income Tax (Active)	3.0
ACCT 121	California Income Tax (Active)	1.0
ACCT 125	Government & Not-for-Profit Accounting (Active)	3.0
ACCT 128A	Recordkeeping (Active)	1.5
ACCT 128B	Payroll (Active)	1.5
ACCT 135	Principles of Auditing (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0

ACCOUNTING - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Accounting prepares students for entry into the field of accounting. The certificate provides students with basic accounting skills necessary to be successful in the accounting industry. Students who successfully complete the award have the skill set necessary for the following careers: accounting

clerk, accounts payable/receivable specialist, claims clerk, payroll clerk, bookkeeper, accounting technician, tax preparer, tax aid, financial management assistant, or comparable positions. This award is intended for students majoring in accounting, and students looking to update their accounting skills.

Learning Outcome(s): Students who complete the Accounting Program will be able to:

1. Evaluate business transactions and summarize for internal and external financial reporting.
2. Examine ethical decisions while recognizing multiple perspectives in business situations.
3. Demonstrate the use of accounting concepts in decision-making, planning, directing operations, and controlling.
4. Apply accounting guidelines, practices, and regulatory procedures in accordance with Generally Accepted Accounting Principles (GAAP).
5. Implement government and nonprofit specific accounting practices as well as auditing techniques used in accounting.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 119	Business Communications (Active)	3.0

SELECT SEVEN TO NINE (7 - 9) UNITS FROM THE FOLLOWING: **Semester Units:** 7.0-9.0

ACCT 102	Basic Accounting (Active)	3.0
ACCT 119	Accounting Ethics (Active)	3.0
ACCT 120	Federal Income Tax (Active)	3.0
ACCT 121	California Income Tax (Active)	1.0
ACCT 125	Government & Not-for-Profit Accounting (Active)	3.0
ACCT 128A	Recordkeeping (Active)	1.5
ACCT 128B	Payroll (Active)	1.5
ACCT 135	Principles of Auditing (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 120	Personal Financial Management (Active)	3.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0

ADVANCED AIR CONDITIONING AND DIRECT DIGITAL CONTROL - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Advanced Air Conditioning and Direct Digital Control focuses on precise, automated control of air conditioning and lighting systems with the goal of providing optimum comfort at minimal operational cost.

Learning Outcome(s): Students who complete the Advanced Air Conditioning and Direct Digital Control Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0

AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 128	Comfort Heating Systems Theory (Active)	4.0
AIRE 129	Comfort Heating Systems Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 138	HVAC System Design (Active)	3.0
AIRE 139	HVAC System Design Lab (Active)	2.0
AIRE 144	Direct Digital Controls Theory (Active)	4.0
AIRE 145	Direct Digital Controls Lab (Active)	2.0

ADVANCED ARTS ENTREPRENEURSHIP - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Fine Art with an advanced arts entrepreneurship emphasis provides students with the skills and knowledge to foster self-employment or a small business. The curriculum is designed to maximize students art experience while preparing students with the understanding of entrepreneurship and small business management with business courses. This program expands student education in entrepreneurship and small business management. The primary aim is to prepare students to create advanced artwork and pursue a career 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 Advanced Arts Entrepreneurship Program will be able to:

1. Interpret, evaluate and critiques orally and in writing visual works of art.
2. Solve basic problems of visual expression and describe its historical or contemporary context.
3. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
4. Produce visual works of art reflecting global awareness, cultural diversity.
5. Demonstrate knowledge of specific historical and cultural art styles.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

ARTF 206	Art Entrepreneurship (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0

Select three (3) units from the following: **Semester Units:** 3.0

ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 165C	Composition in Painting III (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 175B	Sculpture II (Active)	3.0
ARTF 175C	Sculpture III (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0

ARTF 195C	Ceramics III (Active)	3.0
ARTF 207A	Industrial and Architectural Ceramic Design I (Active)	3.0
ARTF 207B	Industrial and Architectural Ceramic Design II (Active)	3.0
ARTF 212	Sustainable Art and Design (Active)	3.0

ADVANCED ELECTROMECHANICAL TECHNOLOGY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Electromechanical Engineering Technology course of study provides a comprehensive learning environment of both electronic and mechanical principles. Learning emphasis is placed upon the hands-on application and design of electromechanical systems that include analog & digital electronics, engineering design, and computer controlled mechanical systems.

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 Electromechanical Technology Program will be able to:

1. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.
2. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
3. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
4. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 224	Microprocessor Design (Active)	3.0
ELDT 224L	Microprocessor Design Laboratory (Active)	1.5
ENGE 152	Engineering Design (Active)	3.0

ADVANCED HVAC/R MECHANICAL SYSTEMS INSTALLATION AND REPAIR - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Advanced HVAC/R Mechanical Systems Installation and Repair provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Learning Outcome(s): Students who complete the Advanced HVAC/R Mechanical Systems Installation and Repair Program will be able to:

1. Gain essential skills necessary to perform a as an HVAC/R Technician.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Demonstrate HVAC/R industry readiness through certification training.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0
EGEE 50	Building Science Principles (Active)	3.0

ADVANCED MANUFACTURING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Advanced Manufacturing furthers student's knowledge with the innovative experience and exposure to modern manufacturing practices.

It is recommended that MFET 150 and MFET 210 be completed before taking MFET 230.

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 Manufacturing Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain the use of product design in relation to manufacturing efficiency.
9. Identify and apply quality control tools and instruments using in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

MFET 110	Industrial Safety (Active)	2.0
MFET 150	Manufacturing Automation (Active)	3.0
MFET 210	Statistical Process Control (Active)	3.0

MFET 230	Lean Manufacturing (Active)	3.0

ADVANCED MECHANICAL DESIGN - CERTIFICATE OF PERFORMANCE: CITY

Summary

Mechanical Design Technology graduates pursue careers in industry in the areas of industrial machinery, consumer products, construction, automotive, power transmission, automation, and other mechanical machinery related fields. Related areas of employment include sales, manufacturing and testing mechanical products. Graduates create designs as well as analyze and specify the components and systems of machinery and products.

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 Mechanical Design Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.0

MFET 115	Properties of Materials (Active)	3.0
MACT 160M	Introduction to CAD/CAM (Active)	4.0
ENGE 152	Engineering Design (Active)	3.0

AGRICULTURE PLANT SCIENCE - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

Summary

The Associate in Science in Agriculture Plant Science for Transfer is intended for students who plan to complete a bachelor's degree in Agriculture Plant 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 Agriculture Plant Science Program will be able to:

1. Understand and explain the three facets of sustainability (economic, environmental and social) both in general and as they apply specifically to landscaping, practices.
2. Understand and explain the components of a food system.
3. Design an organic urban farm that supports natural ecosystems, human health, and water conservation.
4. Evaluate the soil food web.
5. Create a crop plan that is appropriate for the southwest region.
6. Identify plant disease and pests and incorporate integrated pest management and other organic strategies for a resilient food system.
7. Demonstrate basic propagation techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

AGRI 125	Introduction to Soil Science (Active)	3.0
AGRI 114	Plant Propagation (Active)	3.0
AGRI 107	Introduction to Agricultural Plant Science (Active)	4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
ECON 121	Principles of Microeconomics (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0

AIR CONDITIONING, HEATING, AND ADVANCED REFRIGERATION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Air Conditioning, Heating and Advanced Refrigeration certificate focuses on advanced, complex, high efficiency HVACR systems and their components.

Learning Outcome(s): Students who complete the Air Conditioning, Heating, and Advanced Refrigeration Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0

AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 128	Comfort Heating Systems Theory (Active)	4.0
AIRE 129	Comfort Heating Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0

AIR CONDITIONING, REFRIGERATION, AND ENVIRONMENTAL CONTROL TECHNOLOGY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Air Conditioning, Refrigeration and Environmental Control Technology AS degree focuses on the study of complex, high efficiency HVACR, advanced controls and alternative energy systems.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Air Conditioning, Refrigeration, and Environmental Control Technology Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 128	Comfort Heating Systems Theory (Active)	4.0
AIRE 129	Comfort Heating Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0
AIRE 138	HVAC System Design (Active)	3.0
AIRE 139	HVAC System Design Lab (Active)	2.0

ALCOHOL AND OTHER DRUG STUDIES - ASSOCIATE OF SCIENCE DEGERE: CITY

Summary

The Associate of Science in Alcohol and Other Drug Studies prepares students for certification as alcohol and other drug counselors in the State of California (units may qualify for other state certification or licensing requirements). The Associate of Science degree provides academic preparation for baccalaureate study in addiction, psychology, social work, human services, and related disciplines. Students must complete all required courses within ten years in order to receive the Associate Degree.

The AODS department recommends students take courses in the order as presented.

AODS 270 must be substituted for AODS 164 if student has a paid internship.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Alcohol and Other Drug Studies Program will be able to:

1. Identify diagnostic criteria, apply assessment skills, and describe scientifically validated models of substance use disorder treatment.
2. Identify the behavioral, psychological, physical health, and social effects of psychoactive substances on the person and their significant others.
3. Explain the potential for medical and mental health conditions to coexist with substance use disorder.
4. Demonstrate an understanding of the laws, regulations, and ethical codes of the substance use disorder treatment profession.
5. Practice in an internship the eight addiction counselor practice dimensions: clinical evaluation; treatment planning; referral; service coordination; counseling; client, family, community education; documentation; professional and ethical responsibilities.

Accreditation

The Alcohol and Other Drug Studies (AODS) program prepares students for certification as substance use disorder counselors in the State of California (units may qualify for other state certification or licensing requirements). This program is vocational, academic, and clinical in nature. It trains students in the practice dimensions and core competencies of alcohol and other drug counseling while providing a theoretical foundation in the behavioral sciences and human service professions.

The AODS certificate program includes education in the many complex factors that contribute to addiction and substance abuse (including psychological and sociological factors), training in the evidence-based clinical practices used in day-today work as a counselor, and on-the-job experience through a supervised internship at an active treatment facility.

The AODS certificate program at San Diego City College is fully accredited and approved by the State of California's Department of Health Care Services through a contract with the California Association for Alcohol/ Drug Educators (CAADE), an organization that accredits substance abuse counselor training programs in higher education.

Upon completion of the certificate of achievement or associate degree, students may be eligible for entry level employment as an alcohol and other drug counselor. However, the State of California requires additional credentialing in order to maintain employment in this field. Persons hired as alcohol and other drug counselors have five years to become fully certified and most employers will want counselors to be certified within a year of being hired. California does not license alcohol and other drug counselors at this time. Certification is accomplished through private credentialing organizations that are nationally approved and approved by the State of California. The Alcohol and Other Drug Studies Program specifically prepares students for application to three certifying organizations: the California Association for Drug/Alcohol Educators' (CAADE) Addiction Counselor Certification Board of California (ACCBC), the California Association of DUI Treatment Programs (CADTP), and the California Consortium of Addiction Programs and Professionals (CCAPP). ACCBC offers certification as a Certified Addiction Treatment Counselor (CATC), CADTP offers certification as a Certified Alcohol and Other Drug Counselor (CAODC), and CCAPP offers certification as a Certified Alcohol and Drug Abuse Counselor (CADC). Each organization offers several levels of certification depending on experience and academic achievement. Students who complete the certificate of achievement in AODS will have met the educational requirements for all three certifying organizations.

Requirements

COURSES REQUIRED FOR THE MAJOR:		Semester Units: 40.0-41.0
AODS 150	Introduction to Chemical Dependency (Active)	3.0
AODS 153	Chemical Dependency Family Counseling Techniques (Active)	3.0
AODS 154	Law, Ethics, and Skills in Alcohol and Other Drug Counseling (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
AODS 155	Culturally Informed Practices (Active)	3.0
AODS 156	Case Management in Alcohol and Other Drug Counseling (Active)	3.0
AODS 157	Pharmacology of Psychoactive Drugs (Active)	3.0
AODS 159	Co-Occurring Disorders in Alcohol and Other Drug Counseling (Active)	3.0
AODS 160	Group Dynamics in Alcohol and Other Drug Counseling (Active)	3.0
PSYC 161	Introduction to Counseling (Approved)	3.0
AODS 162	Internship Seminar: Alcohol and Other Drug Counseling (Active)	3.0
		4.0-5.0
AODS 164	Internship: Alcohol and Other Drug Counseling (Active)	5.0
OR		
AODS 270	Work Experience in Chemical Dependency (Active)	4.0

ALCOHOL AND OTHER DRUG STUDIES - CERTIFICATE OF ACHIEVEMENT

Summary

The Certificate of Achievement in Alcohol and Other Drug Studies prepares students for certification as alcohol and other drug counselors in the State of California (units may qualify for other state certification or licensing requirements). The Certificate of Achievement is designed to prepare students for entry level alcohol and other drug counselor employment. Students must complete all required courses within ten years in order to receive the Certificate of Achievement.

The AODS department recommends students take courses in the order as presented.

AODS 270 must be substituted for AODS 164 if student has a paid internship.

Learning Outcome(s): Students who complete the Alcohol and Other Drug Studies Program will be able to:

1. Identify diagnostic criteria, apply assessment skills, and describe scientifically validated models of substance use disorder treatment.
2. Identify the behavioral, psychological, physical health, and social effects of psychoactive substances on the person and their significant others.
3. Explain the potential for medical and mental health conditions to coexist with substance use disorder.
4. Demonstrate an understanding of the laws, regulations, and ethical codes of the substance use disorder treatment profession.
5. Practice in an internship the eight addiction counselor practice dimensions: clinical evaluation; treatment planning; referral; service coordination; counseling; client, family, community education; documentation; professional and ethical responsibilities.

Accreditation

The Alcohol and Other Drug Studies (AODS) program prepares students for certification as substance use disorder counselors in the State of California (units may qualify for other state certification or licensing requirements). This program is vocational, academic, and clinical in nature. It trains students in the practice dimensions and core

competencies of alcohol and other drug counseling while providing a theoretical foundation in the behavioral sciences and human service professions.

The AODS certificate program includes education in the many complex factors that contribute to addiction and substance abuse (including psychological and sociological factors), training in the evidence-based clinical practices used in day-today work as a counselor, and on-the-job experience through a supervised internship at an active treatment facility.

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Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 40.0-41.0

AODS 150	Introduction to Chemical Dependency (Active)	3.0
AODS 153	Chemical Dependency Family Counseling Techniques (Active)	3.0
AODS 154	Law, Ethics, and Skills in Alcohol and Other Drug Counseling (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
AODS 155	Culturally Informed Practices (Active)	3.0
AODS 156	Case Management in Alcohol and Other Drug Counseling (Active)	3.0
AODS 157	Pharmacology of Psychoactive Drugs (Active)	3.0
AODS 159	Co-Occurring Disorders in Alcohol and Other Drug Counseling (Active)	3.0
AODS 160	Group Dynamics in Alcohol and Other Drug Counseling (Active)	3.0
PSYC 161	Introduction to Counseling (Active)	3.0
AODS 162	Internship Seminar: Alcohol and Other Drug Counseling (Active)	3.0
		4.0-5.0
AODS 164	Internship: Alcohol and Other Drug Counseling (Active)	5.0
OR		
AODS 270	Work Experience in Chemical Dependency (Active)	4.0

ALLIED HEALTH TRACK - ASSOCIATE OF SCIENCE DEGREE: CITY

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 Allied Health Track Program will be able to:

1. Demonstrate a detailed mastery of human body structure and function, from micro- to macroscopic levels, including its homeostatic states and processes.
2. Demonstrate a working knowledge of microbial systems, their role in Nature and their impact on humans.

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

AMERICAN SIGN LANGUAGE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The associate degree in American Sign Language requires completion of the courses listed below. Additional general education and graduation requirements for the associate degree are listed in the catalog.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the American Sign Language Program will be able to:

1. Develop receptive and expressive skills in American Sign Language and Fingerspelling.
2. Develop knowledge and awareness of the differences between the Deaf Culture/deaf community and the hearing community.
3. Accurately translate English sentences into ASL.
4. Understand the differences between Deaf and hearing cultures.
5. Develop an appreciation of Deaf culture's values, beliefs, and cultural practices.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

AMSL 120	American Sign Language Level I (Active)	5.0
AMSL 121	American Sign Language Level II (Active)	5.0
AMSL 220	American Sign Language Level III (Active)	5.0
AMSL 221	American Sign Language Level IV (Active)	5.0

SELECT TWO COURSES FROM THE FOLLOWING: **Semester Units:** 6.0

AMSL 150	Introduction to Deaf Culture (Active)	3.0
AMSL 155	Implications of Deafness (Active)	3.0
AMSL 214	American Sign Language Fingerspelled Signs (Active)	3.0
AMSL 225	Introduction to Linguistics of American Sign Language (Active)	3.0

AMERICAN SIGN LANGUAGE - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The certificate focuses on beginning to advanced American Sign Language (ASL) skill development. Students interested in transferring to a four-year institution, may continue with completing the associate degree.

Learning Outcome(s): Students who complete the American Sign Language Program will be able to:

1. Develop receptive and expressive skills in American Sign Language and Fingerspelling.
2. Develop knowledge and awareness of the differences between the Deaf Culture/deaf community and the hearing community.
3. Accurately translate English sentences into ASL
4. Understand the differences between Deaf and hearing cultures
5. Develop an appreciation of Deaf culture's values, beliefs, and cultural practices.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

AMSL 120	American Sign Language Level I (Active)	5.0
AMSL 121	American Sign Language Level II (Active)	5.0
AMSL 220	American Sign Language Level III (Active)	5.0
AMSL 221	American Sign Language Level IV (Active)	5.0

ANTHROPOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Anthropology for Transfer 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. 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 Anthropology Program will be able to:

1. Define Anthropology, identify and discuss its various subfields including: Cultural Anthropology, Biological Anthropology, Comparative Linguistics, Archaeology, and Applied Anthropology.
2. Identify and discuss Anthropological methods of inquiry.

3. Identify, discuss, compare, contrast, and critically analyze the various theoretical orientations used in the different subfields of Anthropology.
4. Discuss and critically evaluate the Anthropological Perspective including its global emphasis and cross-cultural and comparative approach to understanding the various ways in which people organize themselves, meet their various needs, and have adapted to their environments.
5. Identify, describe, and discuss different cultural systems ranging from band societies to the state.
6. Identify, critically evaluate, and discuss the contributions Anthropology has made to describing and understanding the human condition including human biological and cultural diversity.
7. Identify and critically evaluate Anthropology's contributions to other disciplines of study in the Social Sciences, Behavioral Sciences, and the Humanities.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

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
ENGL 202	Introduction to Linguistics (Active)	3.0
		3.0
GISG 104	Geographic Information Science and Spatial Reasoning (Active)	3.0
OR		
SOCO 220	Introduction to Research Methods in Sociology (Active)	3.0

SELECT ONE COURSE (3-4 UNITS) FROM THE FOLLOWING: **Semester Units:** 3.0-4.0

ANTH 110	Anthropology of Magic, Witchcraft, and Religion (Active)	3.0
ANTH 115	Introduction to Archaeological Field Work (Active)	4.0
ANTH 120	Archaeological Artifact Analysis (Active)	3.0
ANTH 130	Bones: Human Osteology (Active)	3.0
ANTH 140	Primatology (Active)	3.0
ANTH 210	Introduction to the Indigenous People of California (Active)	3.0

ANTHROPOLOGY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Anthropology program has three primary goals. The first is to provide the student with a broad perspective of human biological and cultural origins and change which prepares the student for transfer to a four-year institution for further study. The second goal is to provide courses that may include additional information regarding anthropology that are of general interest to community college students or are applications of anthropological principles. The Anthropology program offers a limited course curriculum in archaeology. A certificate of performance is available for the student who has an interest in the recovery, identification, and analysis of prehistoric and early historic artifacts related to archaeological research projects.

The Anthropology Program recommends that students interested in pursuing Biological Anthropology take ANTH 104.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Anthropology Program will be able to:

1. Define Anthropology, identify and discuss its various subfields including: Cultural Anthropology, Biological Anthropology, Comparative Linguistics, Archaeology, and Applied Anthropology.
2. Identify and discuss Anthropological methods of inquiry.

3. Identify, discuss, compare, contrast, and critically analyze the various theoretical orientations used in the different subfields of Anthropology.
4. Discuss and critically evaluate the Anthropological Perspective including its global emphasis and cross-cultural and comparative approach to understanding the various ways in which people organize themselves, meet their various needs, and have adapted to their environments.
5. Identify, describe, and discuss different cultural systems ranging from band societies to the state.
6. Identify, critically evaluate, and discuss the contributions Anthropology has made to describing and understanding the human condition including human physical and cultural diversity.
7. Identify and critically evaluate Anthropology's contributions to other disciplines of study in the Social Sciences, Behavioral Sciences, and the Humanities.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

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

Select 9-10 units from the following: **Semester Units:** 9.0-10.0

ANTH 104	Laboratory in Biological Anthropology (Active)	1.0
ANTH 110	Anthropology of Magic, Witchcraft, and Religion (Active)	3.0
ANTH 115	Introduction to Archaeological Field Work (Active)	4.0
ANTH 120	Archaeological Artifact Analysis (Active)	3.0
ANTH 130	Bones: Human Osteology (Active)	3.0
ANTH 140	Primatology (Active)	3.0
ANTH 210	Introduction to the Indigenous People of California (Active)	3.0

APPLIED MATHEMATICS - ASSOCIATE OF ARTS DEGREE

Summary

The Mathematics program offers students an associate degree option designed to prepare them for working in STEM related fields and/or to transfer to four-year institutions. The Associate of Arts Degree in Applied Mathematics requires completion of the courses listed below. Additional general education and graduation requirements for the associate degree are listed in the catalog.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Applied Mathematics Program will be able to:

1. Analyze, model, and clearly and effectively communicate a solution to a math problem.
2. Apply mathematical skills to solve and accurately describe their process for real-world problems relevant to their major.
3. Solve routine mathematical problems using proper mathematical notation, in multiple ways if applicable.
4. Know about on-campus resources that will promote success in their math classes.
5. Apply technology to enhance mathematical thinking and understanding and to solve mathematical problems.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

MATH 107	Introduction to Scientific Programming (Active)	3.0
MATH 107L	Introduction to Scientific Programming Lab (Active)	1.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 245	Discrete Mathematics (Active)	3.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
MATH 254	Introduction to Linear Algebra (Active)	3.0

ARCHAEOLOGY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The certificate recognizes the student's completion of a series of courses that prepare the student for entry-level participation in field archaeological projects and work in an archaeological lab. This program is designed to prepare students for entryl-evel employment in archaeological field work, laboratory work or museum work.

Learning Outcome(s): Students who complete the Archaeology Program will be able to:

1. Define Anthropology, identify and discuss its various subfields including: Cultural Anthropology, Biological Anthropology, Comparative Linguistics, Archaeology, and Applied Anthropology.
2. Identify and discuss Anthropological methods of inquiry.
3. Identify, discuss, compare, contrast, and critically analyze the various theoretical orientations used in the different subfields of Anthropology.
4. Discuss and critically evaluate the Anthropological Perspective including its global emphasis and cross-cultural and comparative approach to understanding the various ways in which people organize themselves, meet their various needs, and have adapted to their environments.
5. Identify, describe, and discuss different cultural systems ranging from band societies to the state.
6. Identify, critically evaluate, and discuss the contributions Anthropology has made to describing and understanding the human condition including human physical and cultural diversity.
7. Identify and critically evaluate Anthropology's contributions to other disciplines of study in the Social Sciences, Behavioral Sciences, and the Humanities.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
ANTH 107	Introduction to Archaeology (Active)	3.0
ANTH 115	Introduction to Archaeological Field Work (Active)	4.0
ANTH 120	Archaeological Artifact Analysis (Active)	3.0
ANTH 210	Introduction to the Indigenous People of California (Active)	3.0

ART HISTORY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Art History for Transfer 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. 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 Art History Program will be able to:

1. Demonstrate knowledge of specific historical and cultural art styles.
2. Produce visual works of art reflecting global awareness, cultural diversity.
3. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
4. Solve basic problems of visual expression and describe its historical or contemporary context.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

Requirements

Courses required for the major: **Semester Units:** 18.0

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 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0

ARTS ENTREPRENEURSHIP - CERTIFICATE OF PERFORMANCE: CITY

Summary

The certificate of performance in Fine Art with an arts entrepreneurship emphasis provides students with the skills and knowledge to foster self-employment or a small business. The curriculum is designed to maximize students art experience while providing basic skills required for self-employment and employment in art-related fields. This program expands student education in entrepreneurship and small business management. The primary aim is to prepare students to create advanced artwork and pursue a career 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 Arts Entrepreneurship Program will be able to:

1. Demonstrate knowledge of specific historical and cultural art styles.
2. Produce visual works of art reflecting global awareness, cultural diversity.
3. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
4. Solve basic problems of visual expression and describe its historical or contemporary context.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

ARTF 206	Art Entrepreneurship (Active)	3.0

Select three (3) units from the following: **Semester Units:** 3.0

ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 165C	Composition in Painting III (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 175B	Sculpture II (Active)	3.0
ARTF 175C	Sculpture III (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 195C	Ceramics III (Active)	3.0
ARTF 207A	Industrial and Architectural Ceramic Design I (Active)	3.0
ARTF 207B	Industrial and Architectural Ceramic Design II (Active)	3.0

ASTRONOMY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

Astronomy is the study of the universe. Various branches of astronomy include: cosmology, planetary, geology, space plasma physics, and image analysis, amongst others. Astronomy is focused on understanding the fundamental laws of the universe.

Only one astronomy lab course (ASTR 109 OR ASTR 111) is required for the major.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Astronomy Program will be able to:

1. Demonstrate an understanding and appreciation of the scientific method.
2. Communicate an understanding of the connections between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

ASTR 101	Descriptive Astronomy (Active)	3.0
		1.0
ASTR 109	Practice in Observing (Active)	1.0
OR		
ASTR 111	Astronomy Laboratory (Active)	1.0
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

AUDIO PRODUCTION TECHNOLOGY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Audio Production Technology is designed to provide students with practical, career-oriented skills in professional audio production using current music industry technologies. The certificate emphasizes basic musical fundamentals, live sound reinforcement, microphone and recording techniques, mixing and mastering skills, MIDI (Musical Instrument Digital Interface) sequencing and programming, audio software and hardware development, audio post production for video and gaming, and audio for multimedia. In addition, students are introduced to, and guided through, self-promotion skills using multimedia and social networking tools specific to the music industry.

Upon successful completion of the Certificate of Achievement in Audio Production, students should be able to:

- Analyze the media's impact on the public;
- Operate audio software and hardware equipment;
- Compose original music;
- Record and produce all forms of audio in digital media content;
- Participate in the local and global music community; and
- Perform at or facilitate live events.

Learning Outcome(s): Students who complete the Audio Production Technology Program will be able to:

1. Demonstrate an understanding of the physics of sound, sound isolation, and room acoustics as it pertains to studio recording and audio production.
2. Demonstrate proficiency with industry standard notation and third party extension audio processing plug-in software including Sibelius and iZotope.
3. Demonstrate proficiency with sound design and post production audio techniques for TV, film, video, gaming, and multimedia formats.
4. Produce and perform in concerts and music events that incorporate new technologies and media.
5. Demonstrate proficiency with industry standard DAW (Digital Audio Workstations) software including Avid Pro Tools, Ableton Live, Propellerhead Reason, Cycling '74 Max, and Apple Logic Pro X.
6. Utilize and demonstrate proficiency with music fundamentals, sound design principles in the creation of successful original music compositions in various formats.
7. Demonstrate an understanding of the history and development of music technology.
8. Demonstrate an understanding of music business elements including music publishing, copyrights, licensing, management, marketing, music contracts, self promotion.
9. To prepare students for entry-level positions in the commercial music industry.
10. Recognize and incorporate music technology elements such as mixing, editing, mastering, sequencing, synthesis, signal flow, controller mapping, signal processing, elastic audio, automation, and quantization in the creation of original compositions.
11. Produce a professional quality portfolio in preparation for academic transfer or for sharing with potential clients and employers.
12. Demonstrate an understanding of the role of and opportunities with music technology in today's modern multi-cultural society.
13. Demonstrate competent operation of and familiarity with common hardware equipment used in a professional level commercial recording studio environment including mixing consoles, pre-amps, microphones, patch bays, signal processors, and audio interfaces.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

MUSC 104	Composition Technology (Active)	3.0
MUSC 160	Introduction to Electro-Acoustic Music (Active)	3.0
MUSC 162	Introduction to Recording and Sound Reinforcement (Active)	3.0
MUSC 252	Sound Design and Digital Audio Post Production (Active)	3.0
MUSC 260	Electro-Acoustic Music Composition (Active)	3.0
MUSC 262	Intermediate Recording and Sound Reinforcement (Active)	3.0

BASIC HVAC/R MECHANICAL SYSTEMS INSTALLATION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Basic HVAC/R Mechanical Systems Installation provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation and maintenance. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Learning Outcome(s): Students who complete the Basic HVAC/R Mechanical Systems Installation Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
EGEE 50	Building Science Principles (Active)	3.0

BASIC REFRIGERATION AND CONTROL SYSTEMS - CERTIFICATE OF PERFORMANCE: CITY

Summary

With a California and U.S. emphasis on energy efficiency and sustainability, there is a need for well trained mechanical technicians. This Certificate of performance prepares students with knowledge and skill in the installation, maintenance and repair of residential and light-commercial Heating - Ventilation - Air Conditioning & Refrigeration (HVACR) systems.

Students may have concurrent enrollment in AIRE 100, AIRE 103, AIRE 124 and AIRE 125.

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 Basic Refrigeration and Control Systems Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0

BIOLOGY - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

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. Apply core biological concepts that serve as the foundation for higher-level science courses. These include theories of evolution, natural selection, processes of scientific inquiry, and proper laboratory techniques, among others.
2. Evaluate the quality of scientific methodology when it is reported by the popular media.
3. Describe the relationship between the processes of science, human culture and the environment.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0-33.0

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
		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

		10.0
		10.0
PHYS 125	General Physics (Active)	5.0
AND		
PHYS 126	General Physics II (Active)	5.0
OR		
		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
OR		
		10.0
PHYS 195	Mechanics (Active)	5.0
AND		
PHYS 196	Electricity and Magnetism (Active)	5.0

Select 3-5 units from the following: **Semester Units:** 3.0-5.0

		5.0
CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
AND		
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0
MATH 122	Basic Techniques of Calculus II (Active)	3.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0

BLACK AND WHITE PHOTOGRAPHY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Black and White Photography Certificate of Performance prepares students for entry-level employment or self-employment as a fine art photographer or photographer's assistant. Emphasis is placed on grounding students in the fundamentals of traditional analog black and white photography, including camera handling and composition, darkroom film and print processing techniques, archival print finishing, and aesthetic and conceptual thinking, culminating in a polished fine art black and white portfolio that can be used to obtain employment as a fine art photography assistant, and/or freelance fine art photographer. Students develop a comprehensive portfolio to showcase the technical and creative aspects of their work.

Faculty recommend students complete classes in the order presented.

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 Black and White Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.

4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

PHOT 100	Introduction to Black & White Photography (Active)	3.0
PHOT 102A	Directed Darkroom Studies I (Active)	1.0
PHOT 135	Intermediate Black & White Photography (Active)	3.0
PHOT 235	Advanced Black and White Photography (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

BLACK STUDIES - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Black Studies program at City College provides an interdisciplinary and systemic approach to the historical and contemporary study of African people in Africa and in the Americas. The program is designed to provide enrichment in the social sciences and humanities by giving students in these areas the opportunity to link the tools of formal analysis to a specific cultural area in the African experience. The student's career and future alternatives may be increased by adding a specialized dimension at the undergraduate level. Students preparing for transfer to a four-year university may major in African Studies or humanities, law, social work, or public administration. This will enhance their opportunities in local, national and international organizations, both public and private, through participation in the program.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Black Studies Program will be able to:

1. Evaluate the aesthetics, social, and political significance of Black artistic, musical and literary expression from its African origins to the present.
2. Analyze the underlying causes of such social problems as racism and sexism and class conflict.
3. Critically analyze current social policies and their historical origins, both on the local and national levels, aimed at addressing current social problems that most effect African-Americans.
4. Evaluate the role of active citizens who will be engaged in the global community.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

BLAS 100	Introduction to Black Studies (Active)	3.0
		3.0
BLAS 104	Black Psychology (Active)	3.0
OR		
BLAS 130	The Black Family (Active)	3.0
		3.0

BLAS 110	African American Art (Active)	3.0
OR		
BLAS 120	Black Music (Active)	3.0
		3.0
BLAS 115	Sociology from a Black Perspective (Active)	3.0
OR		
BLAS 116	Contemporary Social Problems from a Black Perspective (Active)	3.0
OR		
BLAS 135	Introduction to Black Politics (Active)	3.0
		3.0
BLAS 140A	African American History to Reconstruction (Active)	3.0
OR		
BLAS 140B	African American History since Reconstruction to the Present (Active)	3.0
		3.0
BLAS 145A	Introduction to African History (Active)	3.0
OR		
BLAS 145B	Introduction to African History (Active)	3.0
		3.0
BLAS 150	Black Women in Literature, Film and the Media (Active)	3.0
OR		
BLAS 155	African American Literature (Active)	3.0

BOOKKEEPING FOR A SMALL BUSINESS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Accounting program at San Diego City College offers certificates of performance, certificates of achievement, and associate degree awards in the field of accounting and financial management. Areas of emphasis include tax and certified public accounting (CPA) preparation, financial management, and fundamentals in accounting. Awards are designed to prepare students with an educational framework for effective leadership in an accounting position. Coursework offered by the program equips students for transfer to a four-year institution, while providing foundational skills to obtain entry-level positions, enhance existing job competencies, and prepare for the Certified Public Accountant (CPA) and Certified Management Accountant (CMA) license.

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 Bookkeeping for a Small Business Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

ACCT 102	Basic Accounting (Active)	3.0
ACCT 150	Computer Accounting Applications (Active)	3.0

BUSINESS ADMINISTRATION 2.0 - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

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. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

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

C++ - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The goal of the Certificate of Achievement in C++ is to prepare students for entry-level employment in the field of Information Technology. The emphasis of the Certificate of Achievement in C++ is designed to provide students with training in the theory and practice of computer programming emphasizing business and computer applications using C++. Students receive hands-on experience in the fundamentals of structured- and object-oriented analysis, design, and implementation using the computer programming language C++.

Students who successfully complete the Certificate of Achievement in C++ will be able to:

- Effectively design and implement programming constructs, including functions, control structures, arrays/lists, classes, and objects for a given programming problem; and
- Effectively implement the appropriate data structures using the principles and techniques of object-oriented programming for a given programming problem.

The Computer Information Systems Department requires students to complete all course requirements for the certificate within five years.

Learning Outcome(s): Students who complete the C++ Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Communicate effectively in a variety of professional contexts.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

CISC 187	Data Structures in C++ (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 201	Advanced C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0

CERTIFIED PUBLIC ACCOUNTANT PREPARATORY PROGRAM - CERTIFICATE OF PERFORMANCE

Summary

There is an increasing demand for qualified individuals in the niche government and nonprofit accounting sector. The Certificate of Performance in Certified Public Accounting Preparatory Program provides an in-depth exploration of government and nonprofit accounting, ethics, and auditing. Students learn about government and nonprofit specific accounting practices as well as auditing techniques used in the accounting field. Emphasis is

placed on careers in the accounting field and preparation for students interested in earning the California Certified Public Accountant License.

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 Certified Public Accountant Preparatory Program Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

ACCT 119	Accounting Ethics (Active)	3.0

Complete one course from the following: **Semester Units:** 3.0-4.0

ACCT 125	Government & Not-for-Profit Accounting (Active)	3.0
ACCT 135	Principles of Auditing (Active)	3.0
ACCT 220	Uniform CPA Examination Review Course (Active)	4.0

CHEMISTRY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Chemistry certifies that the student has emphasized the theory and practice of chemistry and has met the preparation for the major in chemistry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Chemistry Program will be able to:

1. Demonstrate an understanding of safe handling of chemicals and a respect for chemicals, their properties, and their effect on the environment.
2. Demonstrate an awareness of the ways in which different aspects of nature (e.g., our local environment on Earth, the inner workings of the human body, etc.) can be known through and are connected by chemistry.
3. Demonstrate an understanding of how chemistry is the study of matter and its changes.
4. Demonstrate proficiency in a number of techniques and analyses employed in the chemistry laboratory.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 34.0

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
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

PHYS 196	Electricity and Magnetism (Active)	5.0

Complete a minimum of 5 units from the following: **Semester Units:** 5.0

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
MATH 252	Calculus with Analytic Geometry III (Active)	4.0

CHICANA AND CHICANO STUDIES - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts in Chicana and Chicano Studies provides a foundational coursework that emphasizes an understanding of history, culture, identity, literature, the arts, institutions, and ideas in addition to preparing students with the critical thinking and analytical skills required in the real world. Chicana and Chicano Studies prepares students to engage important questions, political issues, and institutions as scholars, activists, and civic participants, while also equipping them to transfer to the baccalaureate level.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Chicana and Chicano Studies Program will be able to:

1. Attend and analyze educational, cultural, or political activities related to the Chicano/a Latino/a community's social issues.
2. Express in a written, oral or artistic way the significance of the Chicana/o and Mexican experience.
3. Express in a written, oral or artistic way some of the major obstacles that the Indigenous cultures of Mexico have faced since having contact with European cultures.
4. Express in a written, oral or artistic way some of the contributions that women have made to the development of the Mexican and Mexican-American experience.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

CHIC 110A	Introduction to Chicana and Chicano Studies (Active)	3.0
CHIC 141A	United States History from a Chicano Perspective (Active)	3.0
CHIC 141B	United States History from a Chicano Perspective (Active)	3.0
CHIC 170	La Chicana (Active)	3.0

SELECT SIX UNITS FROM THE FOLLOWING COURSES: **Semester Units:** 6.0

CHIC 110B	Introduction to Chicana and Chicano Studies (Active)	3.0
CHIC 130	Mexican Literature in Translation (Active)	3.0
CHIC 135	Chicana/o Literature (Active)	3.0
CHIC 138	Literature of La Raza in Latin America in Translation (Active)	3.0
CHIC 140	Chicana/o Sociology (Active)	3.0
CHIC 150	History of Mexico (Active)	3.0
CHIC 190	Chicano Images in Film (Active)	3.0
CHIC 201	The Indigenous Tradition of Mexico and Ancient Mesoamerica (Active)	3.0
CHIC 210	Chicano Culture (Active)	3.0
CHIC 230	Chicano Art (Active)	3.0
CHIC 250	Introduction to Chicana/o Dramatic Art (Active)	3.0

CHILD DEVELOPMENT: ASSOCIATE TEACHER - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Child Development: Associate Teacher prepares students to provide developmentally appropriate curriculum and environments in early care and education programs and to supervise Assistant Teachers.

Students are introduced to early education philosophies and strategies that support their understanding and application of developmentally appropriate practices for working with young children and their families in a diverse society. Emphasis is placed on the understanding of growth and development, social emotional needs, positive guidance techniques, intentional design of curriculum, and healthy and safe environments. Hands-on practical experiences in the campus child development center provides opportunities for students to apply their learning with the support and supervision of child development faculty and staff.

The Certificate of Achievement in Child Development: Associate Teacher partially fulfills the State of California matrix requirements for the Associate Teacher permit. For more information on permit requirements and application, visit www.childdevelopment.org.

Learning Outcome(s): Students who complete the Child Development: Associate Teacher Program will be able to:

1. Interpret the processes of child growth and development.
2. Examine practices that respect and support inclusion.
3. Plan and demonstrate curriculum based on developmentally appropriate practices.
4. Model ethical practices with children, families, colleagues and communities as stated in the NAEYC Code of Ethical Conduct.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

CHIL 100	Principles and Practices of Early Childhood Education (Active)	3.0
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

COMPLETE THREE (3) UNITS FROM THE FOLLOWING: **Semester Units:** 3.0

CHIL 130	Introduction to Curriculum (Active)	3.0
CHIL 133	Curriculum: Language, Literacy, and Art (Active)	3.0
CHIL 135	Curriculum: Science, Math, and Music and Movement (Active)	3.0

COMPLETE A MINIMUM OF THREE (3) UNITS FROM THE FOLLOWING: **Semester Units:** 3.0-4.0

CHIL 163	Experience in Child Guidance Techniques for Early Childhood Classrooms (Active)	3.0
CHIL 270	Work Experience (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: CITY

Summary

The Certificate of Achievement in Child Development: Master Teacher prepares students to provide service in the care, development, and instruction of children in a child care and development program, and to supervise Teachers, Associate Teachers, and Assistants. Students who complete the Certificate of Achievement in Child Development: Master Teacher are prepared to serve as a coordinator of curriculum and staff development in a child care and development program.

Students are introduced to early education philosophies and strategies that support their understanding and application of developmentally appropriate practices for working with young children and their families in a diverse society. Emphasis is placed on the understanding of growth and development, social emotional needs, positive guidance techniques, and intentional design of curriculum experiences and healthy and safe environments. Hands-on practical experiences in the campus child development center provides opportunities for students to apply their learning with the support and supervision of child development faculty and staff.

Learning Outcome(s): Students who complete the Child Development: Master Teacher Program will be able to:

1. Interpret the processes of child growth and development.
2. Examine practices that respect and support inclusion.
3. Plan and demonstrate curriculum based on developmentally appropriate practices.
4. Model ethical practices with children, families, colleagues and communities as stated in the NAEYC Code of Ethical Conduct.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

CHIL 100	Principles and Practices of Early Childhood Education (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 120	Observation and Assessment in Early Childhood Programs (Active)	3.0
CHIL 130	Introduction to Curriculum (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 163	Experience in Child Guidance Techniques for Early Childhood Classrooms (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

SELECT ONE COURSE FROM THE FOLLOWING: **Semester Units:** 3.0

CHIL 135	Curriculum: Science, Math, and Music and Movement (Active)	3.0
CHIL 133	Curriculum: Language, Literacy, and Art (Active)	3.0

SELECT TWO UNITS FROM THE FOLLOWING: **Semester Units:** 2.0

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

COMPLETE A MINIMUM OF SIX TO SEVEN (6-7) UNITS FROM THE FOLLOWING SPECIALIZATIONS: **Semester Units:** 6.0-7.0

ADMINISTRATION **Semester Units:** 0.0

CHIL 202	Administration of Early Childhood Programs (Active)	3.0
CHIL 210	Supervision of Early Childhood Programs (Active)	3.0

Diverse Learners

CHIL 150	Teaching in a Diverse Society (Active)	3.0
CHIL 166	Curriculum for Diverse Learners (Active)	3.0

Infant/Toddler

CHIL 175	Infant-Toddler Growth and Development (Active)	3.0
CHIL 176	Principles of Infant-Toddler Caregiving (Active)	3.0

School Age

MUSI 110	Music for Elementary School Teachers (Active)	3.0
MATH 210A	Concepts of Elementary School Mathematics I (Active)	3.0
MATH 210B	Concepts of Elementary School Mathematics II (Active)	3.0
MATH 212	Children's Mathematical Thinking (Active)	1.0
EXSC 240	Physical Education in the Elementary Schools (Active)	3.0

CHILD DEVELOPMENT: TEACHER - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Child Development: Teacher prepares students to plan and implement developmentally appropriate curriculum for early childhood education programs and to supervise Assistant and Associate Teachers in the classroom.

Students are introduced to early education philosophies and strategies that support their understanding and application of developmentally appropriate practices for working with young children and their families in a diverse society. Emphasis is placed on the understanding of growth and development, social emotional needs, positive guidance techniques, and intentional design of curriculum experiences and healthy and safe environments. Hands-on practical experiences in the campus child development center provides opportunities for students to apply their learning with the support and supervision of child development faculty and staff.

The Certificate of Achievement in Child Development: Teacher partially fulfills the State of California matrix requirements for the Teacher permit. For more information on permit requirements and application, visit www.childdevelopment.org.

Learning Outcome(s): Students who complete the Child Development: Teacher Program will be able to:

1. Interpret the processes of child growth and development.
2. Examine practices that respect and support inclusion.
3. Plan and demonstrate curriculum based on developmentally appropriate practices.
4. Model ethical practices with children, families, colleagues and communities as stated in the NAEYC Code of Ethical Conduct.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

CHIL 100	Principles and Practices of Early Childhood Education (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 120	Observation and Assessment in Early Childhood Programs (Active)	3.0
CHIL 130	Introduction to Curriculum (Active)	3.0
		3.0
CHIL 133	Curriculum: Language, Literacy, and Art (Active)	3.0

OR		
CHIL 135	Curriculum: Science, Math, and Music and Movement (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 150	Teaching in a Diverse Society (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0

Complete a minimum of one (1) course from the following: **Semester Units:** 1.0-4.0

CHIL 163	Experience in Child Guidance Techniques for Early Childhood Classrooms (Active)	3.0
CHIL 270	Work Experience (Active)	1.0-4.0

COMMERCIAL PHOTOGRAPHY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Commercial Photography Certificate of Performance prepares students for entry-level employment and/or self-employment in commercial photography. Emphasis is placed on grounding students in the fundamentals of digital photography, retouching, studio lighting techniques, and portraiture, culminating in a polished commercial portfolio that can be used to obtain employment as a commercial photography assistant, and/or freelance commercial photographer.

Faculty recommend students complete classes in the order presented.

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 Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 201A	Photographic Lighting Techniques I (Active)	3.0
PHOT 220	Portraiture (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

COMMUNICATION STUDIES - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Communication Studies program is committed to providing students with the theoretical and practical tools required for effective communication in fulfilling human needs and enhancing relationships in face-to-face, virtual, and cultural environments. Emphasis is placed on proficiency in public speaking, interpersonal communication, intercultural communication, voice and articulation, small group communication, and argumentation.

The Communication Studies program provides students the opportunity to gain effective communication skills which are essential and highly demanded in educational, professional, and social settings. Through critical thinking, observation, and performance, students recognize the importance of messages in an interconnected multicultural community. The Associate Degree or Certificate of Performance in Communication Studies offer students enhancement of self-development and foundational tools for relational success.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Communication Studies Program will be able to:

1. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.
4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

COMM C1000	Introduction to Public Speaking (Historical)	3.0

Select 15 units from the following courses: **Semester Units:** 15.0

COMS 101	Voice and Articulation (Active)	3.0
COMS 104	Advanced Public Communication (Active)	3.0
COMS 135	Interpersonal 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

COMMUNICATION STUDIES - CERTIFICATE OF PERFORMANCE: CITY

Summary

This award is for students who have demonstrated a competence in Communication Studies by taking classes to enhance their communication skills. These skills will benefit them in a variety of fields related to Communication Studies (advertising, public relations, community service, counseling, education, human resources, journalism, management, marketing, performing arts, politics, and radio/podcast/television/film) as well as degrees and careers outside of Communication Studies where critical thinking, research, performance, and presentation are essential elements.

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 Communication Studies Program will be able to:

1. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.

4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

Students should complete 9 units from the following:		
COMS 101	Voice and Articulation (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 104	Advanced Public Communication (Active)	3.0
COMS 111	Oral Interpretation (Active)	3.0
COMS 135	Interpersonal 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

COMMUNICATION STUDIES 2.0 - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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 Communications 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. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.
4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

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

Select three courses (9 units) from the following: **Semester Units:** 9.0

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

Select one course (3 units) not selected above from the following: **Semester Units:** 3.0

COMS 104	Advanced Public Communication (Active)	3.0
COMS 111	Oral Interpretation (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

COMMUNICATION STUDIES: BUSINESS - CERTIFICATE OF PERFORMANCE: CITY

Summary

This award is for students who have demonstrated a competence in Communication Studies by taking classes to enhance their communication skills, specifically in the area of business. These skills will benefit them in a variety of fields related to Communication Studies (advertising, public relations, community service, marketing, performing arts, politics, and radio/television/film) as well as degrees and careers outside of Communication Studies because communication is an essential element to any business.

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 Communication Studies: Business Program will be able to:

1. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.
4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

BUSE 119	Business Communications (Active)	3.0

Select six (6) units from the following: **Semester Units:** 6.0

COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 170	Small Group Communication (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0

COMMUNICATION STUDIES: HEALTH COMMUNICATION - CERTIFICATE OF PERFORMANCE: CITY

Summary

This award is for students who have demonstrated a competence in Communication Studies by taking classes to enhance their communication skills, specifically in the area of health communication. These skills will benefit them in a variety of fields related to Communication Studies (advertising, public relations, community service, counseling, education, human resources, journalism, management, marketing, performing arts, politics, and radio/television/film) and Health Communication (careers involving health-related and care-related messages, the goals and strategies of health care promotion, doctor-patient communication, health communication campaigns, communication in health risk and crisis, and other topics in various contexts, and the communication surrounding wellness, illness, and health care in personal and professional relationships).

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 Communication Studies: Health Communication Program will be able to:

1. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.
4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 3.0
HEAL 101	Health and Lifestyle (Active)	3.0

Select six (6) units from the following:		**Semester Units:** 6.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 104	Advanced Public Communication (Active)	3.0
COMS 135	Interpersonal Communication (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0

COMMUNICATION STUDIES: VOICE AND PERFORMANCE - CERTIFICATE OF PERFORMANCE

Summary

The Certificate of Performance in Communication Studies: Voice and Performance is for students who have demonstrated a competence in communication studies by taking classes to enhance their communication skills, specifically in the area of voice and performance. These skills will benefit them in a variety of fields related to communication studies (advertising, public relations, community service, marketing, performing arts, politics, film, journalism, and media production) as well as degrees and careers outside of communication studies where performance and presentation are essential elements.

Students must complete nine (9) from the courses listed.

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 Communication Studies: Voice and Performance Program will be able to:

1. Analyze the audience's backgrounds, motives and attitudes.
2. Design effective communication in order to facilitate understanding and cooperation.
3. Develop effective verbal and presentational skills for a variety of communication situations.
4. Evaluate the speaker's backgrounds, motives and attitudes.
5. Research, organize, and present a developed viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

Students must complete nine (9) units from the courses listed below:		
COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 101	Voice and Articulation (Active)	3.0
COMS 104	Advanced Public Communication (Active)	3.0
COMS 111	Oral Interpretation (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0

COMMUNICATIONS TECHNICIAN APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year apprenticeship program in the installation, maintenance and repair of communications equipment offered through the City of San Diego. This is a promotional opportunity for City of San Diego employees only and applicants must meet criteria specified by the city. For information about employment through the City of San Diego, call 619-682-1011.

This apprenticeship program combines classroom instruction in Electronic Systems with on-the-job training to prepare City of San Diego Communication Technicians in the areas of installation, maintenance and repair of communications equipment in City facilities and vehicles.

Upon successful completion of the program, the student will receive a Journeyman certificate from the State of California, and will be eligible for employment in the field of communication equipment maintenance and repair.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Communications Technician Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards for the Communications Technician.
2. Illustrate procedures utilized for Communication Technician practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in Communication Technician Apprenticeship.
3. Identify and utilize equipment and related components of Communications Technician to meet standards for measurement, calibration and Communications Technician practices at Journeyman levels.
4. Read, comprehend and apply Communications Technician instructions and design standards for Communications Technician outcomes as required by Communications Technician practice and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 225	Microcontrollers (Active)	3.0
ELDT 225L	Microcontrollers Laboratory (Active)	1.5
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0
ELDT 229	Advanced Telecommunications Networks (Active)	3.0
ELDT 229L	Advanced Telecommunications Networks Laboratory (Active)	1.0
ELDT 232	Advanced Computer Design and Interfacing (Active)	4.0
ELDT 232L	Advanced Computer Designs Laboratory (Active)	1.5

COMMUNICATIONS TECHNICIAN APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A four-year apprenticeship program in the installation, maintenance and repair of communications equipment offered through the City of San Diego. This is a promotional opportunity for City of San Diego employees only and applicants must meet criteria specified by the city. For information about employment through the City of San Diego, call 619-682-1011.

This apprenticeship program combines classroom instruction in Electronic Systems with on-the-job training to prepare City of San Diego Communication Technicians in the areas of installation, maintenance and repair of communications equipment in City facilities and vehicles.

Upon successful completion of the program, the student will receive a Journeyman certificate from the State of California, and will be eligible for employment in the field of communication equipment maintenance and repair.

Learning Outcome(s): Students who complete the Communications Technician Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards for the Communications Technician.
2. Illustrate procedures utilized for Communication Technician practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in Communication Technician Apprenticeship.
3. Identify and utilize equipment and related components of Communications Technician to meet standards for measurement, calibration and Communications Technician practices at Journeyman levels.
4. Read, comprehend and apply Communications Technician instructions and design standards for Communications Technician outcomes as required by Communications Technician practice and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

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The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 225	Microcontrollers (Active)	3.0
ELDT 225L	Microcontrollers Laboratory (Active)	1.5
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0
ELDT 229	Advanced Telecommunications Networks (Active)	3.0
ELDT 229L	Advanced Telecommunications Networks Laboratory (Active)	1.0
ELDT 232	Advanced Computer Design and Interfacing (Active)	4.0
ELDT 232L	Advanced Computer Designs Laboratory (Active)	1.5

COMMUNITY HEALTH WORK - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Community Health Work is designed to prepare students to work in a variety of health settings that utilize entry-level front-line health care workers by providing training in the core competencies needed to successfully insert themselves in the vast range of options this line of work provides.

The department recommends that students complete HUMS103 before enrolling in HUMS121. The department highly recommends that students complete HUMS 121 before enrolling in HUMS122 or HUMS 270.

Learning Outcome(s): Students who complete the Community Health Work Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging (e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/ neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0-21.0

HUMS 103	Introduction to Community Health Work (Active)	3.0
HUMS 111	Introduction to Chronic Disease (Active)	3.0

HUMS 118	Diversity and Cultural Competency (Active)	3.0
HUMS 121	Practicum 1: Core Competencies (Active)	3.0
HUMS 122	Practicum 2: Field Work (Active)	2.0
PSYC 130	Introduction to Community Psychology (Active)	3.0
HUMS 270	Work Experience (Active)	1.0-4.0

COMMUNITY HEALTH WORK - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Community Health Work is designed to introduce current and potential Community Health Workers (CHWs) to core concepts in the field of community health. This program prepares students to work in a variety of health settings that utilize entry level front line health workers. These settings may include public and private health and human service institutions, especially those that address undeserved communities.

The Community Health Work Certificate Program provides students who work in, or plan to work in, the field of Community Health Work with a fundamental academic and practical base for success in the field.

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 Community Health Work Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging(e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/ neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

HUMS 103	Introduction to Community Health Work (Active)	3.0
HUMS 111	Introduction to Chronic Disease (Active)	3.0
HUMS 112	Community Service Practicum (Active)	3.0

COMPUTER AIDED MANUFACTURING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Machine Technology program offers a variety of instruction in the process of modern manufacturing. Emphasis is placed on CAD/CAM and C.N.C. technology.

This is a two semester certificate. The department suggest students take MACT 160M first semester toward this certificate.

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 Aided Manufacturing Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
3. Utilize common measuring instruments to ensure projects are within given specifications.
4. Set up machine tools to specification in a given time period.
5. Machine projects to specifications using both conventional and CNC machines.
6. Create CNC programs using both "hand coding" and CAD/CAM software.
7. Create designs, and Toolpaths for both basic and advanced projects, using CAD/CAM software.
8. Complete necessary documentation and inspection forms as required.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

MACT 160M	Introduction to CAD/CAM (Active)	4.0
MACT 170	Introduction to CNC Controlled Vertical Machining (Active)	4.0
MACT 180M	Advanced CAD/CAM (Active)	4.0

COMPUTER AIDED MANUFACTURING (CAM) OPTION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

An Associate of Science Degree may be earned in Computer Aided Manufacturing Option. Complete the Computer Aided Manufacturing Option Certificate of Achievement as specified (32 units).

Recommended first semester enrollment: MACT 140, MACT 150, MACT 160M, and MACT 161M

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Computer Aided Manufacturing (CAM) Option Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
3. Utilize common measuring instruments to ensure projects are within given specifications.
4. Set up machine tools to specification in a given time period.
5. Machine projects to specifications using both conventional and CNC machines.
6. Create CNC programs using both "hand coding" and CAD/CAM software.
7. Create designs, and Toolpaths for both basic and advanced projects, using CAD/CAM software.
8. Complete necessary documentation and inspection forms as required.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

MACT 140	Machine Technology (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 170	Introduction to CNC Controlled Vertical Machining (Active)	4.0
MACT 171	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers I (Active)	2.0
MACT 172	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers II (Active)	2.0

Complete the following additional Computer Aided Manufacturing Option certificate of achievement courses: **Semester Units:** 12.0

MACT 161M	Applications of CAD/CAM I (Active)	2.0
MACT 162M	Applications of CAD/CAM II (Active)	2.0
MACT 180M	Advanced CAD/CAM (Active)	4.0
MACT 181M	Application in Advanced CAD/CAM I (Active)	2.0
MACT 182M	Application in Advanced CAD/CAM II (Active)	2.0

and the following C.N.C. Technology Option certificate of achievement course: **Semester Units:** 4.0

MACT 160M	Introduction to CAD/CAM (Active)	4.0

COMPUTER AIDED MANUFACTURING (CAM) OPTION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Machine Technology program offers a variety of instruction in the process of modern manufacturing. Emphasis is placed on CAD/CAM and C.N.C. technology.

Recommended first semester enrollment: MACT 140, MACT 150, MACT 160M, and MACT 161M

Learning Outcome(s): Students who complete the Computer Aided Manufacturing (CAM) Option Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
3. Utilize common measuring instruments to ensure projects are within given specifications.
4. Set up machine tools to specification in a given time period.
5. Machine projects to specifications using both conventional and CNC machines.
6. Create CNC programs using both "hand coding" and CAD/CAM software.
7. Create designs, and Toolpaths for both basic and advanced projects, using CAD/CAM software.
8. Complete necessary documentation and inspection forms as required.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

MACT 140	Machine Technology (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 170	Introduction to CNC Controlled Vertical Machining (Active)	4.0
MACT 171	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers I (Active)	2.0
MACT 172	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers II (Active)	2.0

Complete the following additional courses required for the major: **Semester Units:** 12.0

MACT 161M	Applications of CAD/CAM I (Active)	2.0
MACT 162M	Applications of CAD/CAM II (Active)	2.0
MACT 180M	Advanced CAD/CAM (Active)	4.0
MACT 181M	Application in Advanced CAD/CAM I (Active)	2.0
MACT 182M	Application in Advanced CAD/CAM II (Active)	2.0

and the following C.N.C. Technology Option certificate of achievement course: **Semester Units:** 4.0

MACT 160M	Introduction to CAD/CAM (Active)	4.0

COMPUTER NUMERICAL CONTROL (CNC) OPERATOR OPTION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Machine Technology program offers a variety of instruction in the process of modern manufacturing. Emphasis is placed on CAD/CAM and C.N.C. technology.

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 Numerical Control (CNC) Operator Option Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
3. Utilize common measuring instruments to ensure projects are within given specifications.
4. Set up machine tools to specification in a given time period.
5. Machine projects to specifications using both conventional and CNC machines.
6. Create CNC programs using both "hand coding" and CAD/CAM software.
7. Create designs, and Toolpaths for both basic and advanced projects, using CAD/CAM software.
8. Complete necessary documentation and inspection forms as required.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 170	Introduction to CNC Controlled Vertical Machining (Active)	4.0
MACT 171	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers I (Active)	2.0
MACT 172	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers II (Active)	2.0

COMPUTER NUMERICAL CONTROL (CNC) TECHNOLOGY OPTION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Machine Technology program offers a variety of instruction in the process of modern manufacturing. Emphasis is placed on CAD/CAM and C.N.C. technology.

Recommended first semester enrollment: MACT 140, MACT 150, MACT 160M, and MACT 161M

Learning Outcome(s): Students who complete the Computer Numerical Control (CNC) Technology Option Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
3. Utilize common measuring instruments to ensure projects are within given specifications.
4. Set up machine tools to specification in a given time period.
5. Machine projects to specifications using both conventional and CNC machines.

6. Create CNC programs using both "hand coding" and CAD/CAM software.
7. Create designs, and Toolpaths for both basic and advanced projects, using CAD/CAM software.
8. Complete necessary documentation and inspection forms as required.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

MACT 140	Machine Technology (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 170	Introduction to CNC Controlled Vertical Machining (Active)	4.0
MACT 171	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers I (Active)	2.0
MACT 172	Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers II (Active)	2.0

Complete the following additional course required for the major: **Semester Units:** 4.0

MACT 160M	Introduction to CAD/CAM (Active)	4.0

COMPUTER NUMERICAL CONTROL (CNC) TECHNOLOGY OPTION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Machine Technology program offers a variety of instruction in the process of modern manufacturing. Emphasis is placed on CAD/CAM and C.N.C. technology.

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 Numerical Control (CNC) Technology Option Program will be able to:

1. Demonstrate a thorough understanding of common safety policies used in modern machining facilities.
2. Solve common machining problems using various mathematical equations.
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Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

MACT 140	Machine Technology (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 160M	Introduction to CAD/CAM (Active)	4.0

COMPUTER PROGRAMMING - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

This award prepares students for entry-level employment in the field of information technology (IT). It is designed to provide students with training in the theory and practice of computer programming emphasizing business and computer applications. Students receive hands-on experience in the fundamentals of structured- and object-oriented analysis, design, and implementation of popular computer programming languages, such as Python, C++, and Java.

The Computer Information Systems Department requires students to complete all course requirements for the degree within five years.

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. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

CISC 179	Introduction to Python Programming (Active)	4.0
		4.0
CISC 183	Web Development with Ruby on Rails (Active)	4.0
OR		
CISC 193	Microsoft C# Software Engineering 1 (Active)	4.0
CISC 187	Data Structures in C++ (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 201	Advanced C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0

COMPUTER PROGRAMMING - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This award prepares students for entry-level employment in the field of information technology (IT). It is designed to provide students with training in the theory and practice of computer programming emphasizing business and computer applications. Students receive hands-on experience in the fundamentals of structured- and object-oriented analysis, design, and implementation of popular computer programming languages, such as Python, C++, and Java.

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Learning Outcome(s): Students who complete the Computer Programming Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

CISC 179	Introduction to Python Programming (Active)	4.0
		4.0
CISC 183	Web Development with Ruby on Rails (Active)	4.0
OR		
CISC 193	Microsoft C# Software Engineering 1 (Active)	4.0
CISC 187	Data Structures in C++ (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 201	Advanced C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0

COMPUTER SCIENCE - ASSOCIATE IN SCIENCE FOR TRANSFER: CITY

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.

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 major.

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 Computer Science Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0-29.0

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 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
Select one course from the following:		4.0-5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
OR		
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0

CONFLICT RESOLUTION AND MEDIATION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Conflict Resolution and Mediation Certificate offers an interdisciplinary, theoretical, philosophical and applied approach for students to enter into the academic and/or professional fields related to Conflict Resolution and Mediation. Students explore the impacts of culture, intra and inter-group communication, conflict resolution and

mediation. Students gain theory and practice to address conflicts in a personal, local, national and international level. The Conflict Resolution and Mediation program allows students access to professional experience with an organization working within a related field through participation in the required Field Work course.

Learning Outcome(s): Students who complete the Conflict Resolution and Mediation Program will be able to:

1. Contemplate, analyze, and discuss issues related to the role of culture in conflict resolution and mediation.
2. Think about their role in society through the use of conflict resolution and mediation.
3. Critically think about their own values, individual biases, and personal conflict resolution style.
4. Discover the art and science of conflict resolution and mediation.
5. Learn and understand the core principles, values, and application of conflict resolution and mediation.
6. Develop and enhance skills related to communication, listening and problem solving.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

		3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
OR		
HUMS 118	Diversity and Cultural Competency (Active)	3.0
		3.0
PSYC 130	Introduction to Community Psychology (Active)	3.0
OR		
PSYC 166	Introduction to Social Psychology (Active)	3.0
PEAC 102	Nonviolence and Conflict Resolution (Historical)	3.0
CRES 101	Conflict Resolution and Mediation (Active)	3.0
CRES 102	Mediation Skills (Active)	3.0
CRES 276	Field Work in Conflict Resolution and Mediation (Active)	3.0

CONFLICT RESOLUTION AND MEDIATION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Conflict Resolution and Mediation Certificate offers an interdisciplinary, theoretical, philosophical and applied approach for students to enter into the academic and/or professional fields related to Conflict Resolution and Mediation. Students explore the impacts of culture, intra and inter-group communication, conflict resolution and mediation. Students gain theory and practice to address conflicts in a personal, local, national and international level. The Conflict Resolution and Mediation program allows students access to professional experience with an organization working within a related field through participation in the required Field Work course.

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 Conflict Resolution and Mediation Program will be able to:

1. Contemplate, analyze, and discuss issues related to the role of culture in conflict resolution and mediation.
2. Think about their role in society through the use of conflict resolution and mediation.
3. Critically think about their own values, individual biases, and personal conflict resolution style.
4. Discover the art and science of conflict resolution and mediation.
5. Learn and understand the core principles, values, and application of conflict resolution and mediation.

6. Develop and enhance skills related to communication, listening and problem solving.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

		3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
OR		
HUMS 118	Diversity and Cultural Competency (Active)	3.0
		3.0
PSYC 130	Introduction to Community Psychology (Active)	3.0
OR		
PSYC 166	Introduction to Social Psychology (Active)	3.0
PEAC 102	Nonviolence and Conflict Resolution (Historical)	3.0
CRES 101	Conflict Resolution and Mediation (Active)	3.0
CRES 102	Mediation Skills (Active)	3.0

COSMETOLOGY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate Degree in Cosmetology provides students with the practical and theoretical cosmetology training that prepares the student for the California Board of Cosmetology examination. Students completing this degree have a competitive edge over their private school counterparts. Students not only acquire the high-level skills to compete in the industry, they also earn the opportunity to expand their educational horizon beyond the completion of the associate degree. It is strongly recommended that students consult with a counselor to determine which general education option is most appropriate for their individual educational goals.

A grade of "C" or better must be maintained in order to advance in the course sequence. The Cosmetology Department requires students to complete all required courses within seven years.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Cosmetology Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.
8. Pass the written and practical license examinations administered by the California Board of Barbering and Cosmetology.

Admission Criteria

The San Diego City College's Cosmetology Program offers courses during the spring, summer, and fall semesters. Spring and fall semester daytime programs begin at every eight-week session. Spring and fall semester evening programs begin at every twelve-week session. Prospective students must be admitted to the program in order to register for cosmetology courses. Admitted students must attend an orientation to receive important information, program rules and regulations, and program expectations. Students transferring into the San Diego City College's

Cosmetology Program cannot apply previous coursework towards the college's cosmetology degrees and certificates. Permission numbers are required to register for cosmetology courses.

Orientation

Orientation is mandatory prior to registration. Contact the Cosmetology Department Chair for a schedule of days and times.

State Board Verification

Students with previous course hours in cosmetology from another community college program or private institution must provide written State Board documentation. The California State Board of Barbering and Cosmetology requires:

- Cosmetology: 1000 hours of instruction
- Esthetics: 600 hours of instruction
- Nail Technician: 400 hours of instruction
- Barber Crossover: 100 hours of instruction

All careers require a passing score on the State Board examination to become licensed and eligible for employment.

This program is approved by: Board of Barbering and Cosmetology, 2420 Del Paseo Road Suite 100, Sacramento, CA 94244-2260.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

COSM 50L	Fundamentals of Cosmetology (Active)	6.0
COSM 60L	Intermediate Cosmetology (Active)	6.0
COSM 70L	Intermediate-Advanced Cosmetology (Active)	6.0
COSM 80L	Advanced Cosmetology (Active)	6.0

COSMETOLOGY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Cosmetology provides students with practical and theoretical cosmetology training that prepares the student for the California Board of Cosmetology examination. Students gain the knowledge and hands-on skills on all aspects of the beauty industry under the supervision of trained professionals.

A grade of "C" or better must be maintained in order to advance in the course sequence. The Cosmetology Department requires students to complete all required courses within seven years.

Learning Outcome(s): Students who complete the Cosmetology Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.
8. Pass the written and practical license examinations administered by the California Board of Barbering and Cosmetology.

Admission Criteria

The San Diego City College's Cosmetology Program offers courses during the spring, summer, and fall semesters. Spring and fall semester daytime programs begin at every eight-week session. Spring and fall semester evening programs begin at every twelve-week session. Prospective students must be admitted to the program in order to register for cosmetology courses. Admitted students must attend an orientation to receive important information, program rules and regulations, and program expectations. Students transferring into the San Diego City College's Cosmetology Program cannot apply previous coursework towards the college's cosmetology degrees and certificates. Permission numbers are required to register for cosmetology courses.

Orientation

Orientation is mandatory prior to registration. Contact the Cosmetology Department Chair for a schedule of days and times.

State Board Verification

Students with previous course hours in cosmetology from another community college program or private institution must provide written State Board documentation. The California State Board of Barbering and Cosmetology requires:

- Cosmetology: 1000 hours of instruction
- Esthetics: 600 hours of instruction
- Nail Technician: 400 hours of instruction
- Barber Crossover: 100 hours of instruction

All careers require a passing score on the State Board examination to become licensed and eligible for employment.

This program is approved by: Board of Barbering and Cosmetology, 2420 Del Paseo Road Suite 100, Sacramento, CA 94244-2260.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

COSM 50L	Fundamentals of Cosmetology (Active)	6.0
COSM 60L	Intermediate Cosmetology (Active)	6.0
COSM 70L	Intermediate-Advanced Cosmetology (Active)	6.0
COSM 80L	Advanced Cosmetology (Active)	6.0

COSMETOLOGY TEACHER TRAINING PROGRAM - CERTIFICATE OF PERFORMANCE: CITY

Summary

Students learn effective teaching methods to assist Cosmetology and Esthetician students with developing skills in sales, community and client relations, care of skin, hair and nails, as well as salon management. Emphasis is focused on lesson planning, oral presentations, and evaluations that teach the practical aspects of cosmetology science. Students must have obtained an approved California State Board of Barbering and Cosmetology license to enroll in the program.

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 Cosmetology Teacher Training Program Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

COSM 94A	Cosmetology Teacher Training Program I (Active)	4.5
COSM 94B	Cosmetology Teacher Training Program II (Active)	4.5

CREATIVE WRITING - CERTIFICATE OF PERFORMANCE

Summary

The goals of the creative writing certificate are to encourage creative writing students to learn and grow as writers while providing them with a writing community, to help prepare students for upper division writing programs, and to give students a program of study that will help guide the development of their writing 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 Creative Writing Program will be able to:

1. Apply appropriate research strategies and citation formats.
2. Read and comprehend texts, recognize author strategies, purpose, perspective, and argument, and use critical thinking to evaluate a variety of writing.
3. Organize ideas and information and express them clearly and effectively in writing for both academic and workplace contexts for different communicative purposes.
4. Describe, explain, and analyze multiple perspectives on issues in ways that demonstrate global awareness and appreciation of diversity in its many manifestations.
5. Apply strategies both inside and outside the classroom that reflect an understanding of the reading and writing processes in order to become life-long learners, critical thinkers, and active citizens.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

ENGL 249A	Introduction to Creative Writing I (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

ENGL 249B	Introduction to Creative Writing II (Active)	3.0
ENGL 245A	Writing Creative Nonfiction (Active)	3.0
ENGL 245B	Advanced Creative Nonfiction (Active)	3.0
ENGL 247A	Writing Seminar - Poetry (Active)	3.0
ENGL 252A	Fundamentals of Fiction Writing (Active)	3.0
ENGL 252B	Intermediate Fiction Writing (Active)	3.0
DRAM 108	Playwriting (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

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 240	Shakespeare (Active)	3.0
BLAS 155	African American Literature (Active)	3.0
CHIC 135	Chicana/o Literature (Active)	3.0

CUSTOMER RELATIONSHIP MANAGEMENT - CERTIFICATE OF PERFORMANCE: CITY

Summary

This program provides an in-depth exploration of customer relationship management. Students study customer service and professional selling practices used in customer relationship management. Emphasis is placed on careers in customer service and sales fields.

The goal of this program is to introduce students to customer service techniques, client communication processes, and the stages of professional selling to increase their opportunities for employment in the customer relationship management sector. Students who successfully complete this Certificate of Performance will be able to practice and enhance their customer listening and communication skills, customer service and problem solving, and sales presentation knowledge. Program SLO: Analyze, organize, and compose various types of written and oral business communications. This is a department award in recognition of information on the transcript and does not imply meeting a graduation requirement.

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 Customer Relationship Management Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

BUSE 102	Introduction to Customer Service (Active)	3.0
MARK 105	Professional Selling (Active)	3.0

CYBER DEFENSE AND ANALYSIS - BACHELOR OF SCIENCE DEGREE: CITY

Summary

The Bachelor of Science in Cyber Defense and Analysis follows the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework and the Department of Defense (DoD) Cyber Workforce Framework (DCWF) with the common goal of developing critical knowledge, skills, and abilities to perform real-time defensive

cyber operations. Program emphasis is on building strong technical and analytical foundations and the strategic application of advanced techniques to actively monitor and defend core operational technology, network hardware and systems, critical infrastructure, and emerging technology. Additionally, students explore the ethical and societal impacts of the development and use of cyber technology.

This pathway includes preparation for up to multiple industry-recognized certifications geared toward preparing students to be job-ready for a successful career in cyber workforce roles that impact an organization's ability to analytically assess and respond to modern cybersecurity threats while managing risk and maintaining business continuity.

Careers in the cyber workforce or information security field include cyber defense analyst, information security consultant, security administrator, security analyst, security engineer, security auditor, incident responder, penetration tester, vulnerability assessor, support technician, systems administrator, network administrator, and network specialist.

Learning Outcome(s): Students who complete the Cyber Defense and Analysis Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Program Goals

- Be poised to enter professional positions in a cybersecurity related occupation or continue to a graduate study in cybersecurity or a related field of interest.
- Be informed, active individuals engaged in the global community, social justice advocacy, and the highest level of professional ethics.
- Pursue lifelong learning opportunities to improve and expand their technical and professional skills.

Admission Criteria

Admission to a community college hosting the baccalaureate degree program does not guarantee admission into the program. Students who wish to declare a major in the baccalaureate degree program may need to meet minimum criteria in order to be admitted into the program. Admission into the program may be selective due to availability of practicum sites, limitations in the number of students who can be accommodated in the program, and/or other limitations. Students admitted to the baccalaureate degree program must be able to meet the essential elements of the courses and programs.

San Diego City College uses a multicriteria screening process to evaluate applicants for admission. This process may include, but shall not necessarily be limited to, all of the following:

- Academic degrees or diplomas, or relevant certificates, held by an applicant.
- Grade-point average in relevant coursework.
- Any relevant work or volunteer experience.
- Professional licensing and/or state/national certification.
- Life experiences or special circumstances of an applicant, including, but not necessarily limited to, the following experiences or circumstances: disability, low family income, first generation of family to attend college, need to work, disadvantaged social or educational environment, extenuating circumstances, refugee, or veteran status.
- Proficiency or advanced level coursework in languages other than English.

Community colleges approved to offer a baccalaureate degree program shall grant priority enrollment and admission to military veterans, foster youth, students in the Community College Extended Opportunity Programs and Services program, students eligible for Disabled Student Programs and Services, and students who are California Work Opportunity and Responsibility to Kids recipients consistent with Education Code Sections 66025.8, 66025.9, 66025.91 and 66025.92.

Program Prerequisite

Applicants must have successfully completed the program prerequisites and lower division general education requirements, each with a grade of "C" (or "P") or better:

- San Diego City College's Associate Degree in Cybersecurity, or equivalent, satisfies the program prerequisites required for the Cyber Defense and Analysis Baccalaureate Degree.
- Credit for prior learning or experience working in a cyber defense field may be accepted for course credit upon approval of the program director.
- Completion of one of the approved lower-division general education patterns listed in the *Academic Requirements–Baccalaureate Degree* section of this catalog

For more information, visit Cyber Defense and Analysis.

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

LOWER DIVISION COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

Courses Required for the Major:		30.0
CISC 179	Introduction to Python Programming (Active)	4.0
INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 101	Introduction to Information Security (Active)	3.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 125	Cloud Architecture (Cloud+) (Active)	3.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0
INWT 170	Network Defense & Countermeasures (CySA+) (Active)	3.0
INWT 201	Ethical Hacking and Penetration Testing (Active)	3.0
Select one course from the following:		3.0
BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0

PSYC 258	Behavioral Science Statistics (Active)	3.0
Select one course from the following:		3.0
CISC 246	Discrete Mathematics for Computer Science (Active)	3.0
MATH 245	Discrete Mathematics (Active)	3.0

UPPER DIVISION COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 54.0

Enrollment in the upper-division courses is restricted to students admitted to the Cyber Defense and Analysis program.

BUSE 440	Cyber Law and Ethics (Active)	3.0
CISC 450	Security Analytics and Visualization (Active)	3.0
ENGL 402	Advanced Technical Writing (Active)	3.0
CYDA 400	Emerging Technology and Cybersecurity (Active)	3.0
CYDA 410	Modern Cryptography (Active)	3.0
CYDA 420	Applied Network Security Monitoring (NSM) (Active)	3.0
CYDA 430	Applied Intrusion Detection and Analysis (Active)	3.0
CYDA 440	Deconstructing Malware (Active)	3.0
CYDA 450	Network Forensics (Active)	3.0
CYDA 460	Digital Forensics (Active)	3.0
CYDA 500	Cyber Incident Response (Active)	3.0
CYDA 510	Disaster Response and Recovery (Active)	3.0
CYDA 520	Cyber Threat Intelligence (CTI) (Active)	3.0
CYDA 530	Advanced Security Implementation and Management (Active)	3.0
CYDA 540	Critical Infrastructure and Supply Chain Protection (Active)	3.0
CYDA 550	Systems and Network Auditing (Active)	3.0
CYDA 560	Operational Security Architecture (Active)	3.0
CYDA 570	Cyber Defense and Analysis Capstone (Active)	3.0

CYBER OPERATIONS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Cyber Operations provides an intermediate-level study of cybersecurity blue team and red team methodologies through a curriculum that follows the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework with the common goal of developing critical knowledge, skills, and abilities to perform cybersecurity tasks. The curriculum includes simulated scenarios in the domains of system vulnerabilities, managing risk, and responding to cyber incidents. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in cybersecurity workforce roles that have an impact on an organization's ability to protect its data, systems, and operations.

The Computer Information Systems department requires student to complete all requirements for the degree within five years.

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 Cyber Operations Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

INWT 170	Network Defense & Countermeasures (CySA+) (Active)	3.0
INWT 201	Ethical Hacking and Penetration Testing (Active)	3.0

CYBERSECURITY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Cybersecurity follows the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework and the Department of Defense (DoD) Cyber Workforce Framework (DCWF) with the common goal of developing knowledge, skills, and abilities (KSAs) to perform foundational cybersecurity tasks. The curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in the domains of security provisions, operations and maintenance, governance, protection and defense, analysis, collection, and investigation.

This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in cybersecurity workforce roles that have an impact on an organization's ability to protect its data, systems, and operations.

The Computer Information Systems department requires students to complete all requirements for the degree within five years.

General Education
In addition to the courses listed, students must complete one of the following general education options:

- The LOCAL/DISTRICT pattern of General Education coursework allows students to receive an Associate of Arts or an Associate of Science degree from San Diego City College.
- The California General Education Transfer Curriculum (Cal-GETC). Cal-GETC is accepted by all California State University (CSU) campuses and most University of California (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 option is most appropriate for their individual educational goals.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Cybersecurity Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.

4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

CISC 179	Introduction to Python Programming (Active)	4.0
INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 101	Introduction to Information Security (Active)	3.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 125	Cloud Architecture (Cloud+) (Active)	3.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0
INWT 170	Network Defense & Countermeasures (CySA+) (Active)	3.0
INWT 201	Ethical Hacking and Penetration Testing (Active)	3.0
Select one course from the following:		3.0
BUSE 115	Statistics for Business (Active)	3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
Select one course from the following:		3.0
CISC 246	Discrete Mathematics for Computer Science (Active)	3.0
MATH 245	Discrete Mathematics (Active)	3.0

CYBERSECURITY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Cybersecurity follows the National Initiative for Cybersecurity Education (NICE) Cybersecurity Workforce Framework and the Department of Defense (DoD) Cyber Workforce Framework (DCWF) with the common goal of developing knowledge, skills, and abilities (KSAs) to perform foundational cybersecurity tasks. The curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in the domains of security provisions, operations and maintenance, governance, protection and defense, analysis, collection, and investigation.

This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in cybersecurity workforce roles that have an impact on an organization's ability to protect its data, systems, and operations.

The Computer Information Systems department requires students to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Cybersecurity Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.

4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

CISC 179	Introduction to Python Programming (Active)	4.0
INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 101	Introduction to Information Security (Active)	3.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 125	Cloud Architecture (Cloud+) (Active)	3.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0
INWT 170	Network Defense & Countermeasures (CySA+) (Active)	3.0
INWT 201	Ethical Hacking and Penetration Testing (Active)	3.0

DANCE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Courses in choreography, dance history, and global dance traditions, along with technical training and improvisation are among those required for the Associate of Arts degree in Dance. Dance students have opportunities to perform every semester and work closely with the City College Theatre and Musical Theatre departments in productions for public performance.

The degree prepares the student with a solid foundation of kinesthetic training in one or more dance genres, principles of choreography and improvisation, and movement education and wellness, along with an emphasis in production and performance. Graduates are qualified to transfer with a major in Dance to UCs and CSUs as well as private colleges and universities.

The Associate of Arts in Dance 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 San Diego City College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Dance Program will be able to:

1. Demonstrate knowledge of the history of dance including ballet, modern, jazz, Broadway/musical theatre, and global dance forms of dance.
2. Demonstrate knowledge of aesthetic perception of various dance forms, and critical analysis and response to performance.
3. Demonstrate knowledge of an understanding of choreographic, technical and improvisational elements of dance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.5

DANC 111	Global Dance Traditions (Active)	2.0
DANC 112C	Ballet III (Active)	1.5

DANC 112D	Ballet IV (Active)	1.5
DANC 142C	Modern Dance III (Active)	1.5
DANC 142D	Modern Dance IV (Active)	1.5
DANC 176B	Dance Improvisation II (Active)	1.5
DANC 181	History of Dance (Active)	3.0
DANC 183	Music for Dance (Active)	2.0
DANC 253	Choreography (Active)	2.0

Select six (6) units from the following: **Semester Units:** 6.0

DANC 112A	Ballet I (Active)	1.5
DANC 112B	Ballet II (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 117B	Tap Dance II (Active)	1.5
DANC 117C	Tap Dance III (Active)	1.5
DANC 117D	Tap Dance IV (Active)	1.5
DANC 122A	Hip Hop I (Active)	1.5
DANC 122B	Hip Hop II (Active)	1.5
DANC 122C	Hip Hop III (Active)	1.5
DANC 122D	Hip Hop IV (Active)	1.5
DANC 127	Movement for Wellness (Active)	2.0
DANC 130A	Dance Repertoire (Active)	1.0
DANC 137A	Jazz Dance I (Active)	1.5
DANC 137B	Jazz Dance II (Active)	1.5
DANC 137C	Jazz Dance III (Active)	1.5
DANC 137D	Jazz Dance IV (Active)	1.5
DANC 142A	Modern Dance I (Active)	1.5
DANC 142B	Modern Dance II (Active)	1.5
DANC 150A	Dance Making: Ballet (Active)	1.0
DANC 151A	Dance Making: Jazz (Active)	1.0
DANC 152A	Dance Making: Modern (Active)	1.0
DANC 153A	Dance Making: Dance Theatre (Active)	1.0
DANC 160A	Pilates - Stretch and Conditioning (Active)	1.0-1.5
DANC 160B	Pilates - Alignment and Correctives (Active)	1.0-1.5
DANC 176A	Dance Improvisation (Active)	1.5
DANC 178A	Advanced Commercial Dance I (Active)	1.5
DANC 178B	Advanced Commercial Dance II (Active)	1.5
DANC 179A	Advanced Classical Dance I (Active)	1.5
DANC 179B	Advanced Classical Dance II (Active)	1.5
DANC 180A	Advanced Contemporary Dance I (Active)	1.5
DANC 180B	Advanced Contemporary Dance II (Active)	1.5

Select four (4) units from the following: **Semester Units:** 4.0

DANC 261A	Dance Performance I (Active)	2.0
DANC 261B	Dance Performance II (Active)	2.0
DANC 261C	Dance Performance III (Active)	2.0
DANC 261D	Dance Performance IV (Active)	2.0
DANC 271A	Stage Costuming for Dance (Active)	2.0
DANC 271B	Makeup for Dance Productions (Active)	2.0
DANC 271C	Lighting Design for Dance Production (Active)	2.0
DANC 271D	Sound Design for Dance Production (Active)	2.0

DANCE - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Courses in choreography, dance history, and global dance traditions, along with technical training and improvisation are among those required for the Certificate of Achievement in Dance. Dance students have opportunities to perform every semester and work closely with the City College Theatre and Musical Theatre departments in productions for public performance.

This certificate prepares the dance student with a solid foundation of kinesthetic training in one or more genres, principles of choreography and improvisation, movement education and wellness, along with an emphasis in performance. Graduates are qualified to work in regional dance theatre, as a professional dancer in industrial work in areas such as Los Angeles, and as a certified dance instructor, or independent choreographer.

Learning Outcome(s): Students who complete the Dance Program will be able to:

1. Demonstrate knowledge of the history of dance including ballet, modern, jazz, Broadway/musical theatre, and global dance forms of dance.
2. Demonstrate knowledge of aesthetic perception of various dance forms, and critical analysis and response to performance.
3. Demonstrate knowledge of an understanding of choreographic, technical and improvisational elements of dance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.5

DANC 111	Global Dance Traditions (Active)	2.0
DANC 112C	Ballet III (Active)	1.5
DANC 112D	Ballet IV (Active)	1.5
DANC 142C	Modern Dance III (Active)	1.5
DANC 142D	Modern Dance IV (Active)	1.5
DANC 176B	Dance Improvisation II (Active)	1.5
DANC 181	History of Dance (Active)	3.0
DANC 183	Music for Dance (Active)	2.0
DANC 253	Choreography (Active)	2.0

Select six (6) units from the following: **Semester Units:** 6.0

DANC 112A	Ballet I (Active)	1.5
DANC 112B	Ballet II (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 117B	Tap Dance II (Active)	1.5
DANC 117C	Tap Dance III (Active)	1.5
DANC 117D	Tap Dance IV (Active)	1.5
DANC 122A	Hip Hop I (Active)	1.5
DANC 122B	Hip Hop II (Active)	1.5
DANC 122C	Hip Hop III (Active)	1.5
DANC 122D	Hip Hop IV (Active)	1.5
DANC 127	Movement for Wellness (Active)	2.0
DANC 130A	Dance Repertoire (Active)	1.0
DANC 137A	Jazz Dance I (Active)	1.5
DANC 137B	Jazz Dance II (Active)	1.5
DANC 137C	Jazz Dance III (Active)	1.5
DANC 137D	Jazz Dance IV (Active)	1.5
DANC 142A	Modern Dance I (Active)	1.5

DANC 142B	Modern Dance II (Active)	1.5
DANC 150A	Dance Making: Ballet (Active)	1.0
DANC 151A	Dance Making: Jazz (Active)	1.0
DANC 152A	Dance Making: Modern (Active)	1.0
DANC 153A	Dance Making: Dance Theatre (Active)	1.0
DANC 160A	Pilates - Stretch and Conditioning (Active)	1.0-1.5
DANC 160B	Pilates - Alignment and Correctives (Active)	1.0-1.5
DANC 176A	Dance Improvisation (Active)	1.5
DANC 179A	Advanced Classical Dance I (Active)	1.5
DANC 179B	Advanced Classical Dance II (Active)	1.5
DANC 180A	Advanced Contemporary Dance I (Active)	1.5
DANC 180B	Advanced Contemporary Dance II (Active)	1.5

Select four (4) units from the following: **Semester Units:** 4.0

DANC 261A	Dance Performance I (Active)	2.0
DANC 261B	Dance Performance II (Active)	2.0
DANC 261C	Dance Performance III (Active)	2.0
DANC 261D	Dance Performance IV (Active)	2.0
DANC 271A	Stage Costuming for Dance (Active)	1.0-2.0
DANC 271B	Makeup for Dance Productions (Active)	1.0-2.0
DANC 271C	Lighting Design for Dance Production (Active)	1.0-2.0
DANC 271D	Sound Design for Dance Production (Active)	1.0-2.0

DANCE - CERTIFICATE OF PERFORMANCE: CITY

Summary

Courses in choreography, dance history, and global dance traditions, along with technical training and improvisation are among those required for the Certificate of Performance in Dance. Dance students have opportunities to perform every semester and work closely with the City College Theatre and Musical Theatre departments in production for public performance.

This certificate prepares the dance student with a solid foundation of kinesthetic training in one or more idioms, principles of choreography, movement education, along with the process of performance. Graduates are qualified to work in regional dance theatre, as a professional dancer in industrial work in areas such as Los Angeles, and as a certified dance instructor or independent choreographer.

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 Dance Program will be able to:

1. Demonstrate knowledge of the history of dance including ballet, modern, jazz, Broadway/musical theatre, and global dance forms of dance.
2. Demonstrate knowledge of aesthetic perception of various dance forms, and critical analysis and response to performance.
3. Demonstrate knowledge of an understanding of choreographic, technical and improvisational elements of dance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.5

DANC 176B	Dance Improvisation II (Active)	1.5
DANC 181	History of Dance (Active)	3.0
DANC 253	Choreography (Active)	2.0

Select 4.5 units from the following: **Semester Units:** 4.5

DANC 111	Global Dance Traditions (Active)	2.0
DANC 112A	Ballet I (Active)	1.5
DANC 112B	Ballet II (Active)	1.5
DANC 112C	Ballet III (Active)	1.5
DANC 112D	Ballet IV (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 117B	Tap Dance II (Active)	1.5
DANC 117C	Tap Dance III (Active)	1.5
DANC 117D	Tap Dance IV (Active)	1.5
DANC 122A	Hip Hop I (Active)	1.5
DANC 122B	Hip Hop II (Active)	1.5
DANC 122C	Hip Hop III (Active)	1.5
DANC 122D	Hip Hop IV (Active)	1.5
DANC 125A	Latin American Dance I (Active)	1.0-1.5
DANC 125B	Latin American Dance II (Active)	1.0-1.5
DANC 127	Movement for Wellness (Active)	2.0
DANC 137A	Jazz Dance I (Active)	1.5
DANC 137B	Jazz Dance II (Active)	1.5
DANC 137C	Jazz Dance III (Active)	1.5
DANC 137D	Jazz Dance IV (Active)	1.5
DANC 142A	Modern Dance I (Active)	1.5
DANC 142B	Modern Dance II (Active)	1.5
DANC 142C	Modern Dance III (Active)	1.5
DANC 142D	Modern Dance IV (Active)	1.5
DANC 160A	Pilates - Stretch and Conditioning (Active)	1.0-1.5
DANC 160B	Pilates - Alignment and Correctives (Active)	1.0-1.5
DANC 180A	Advanced Contemporary Dance I (Active)	1.5
DANC 180B	Advanced Contemporary Dance II (Active)	1.5

Select four (4) units from the following: **Semester Units:** 4.0

DANC 176A	Dance Improvisation (Active)	1.5
DANC 150A	Dance Making: Ballet (Active)	1.0
DANC 151A	Dance Making: Jazz (Active)	1.0
DANC 152A	Dance Making: Modern (Active)	1.0
DANC 153A	Dance Making: Dance Theatre (Active)	1.0
DANC 183	Music for Dance (Active)	2.0
DANC 261A	Dance Performance I (Active)	2.0
DANC 261B	Dance Performance II (Active)	2.0
DANC 261C	Dance Performance III (Active)	2.0
DANC 261D	Dance Performance IV (Active)	2.0
DANC 271A	Stage Costuming for Dance (Active)	2.0
DANC 271B	Makeup for Dance Productions (Active)	2.0
DANC 271C	Lighting Design for Dance Production (Active)	2.0
DANC 271D	Sound Design for Dance Production (Active)	2.0

DESKTOP SUPPORT TECHNICIAN I - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Desktop Support Technician I provides students with an introductory level study in administering and supporting computers and operating systems. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in installation, administration, and troubleshooting of computer hardware and software. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

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 Desktop Support Technician I Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 111	Windows Desktop Administration (Active)	3.0

DESKTOP SUPPORT TECHNICIAN II - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Desktop Support Technician II provides students with an intermediate level study in administering and supporting computers, operating systems, and networks. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in installation, administration, and troubleshooting of computer hardware and software, enterprise networks, and security systems. This pathway includes preparation for industry recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

The Computer Information Systems department requires students to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Desktop Support Technician II Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 17.0

INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 111	Windows Desktop Administration (Active)	3.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0

DIGITAL PHOTOGRAPHY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Digital Photography Certificate of Performance prepares students for entry-level employment and/ or self-employment in commercial photography. Emphasis is placed on the fundamentals of digital photography, including capture, image manipulation, retouching, and color management. Students develop a comprehensive portfolio to showcase the technical and creative aspects of their work.

Faculty recommend students complete classes in the order presented.

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 Digital Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 103	Digital Directed Photo Lab Studies (Active)	1.0

PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 243	Advanced Digital Photography (Active)	3.0
PHOT 224	Color Management for Digital Photography (Active)	1.0

DRAFTING OPTION - CERTIFICATE OF ACHIEVEMENT: CITY

The engineering curriculum is heavily based on mathematics and physical sciences. Students benefit by having access to state-of-the-art CAD/ CAM facilities as well as to a high technology center that is at the cutting edge of new technologies, thereby enhancing career choices and rewards. This pre-engineering preparation provides an excellent foundation for transfer to a four-year university as an engineering major.

Upon successful completion, the student will be able to:

- Demonstrate skill in engineering drawing.
- Demonstrate proficiency in at least one three-dimensional engineering design software.
- Prepare reports using software tools.

Learning Outcome(s): Students who complete the Drafting Option Program will be able to:

1. Develop analytical problem solving skills in Engineering.
2. Demonstrate introductory skills in engineering drawing and design.

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

ENGE 108	Dimensioning and Tolerancing (Active)	3.0
ENGE 111	Introduction to Computer-Aided Design (Active)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0
ENGE 152	Engineering Design (Active)	3.0
MATH 96	Intermediate Algebra and Geometry (Active)	5.0
ENGL C1000	Academic Reading and Writing (Active)	3.0

EARLY CARE AND EDUCATION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science degree in Early Care and Education prepares students for a range of opportunities in the child development and education fields. Emphasis is placed on current best practices and tools utilized in the field, inquiry, and reflective practice. Course work, training, and supervised practicum experiences provide the foundational knowledge and skills necessary to be successful in the workforce and assist students in expediting the process of meeting requirements for the State of California Child Development Permits and California State Department of Social Services, Title 22, Community Care Licensing.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Early Care and Education Program will be able to:

1. Interpret the processes of child growth and development.
2. Examine practices that respect and support inclusion.
3. Plan and demonstrate curriculum based on developmentally appropriate practices.
4. Model ethical practices with children, families, colleagues and communities as stated in the NAEYC Code of Ethical Conduct.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.0

CHIL 100	Principles and Practices of Early Childhood Education (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 120	Observation and Assessment in Early Childhood Programs (Active)	3.0
CHIL 130	Introduction to Curriculum (Active)	3.0
		3.0
CHIL 133	Curriculum: Language, Literacy, and Art (Active)	3.0
OR		
CHIL 135	Curriculum: Science, Math, and Music and Movement (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 150	Teaching in a Diverse Society (Active)	3.0
CHIL 180	Nutrition, Health, and Safety for Children (Active)	3.0
CHIL 193	Early Childhood Practicum (Active)	5.0

Complete a minimum of three (3) units from the following: **Semester Units:** 3.0-4.0

CHIL 163	Experience in Child Guidance Techniques for Early Childhood Classrooms (Active)	3.0
CHIL 270	Work Experience (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

ECONOMICS - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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. Define scarcity, and show how it relates to the concepts of choice and cost.
2. Explain the role of prices in allocating goods, services and factors of production.
3. Outline the role of comparative advantage in exchange.

4. Utilize the demand and supply model and use the model to critically analyze real world examples.
5. Analyze the impacts of economics on social values and policy.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0-15.0

ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
Select one course from the following:		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
Select one course or course sequence from the following:		3.0-4.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
BUSE 115	Statistics for Business (Active)	3.0
OR		
POLI 201	Elementary Statistics for Political Science (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
AND		
PSYC 259	Behavioral Science Statistics Laboratory (Active)	1.0

SELECT TWO OF THE FOLLOWING COURSES (6-8 units): **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
CISC 181	Principles of Information Systems (Active)	4.0
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

ECONOMICS - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This Certificate of Achievement in Economics provides students the opportunity to learn core concepts and gain insight into the field of economics as well as serves as a steppingstone toward higher academic degrees in the field of economics. This award provides students with a pathway towards completing the Associate in Arts in Economics for Transfer Degree.

Learning Outcome(s): Students who complete the Economics Program will be able to:

1. Define scarcity, and show how it relates to the concepts of choice and cost.
2. Explain the role of prices in allocating goods, services and factors of production.
3. Outline the role of comparative advantage in exchange.
4. Utilize the demand and supply model and use the model to critically analyze real world examples.
5. Analyze the impacts of economics on social values and policy.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0

Complete one of the following courses (3 - 5 units): **Semester Units:** 3.0-5.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 119	Business Communications (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
MATH 116	College and Matrix Algebra (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

Complete one of the following courses not already completed above (3 - 4 units): **Semester Units:** 3.0-4.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0
BUSE 119	Business Communications (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
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

ELECTRICAL CONTROL SYSTEMS OPTION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Electrical Control Systems Option emphasizes the study of electrical control system theory including standard motor controls, transducers, static control devices, programmed controllers, and remote electronic controls.

Learning Outcome(s): Students who complete the Electrical Control Systems Option Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.
5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 25.0

ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0

ELCT 141	Electrical Theory IV (Active)	3.0
ELCT 141L	Electrical Laboratory IV (Active)	2.0
ELCT 200	Electrical Control Systems (Active)	3.0
ELCT 200L	Electrical Control Systems Laboratory (Active)	2.0

ELECTRICAL RECERTIFICATION PREPARATION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The San Diego Gas and Electric (SDGE) program is designed to provide students with an opportunity to master the skills required for success in the electrical trades. Emphasis is placed on electrical principles and safety on the job in the study of power distribution and line construction industry. Topics include the use of "hot sticks" and special equipment, repair and maintenance of poles and lines, both cold and energized, and safety practices, and the local/state requirements. Students are expected to master competencies, such as those included in elements of electricity, overhead pole and electrical line construction, safety codes and applications, electric power system, transformer and meter installations, and exploration of underground electrical distribution.

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 Electrical Recertification Preparation Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.
5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

ELCT 20	Blueprint Reading for Electricians (Active)	3.0
ELCT 30	Modern Commercial Wiring (Active)	3.0
ELCT 40	Data, Voice, and Video Cabling for Electricians (Active)	3.0

ELECTRICITY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The electricity program provides the student with an opportunity to master the skills required for success in the electrical trade. Entering students are not required to have any knowledge of the electrical trade. The two-year curriculum leads to a Certificate of Achievement or an Associate in Science degree.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Electricity Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.

5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELCT 141	Electrical Theory IV (Active)	3.0
ELCT 141L	Electrical Laboratory IV (Active)	2.0

ELECTRICITY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The electricity program provides the student with an opportunity to master the skills required for success in the electrical trade. Entering students are not required to have any knowledge of the electrical trade. The two-year curriculum leads to a Certificate of Achievement or an Associate in Science degree.

Learning Outcome(s): Students who complete the Electricity Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.
5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELCT 141	Electrical Theory IV (Active)	3.0
ELCT 141L	Electrical Laboratory IV (Active)	2.0

ELECTROMECHANICAL TECHNOLOGY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Electromechanical Engineering Technology course of study provides a comprehensive learning environment of both electronic and mechanical principles. Learning emphasis is placed upon the hands-on application and design of electromechanical systems that include analog & digital electronics, engineering design, and computer controlled mechanical systems.

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 Electromechanical Technology Program will be able to:

1. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.
2. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
3. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
4. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ENGE 151	Computer-Aided Design (Active)	2.0
		4.0
PHYS 100	Introductory Physics (Active)	4.0
OR		
		4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
AND		
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0

ELECTRONIC COMMUNICATION SYSTEMS - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Electronics Program emphasis is on providing the fundamental knowledge needed by a general electronics technician. Ample opportunity for electronics skill development is provided in laboratory courses. Two major areas of emphasis are currently available to the electronics student: microcontroller/microprocessor technology and electronic communication technology.

Electronics is a field of technology that is concerned with the installation, operation, repair, maintenance, calibration, modification, and service of electronic circuitry, components, and systems. Technicians often work as part of a design team in industry under the guidance of engineers in preparing prototypes of electronic units or systems. They may check that prototypes are safe work as intended.

The Associate of Science in Electronic Communication Systems aids students in developing the knowledge, skills, and abilities needed in order to become a proficient electronics technician in the student's desired area of focus. The successful student is proficient with basic electronics measurement instrumentation and understands basic electronics circuitry. In addition to courses and labs, the Associate of Science in Electronic Communication Systems provides an opportunity for interested students to take Electronics Technician Association (ETA) and International Association for Radio, Telecommunication and Electromagnetics (iNARTE) Certification tests.

Students who successfully complete the Associate of Science in Electronic Communication Systems will be able to:

1. Interpret the block diagrams of electronic communication systems.
2. Perform tests to verify the performance of electronic communication systems.
3. Make repairs to correct diagnosed faults in electronic communication systems.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Electronic Communication Systems Program will be able to:

1. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
3. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
4. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 39.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 126	Using C AND C++ for Technology (Active)	3.0
ELDT 126L	Using C and C++ for Technology Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 227	Introduction to Lasers and Fiber Optics (Active)	3.0
ELDT 227L	Lasers and Fiber Optics Laboratory (Active)	1.0
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0
ELDT 229	Advanced Telecommunications Networks (Active)	3.0
ELDT 229L	Advanced Telecommunications Networks Laboratory (Active)	1.0

ELECTRONIC COMMUNICATION SYSTEMS - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Electronics is a field of technology that is concerned with the installation, operation, repair, maintenance, calibration, modification, and service of electronic circuitry, components, and systems.

This program introduces students to communication theory/circuitry, and reception of AM, FM, and digital signals. Communications links and lasers/fiber optics systems, and local, metropolitan and wide-area networks are also presented.

Graduates of the Electronics program understand the physical sciences, mathematics, applications, and customer relations necessary in the installation, construction, operation, maintenance, and diagnosis of electronic communication systems.

Students who successfully complete the Electronic Communication Systems certificate will be able to:

1. Interpret the block diagrams of electronic communication systems.
2. Perform tests to verify the performance of electronic communication systems.
3. Make repairs to correct diagnosed faults in electronic communication systems.

Learning Outcome(s): Students who complete the Electronic Communication Systems Program will be able to:

1. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
3. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
4. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 39.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 126	Using C AND C++ for Technology (Active)	3.0
ELDT 126L	Using C and C++ for Technology Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 227	Introduction to Lasers and Fiber Optics (Active)	3.0
ELDT 227L	Lasers and Fiber Optics Laboratory (Active)	1.0
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0
ELDT 229	Advanced Telecommunications Networks (Active)	3.0
ELDT 229L	Advanced Telecommunications Networks Laboratory (Active)	1.0

ELECTRONIC MANUFACTURING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Electronic Manufacturing prepares students with necessary skills, knowledge, and experience to continue on with the coursework and projects in the MFET program.

Students learn skills in problem-solving methods used in manufacturing industries and develop fundamental knowledge of the programming, setup, operation, and maintenance of electronic manufacturing systems. Students explore the study of automated electronic inspection and testing to complete electronic assembly rework, modification, and repair.

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 Electronic Manufacturing Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

MFET 114	Problem Solving and Corrective Action (Active)	3.0
MFET 205	Introduction to Electronic Manufacturing Services (Active)	3.0
MFET 215	Automated PCBA Inspection and Testing (Active)	3.0
MFET 215L	Automated PCBA Inspection and Testing Laboratory (Active)	2.0

ELECTRONIC MICROPROCESSOR/MICROCONTROLLER DESIGN - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Electronic Microprocessor/Microcontroller Design prepares the student for entry-level technical positions in the microprocessor/microcontroller field. Emphasis is placed on testing and documenting the performance of microcontroller systems, modifying microcontroller circuits for improved performance, and upgrading older systems to newer technology.

Students who successfully complete the Associate of Science in Electronic Microprocessor/Microcontroller Design are prepared to:

- Interpret the block diagrams of microprocessor/ microcontroller systems;
- Modify computer programs for microprocessor/ microcontroller systems; and
- Develop circuits to interface motors, displays, sensors, and switching to microprocessor/ microcontroller systems.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Electronic Microprocessor/Microcontroller Design Program will be able to:

1. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.

3. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
4. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 37.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 126	Using C AND C++ for Technology (Active)	3.0
ELDT 126L	Using C and C++ for Technology Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 225	Microcontrollers (Active)	3.0
ELDT 225L	Microcontrollers Laboratory (Active)	1.5
ELDT 232	Advanced Computer Design and Interfacing (Active)	4.0
ELDT 232L	Advanced Computer Designs Laboratory (Active)	1.5

ELECTRONIC MICROPROCESSOR/MICROCONTROLLER DESIGN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Electronic Microprocessor/Microcontroller Design prepares the student for entry-level technical positions in the microprocessor/microcontroller field. Emphasis is placed on testing and documenting the performance of microcontroller systems, modifying microcontroller circuits for improved performance, and upgrading older systems to newer technology.

Students who successfully complete the Certificate of Achievement in Electronic Microprocessor/ Microcontroller Design are prepared to:

- Interpret the block diagrams of microprocessor/ microcontroller systems;
- Modify computer programs for microprocessor/ microcontroller systems; and
- Develop circuits to interface motors, displays, sensors, and switching to microprocessor/ microcontroller systems.

The Electronics Department requires students to complete all requirements for the certificate within five years.

Learning Outcome(s): Students who complete the Electronic Microprocessor/Microcontroller Design Program will be able to:

1. Students who complete the program will be able to demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Students who complete the program will be able to analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
3. Students who complete the program will be able to identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.

4. Students who complete the program will be able to demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 37.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 126	Using C AND C++ for Technology (Active)	3.0
ELDT 126L	Using C and C++ for Technology Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 225	Microcontrollers (Active)	3.0
ELDT 225L	Microcontrollers Laboratory (Active)	1.5
ELDT 232	Advanced Computer Design and Interfacing (Active)	4.0
ELDT 232L	Advanced Computer Designs Laboratory (Active)	1.5

ELECTRONICS - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This certificate of achievement provides basic preparation for electronic technicians.

Learning Outcome(s): Students who complete the Electronics Program will be able to:

1. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
3. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
4. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 126	Using C AND C++ for Technology (Active)	3.0
ELDT 126L	Using C and C++ for Technology Laboratory (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5

ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5

ELECTRONICS MANUFACTURING - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Electronics Manufacturing prepares the student for entry-level technician positions in the manufacturing or industrial technology fields with particular focus on electronics. Emphasis is placed on students learning and being able to use design tools and test equipment used in the electronics industry for product development and manufacturing.

Students who successfully complete the Certificate of Achievement in Electronics Manufacturing are prepared to:

- Utilize and operate various test equipment, and use measurement results to support product development;
- Demonstrate the knowledge of design tools used in electronics industry for product development;
- Identify and apply quality control tools used in electronics manufacturing industry;
- Explain and apply the fundamentals of electronics applications and theory; and
- Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.

Learning Outcome(s): Students who complete the Electronics Manufacturing Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 28.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0
MFET 110	Industrial Safety (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0
MFET 150	Manufacturing Automation (Active)	3.0
MFET 210	Statistical Process Control (Active)	3.0
MFET 230	Lean Manufacturing (Active)	3.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0

ELECTRONICS TECHNICIAN LEVEL I - CERTIFICATE OF PERFORMANCE: CITY

Summary

Certificate of Performance for entry level electronics technician.

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 Electronics Technician Level I Program will be able to:

1. Demonstrate the proper use of basic electronic test instrumentation including an oscilloscope, a digital volt-ohm meter, a signal generator, and a dual power supply.
2. Analyze and explain basic electronic theory including Ohm's Law, the power formula, and calculation of voltage gain and power gain.
3. Identify standard electronic components including resistors, capacitors, inductors, diodes, bipolar transistors, field effect transistors, and integrated circuits.
4. Demonstrate the ability to prepare reports that include text, tables, and spreadsheets using productivity software on a computer.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 14.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0

ENERGY ANALYSIS AND CONSULTATION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Energy Analysis and Consultation provides students with a comprehensive education in energy retrofits, green building construction, and building operations. This curriculum prepares students for a career in the clean energy industry specific to the built environment. This course of study covers topics ranging from energy auditing, energy efficiency, solar energy retrofits, green construction, HVAC integration, and zero-net energy design. This pathway includes preparation for industry-recognized certifications geared towards leading businesses in the energy efficiency and renewable energy industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Energy Analysis and Consultation Program will be able to:

1. Explain the role of mechanical systems and their relationship to building performance.
2. Recognize conservation strategies and energy saving measures by examining the house-as-a-system.
3. Evaluate current issues and concerns regarding indoor air quality, the ozone layer, and computer technology in the environment.

4. Compare and contrast the advantages and disadvantages of energy resources in terms of the effects on the environment.
5. Examine evolving technologies and implementation challenges to manage and meet growing energy demands.
6. Examine the relationship between energy use and society.
7. Explore energy efficiency in various energy conversion devices.
8. Distinguish various types of appliances by energy ratings and performance.
9. Distinguish between various applications for lighting.
10. Identify relevant electrical and building codes that govern photovoltaic (PV) systems at various locations.
11. Examine energy storage technology performance, benefits, and costs.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

EGEE 50	Building Science Principles (Active)	3.0
EGEE 55	Air Quality Management and Systems (Active)	3.0
EGEE 70	Energy Industry Principles (Active)	3.0
EGEE 72	Energy Conservation Strategies (Active)	3.0
EGEE 78	Solar Electric Systems (Active)	3.0
EGEE 80	Energy Storage (Active)	3.0
EGEE 85	Energy Standard Practice (Active)	3.0
EGEE 98	Energy Service Entrepreneurship (Active)	3.0

ENERGY ANALYSIS AND CONSULTATION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Energy Analysis and Consultation provides students with a comprehensive education in energy retrofits, green building construction, and building operations. This curriculum prepares students for a career in the clean energy industry specific to the built environment. This course of study covers topics ranging from energy auditing, energy efficiency, solar energy retrofits, green construction, HVAC integration, and zero-net energy design. This pathway includes preparation for industry-recognized certifications geared towards leading businesses in the energy efficiency and renewable energy industry.

Learning Outcome(s): Students who complete the Energy Analysis and Consultation Program will be able to:

1. Explain the role of mechanical systems and their relationship to building performance.
2. Recognize conservation strategies and energy saving measures by examining the house-as-a-system.
3. Evaluate current issues and concerns regarding indoor air quality, the ozone layer, and computer technology in the environment.
4. Compare and contrast the advantages and disadvantages of energy resources in terms of the effects on the environment.
5. Examine evolving technologies and implementation challenges to manage and meet growing energy demands.
6. Examine the relationship between energy use and society.
7. Explore energy efficiency in various energy conversion devices.
8. Distinguish various types of appliances by energy ratings and performance.
9. Distinguish between various applications for lighting.
10. Identify relevant electrical and building codes that govern photovoltaic (PV) systems at various locations.
11. Examine energy storage technology performance, benefits, and costs.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

EGEE 50	Building Science Principles (Active)	3.0
EGEE 55	Air Quality Management and Systems (Active)	3.0
EGEE 70	Energy Industry Principles (Active)	3.0
EGEE 72	Energy Conservation Strategies (Active)	3.0
EGEE 78	Solar Electric Systems (Active)	3.0
EGEE 80	Energy Storage (Active)	3.0
EGEE 85	Energy Standard Practice (Active)	3.0
EGEE 98	Energy Service Entrepreneurship (Active)	3.0

ENGINEERING - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The engineering curriculum is heavily based on mathematics and physical sciences. Students benefit by having access to state-of-the-art CAD/ CAM facilities as well as to a high technology center that is at the cutting edge of new technologies, thereby enhancing career choices and rewards. This pre-engineering preparation provides an excellent foundation for transfer to a four-year university as an engineering major.

Students who complete the program will be able to:

- Demonstrate proficiency in analytical problem solving skills.
- Describe the engineering field from a general perspective.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Engineering Program will be able to:

1. Develop analytical problem solving skills in Engineering.
2. Demonstrate introductory skills in engineering drawing and design.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0

CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
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

ENGLISH - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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. Apply appropriate research strategies and citation formats.
2. Read and comprehend texts, recognize author strategies, purpose, perspective and argument, and use critical thinking to evaluate a variety of writing.
3. Organize ideas and information and express them clearly and effectively in writing for both academic and workplace contexts for different communicative purposes.
4. Describe, explain, and analyze multiple perspectives on issues in ways that demonstrate global awareness and appreciation of diversity in its many manifestations.
5. Apply strategies both inside and outside the classroom that reflect an understanding of the reading and writing processes in order to become life-long learners, critical thinkers, and active citizens.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 208	Introduction to Literature (Active)	3.0

SELECT FOUR COURSES (12 UNITS) FROM THE FOLLOWING: **Semester Units:** 12.0

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 249A	Introduction to Creative Writing I (Active)	3.0

ENGLISH - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The English program provides a breadth of course work designed to improve reading, writing, listening, speaking, and critical thinking skills. English classes range from developmental writing to transfer-level courses in reading and composition, composition and literature, and intermediate composition and critical thinking, as well as a series of sequential creative writing courses. Literature offerings include an introductory course and specialized courses such as British and American Literature and women in literature. Humanities courses explore cultural achievements of world civilizations. English department courses meet English Composition requirements for the associate degree and for University of California, and California State University, Communications in the English Language and Critical Thinking requirements. Literature courses may also meet general education, humanities, multicultural studies requirements, and preparation for transfer.

The English major at the lower-division level emphasizes learning to read more critically and to write more effectively using strategies of narration, exposition and argument. The English major primarily serves students transferring to colleges and universities where the focus is on academic writing, research, and criticism.

For students seeking a broad appreciation of literature and increased skills in communication. Superior ability to understand and use English is necessary for success in such careers as education, writing, advertising, sales, journalism, law, business and government.

English 205 meets SDSU/CSU critical thinking requirement. Not all courses are offered at each campus.

English 215 and 216 are required by SDSU and UCSD. Other course electives are available at Mesa and Miramar Colleges.

Courses designed to support this and other majors: ELAC 15, 25, 23, 35, 33, 145.

Transferable Units as Prep for the Major at SDSU
SDSU will accept a total of 12 units of literature and creative writing as preparation for the English Major. This includes any combination of lower division literature courses and up to six units of creative writing courses.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the English Program will be able to:

1. Apply appropriate research strategies and citation formats.
2. Read and comprehend texts, recognize author strategies, purpose, perspective and argument, and use critical thinking to evaluate a variety of writing.
3. Organize ideas and information and express them clearly and effectively in writing for both academic and workplace contexts for different communicative purposes.
4. Describe, explain, and analyze multiple perspectives on issues in ways that demonstrate global awareness and appreciation of diversity in its many manifestations.
5. Apply strategies both inside and outside the classroom that reflect an understanding of the reading and writing processes in order to become life-long learners, critical thinkers, and active citizens.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

		3.0
ENGL 105	Composition and Literature (Active)	3.0
OR		
ENGL C1000	Academic Reading and Writing (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 215	English Literature I: 800-1799 (Active)	3.0
ENGL 216	English Literature II: 1800 - Present (Active)	3.0

Select three units from the following (recommended sequence for UC transfer): **Semester Units:** 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

Select three units from the following (recommended sequence for UC transfer): **Semester Units:** 3.0

ENGL 210	American Literature I (Active)	3.0
ENGL 211	American Literature II (Active)	3.0
ENGL 245A	Writing Creative Nonfiction (Active)	3.0
ENGL 247A	Writing Seminar - Poetry (Active)	3.0
ENGL 249A	Introduction to Creative Writing I (Active)	3.0

ENGL 252A	Fundamentals of Fiction Writing (Active)	3.0

ENGLISH LANGUAGE ACQUISITION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The English Language Acquisition (ELAC) Certificate of Performance recognizes an advanced level of English language achievement for students whose first language is not English. Students who earn this certificate have successfully completed advanced ELAC coursework in grammar, writing conventions, reading skills, and critical thinking.

Upon successful completion of the Certificate of Performance, students should be able to:

- Analyze and synthesize the written works of others and compose an organized, multi-paragraph piece in response.
- Revise and reflect on own written work that demonstrates an advanced level of reading, writing, 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 English Language Acquisition Program will be able to:

1. Develop effective verbal and presentational skills for a variety of communication strategies.
2. Read and comprehend texts, recognize author strategies, purpose, perspective and argument, and use critical thinking to evaluate a variety of writing.
3. Organize ideas and information and express them clearly and effectively in writing for both academic and workplace contexts for different communicative purposes.
4. Describe, explain, and analyze multiple perspectives on issues in ways that demonstrate global awareness and appreciation of diversity in its many manifestations.
5. Apply strategies both inside and outside the classroom that reflect an understanding of the reading and writing processes in order to become life-long learners, critical thinkers, and active citizens.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 6.0
ELAC 145	Integrated Reading, Writing, and Grammar III (Active)	6.0

Select three units from the following:		**Semester Units:** 3.0
ELAC 5B	English Language Grammar - High-Intermediate/Advanced (Active)	1.0-2.0
ELAC 7	English Pronunciation (Active)	1.0-2.0
ELAC 33	Academic Listening and Speaking II (Active)	3.0

ESTHETICIAN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Students are expected to learn fundamental practices and procedures of cosmetology or esthetician services. This includes laboratory instruction in client cosmetology or esthetician services. Instructional opportunities provide the student with salon site visitation, guest speakers, exposure to the cosmetology industry, small business concepts and current changes in the field of cosmetology which lead to career opportunities and advancement.

Students are provided with opportunities to develop skills in sales, community and client relations, care of skin, hair and nails, as well as salon management. A grade of "C" or better must be maintained in order to advance in the course sequence.

Upon completion of the program, the student will be prepared to:

- Apply cosmetology concepts, procedures and practices to successfully pass the State Board exam;
- Utilize professional terminology and techniques, practice safety, health and sanitation procedures; and
- Utilize business practices to become successfully employed in the Cosmetology and Esthetician fields.

Learning Outcome(s): Students who complete the Esthetician Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.
8. Pass the written and practical license examinations administered by the California Board of Barbering and Cosmetology.

Admission Criteria

The San Diego City College's Cosmetology Program offers courses during the spring, summer, and fall semesters. Spring and fall semester daytime programs begin at every eight-week session. Spring and fall semester evening programs begin at every twelve-week session. Prospective students must be admitted to the program in order to register for cosmetology courses. Admitted students must attend an orientation to receive important information, program rules and regulations, and program expectations. Students transferring into the San Diego City College's Cosmetology Program cannot apply previous coursework towards the college's cosmetology degrees and certificates. Permission numbers are required to register for cosmetology courses.

Orientation

Orientation is mandatory prior to registration. Contact the Cosmetology Department Chair for a schedule of days and times.

State Board Verification

Students with previous course hours in cosmetology from another community college program or private institution must provide written State Board documentation. The California State Board of Barbering and Cosmetology requires:

- Cosmetology: 1000 hours of instruction
- Esthetics: 600 hours of instruction
- Nail Technician: 400 hours of instruction
- Barber Crossover: 100 hours of instruction

All careers require a passing score on the State Board examination to become licensed and eligible for employment.

This program is approved by: Board of Barbering and Cosmetology, 2420 Del Paseo Road Suite 100, Sacramento, CA 94244-2260.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

COSM 55	Esthetician I (Active)	2.5
COSM 55L	Esthetician I Lab (Active)	6.5

COSM 65	Esthetician II (Active)	2.5
COSM 65L	Esthetician II Lab (Active)	6.5

ESTHETICIAN BUSINESS ADMINISTRATION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in aesthetics with an emphasis in Business Administration entrepreneurial concentration combines the Esthetician core training, small business entrepreneurship, business communications, theatrical makeup, and office software training to prepare students to open and/or manage a skin care salon or Spa. Students are expected to learn fundamental practices and procedures of skin care services. This includes laboratory instruction in client aesthetics and makeup services. Students are provided with opportunities to develop skills in sales, community and client relations, care of skin, makeup and salon management.

Students who successfully complete the Associate of Science in Esthetician Business Administration will be able to:

- Apply Esthetician, professional makeup and entrepreneurial concepts, procedures, and practices to successfully open, operate, or manage an aesthetics salon, spa, or Medispa; and
- Utilize business practices to become successfully employed in the beauty industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Esthetician Business Administration Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.
8. Pass the written and practical license examinations administered by the California Board of Barbering and Cosmetology.

Admission Criteria

The San Diego City College's Cosmetology Program offers courses during the spring, summer, and fall semesters. Spring and fall semester daytime programs begin at every eight-week session. Spring and fall semester evening programs begin at every twelve-week session. Prospective students must be admitted to the program in order to register for cosmetology courses. Admitted students must attend an orientation to receive important information, program rules and regulations, and program expectations. Students transferring into the San Diego City College's Cosmetology Program cannot apply previous coursework towards the college's cosmetology degrees and certificates. Permission numbers are required to register for cosmetology courses.

Orientation

Orientation is mandatory prior to registration. Contact the Cosmetology Department Chair for a schedule of days and times.

State Board Verification

Students with previous course hours in cosmetology from another community college program or private institution must provide written State Board documentation. The California State Board of Barbering and Cosmetology requires:

- Cosmetology: 1000 hours of instruction

- Esthetics: 600 hours of instruction
- Nail Technician: 400 hours of instruction
- Barber Crossover: 100 hours of instruction

All careers require a passing score on the State Board examination to become licensed and eligible for employment.

This program is approved by: Board of Barbering and Cosmetology, 2420 Del Paseo Road Suite 100, Sacramento, CA 94244-2260.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

COSM 55	Esthetician I (Active)	2.5
COSM 55L	Esthetician I Lab (Active)	6.5
COSM 65	Esthetician II (Active)	2.5
COSM 65L	Esthetician II Lab (Active)	6.5
		3.0
BUSE 92	Introduction to Business Communication (Active)	3.0
OR		
BUSE 119	Business Communications (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
DRAM 124	Makeup for the Stage (Active)	3.0

FABRICATION MANUFACTURING - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Fabrication Manufacturing prepares the student for entry-level technician positions in the manufacturing or industrial technology fields with particular focus on fabrication. Emphasis is placed on students learning and being able to use design tools and test equipment used in industry for product development and manufacturing.

Students who successfully complete the Certificate of Achievement in Fabrication Manufacturing are prepared to:

- Utilize and operate various test equipment, and use measurement results to support product development;
- Demonstrate the knowledge of design tools used in industry for product development;
- Identify and apply quality control tools used in manufacturing industries;
- Explain and apply the fundamentals of manufacturing applications and theory; and
- Describe different types of materials, process flows, equipment and techniques used to manufacture products.

Learning Outcome(s): Students who complete the Fabrication Manufacturing Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.

6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.

MFET Option 2: Fabrication Manufacturing

7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0
MFET 110	Industrial Safety (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0
MFET 150	Manufacturing Automation (Active)	3.0
MFET 210	Statistical Process Control (Active)	3.0
MFET 230	Lean Manufacturing (Active)	3.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 160M	Introduction to CAD/CAM (Active)	4.0

FILM PRODUCTION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Film Production offers hands-on training and experience in the fundamentals of filmmaking, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on producing, writing, directing, and editing. Other topics addressed include lighting, art directing, and audio. Students can contribute to the award-winning City Times Media platform and its independent film partner. This program is designed for students interested in enhancing their skills and knowledge of filmmaking, students majoring in Film Production, and for those seeking entry-level employment in related industries.

The skills acquired with this A.S. Degree may lead to employment, freelance work, or business ownership. These jobs include, but are not limited to, production assistants, production audio technicians, art directors, screenwriters, directors, producers, editors, grips, and gaffers.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Film Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

		3.0

FJMP 100	Introduction to Cinema (Active)	3.0
OR		
FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
		3.0
FJMP 112	Introduction to Audio Production (Active)	3.0
OR		
FJMP 124	Video Motion Graphics (Active)	3.0
		3.0
FJMP 121	Fiction Film Production (Active)	3.0
OR		
FJMP 122	Documentary Film Production (Active)	3.0
		3.0
FJMP 145	Art Direction for Film and Media Production (Active)	3.0
OR		
FJMP 146	Lighting for Film and Media Production (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 111	Single Camera Production (Active)	3.0
FJMP 123	The Producer's Role in Film (Active)	3.0
DRAM 119	Film and Television Performance (Active)	3.0
FJMP 211	Single Camera Production Workshop (Active)	3.0
FJMP 221	Fiction Film Production Workshop (Active)	3.0
FJMP 222	Documentary Film Production Workshop (Active)	3.0

FILM PRODUCTION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Film Production offers hands-on training and experience in the fundamentals of filmmaking, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on producing, writing, directing, and editing. Other topics addressed include lighting, art directing, and audio. Students can contribute to the award-winning City Times Media platform and its independent film partner. This program is designed for students interested in enhancing their skills and knowledge of filmmaking, students majoring in Film Production, and for those seeking entry-level employment in related industries.

The skills acquired with this certificate may lead to employment, freelance work, or business ownership. These jobs include, but are not limited to, production assistants, production audio technicians, art directors, screenwriters, directors, producers, editors, grips, and gaffers.

Learning Outcome(s): Students who complete the Film Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
		3.0
FJMP 112	Introduction to Audio Production (Active)	3.0
OR		
FJMP 124	Video Motion Graphics (Active)	3.0
		3.0
FJMP 121	Fiction Film Production (Active)	3.0
OR		
FJMP 122	Documentary Film Production (Active)	3.0
		3.0
FJMP 145	Art Direction for Film and Media Production (Active)	3.0
OR		
FJMP 146	Lighting for Film and Media Production (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 111	Single Camera Production (Active)	3.0
FJMP 123	The Producer's Role in Film (Active)	3.0
DRAM 119	Film and Television Performance (Active)	3.0
FJMP 211	Single Camera Production Workshop (Active)	3.0
FJMP 221	Fiction Film Production Workshop (Active)	3.0
FJMP 222	Documentary Film Production Workshop (Active)	3.0

FILM PRODUCTION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Film Production offers hands-on training and experience in the fundamentals of filmmaking, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on producing, writing, directing, and editing. Other topics addressed include lighting, art directing, and audio. Students can contribute to the award-winning City Times Media platform and its independent film partner. This program is designed for students interested in enhancing their skills and knowledge of filmmaking, students majoring in Film Production, and for those seeking entry-level employment in related industries.

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 Film Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

FJMP 100	Introduction to Cinema (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 112	Introduction to Audio Production (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
FJMP 121	Fiction Film Production (Active)	3.0
FJMP 122	Documentary Film Production (Active)	3.0
FJMP 123	The Producer's Role in Film (Active)	3.0
FJMP 124	Video Motion Graphics (Active)	3.0
DRAM 119	Film and Television Performance (Active)	3.0
FJMP 145	Art Direction for Film and Media Production (Active)	3.0
FJMP 146	Lighting for Film and Media Production (Active)	3.0

FILM, TELEVISION, AND ELECTRONIC MEDIA - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

Summary

The Associate in Science in Film, Television, and Electronic Media for Transfer is intended for students who plan to complete a bachelor's degree in Film, Television, and Electronic Meda 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 Film, Television, and Electronic Media Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

SELECT TWO COURSES (6 UNITS) REQUIRED FOR THE MAJOR		Semester Units: 6.0
FJMP 100	Introduction to Cinema (Active)	3.0
FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0

SELECT ONE COURSE (3 UNITS) FROM AUDIO		Semester Units: 3.0
FJMP 112	Introduction to Audio Production (Active)	3.0

SELECT ONE COURSE (3 UNITS) FROM VIDEO OR FILM PRODUCTION		Semester Units: 3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

SELECT A MINIMUM OF TWO COURSES (6 UNITS) NOT ALREADY SELECTED ABOVE		Semester Units: 6.0
DRAM 105	Introduction to Dramatic Arts (Active)	3.0
DRAM 107	Study of Filmed Plays (Active)	3.0
FJMP 100	Introduction to Cinema (Active)	3.0
FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0
MUSI 100	Introduction to Music (Active)	3.0

FREELANCE PHOTOGRAPHY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Freelance Photography provides students with strong foundational coursework, emphasizing photographic concepts and camera handling techniques needed to enter the field. Students benefit from instructors who are working professionals in the field. Students receive hands-on experience in studio practices and current industry software to create projects for the real world. The award culminates in a professional portfolio that could be used to obtain employment. The award is primarily designed for students interested in entering the photography field and for students pursuing entry-level job opportunities related to photography.

With an emphasis on process, conceptual strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. Working with photography and illustration, students create images to illustrate a client's needs. Using both print and digital formats they produce projects that demonstrate an understanding of visual communication. This diverse body of work is refined into a strategic professional portfolio aimed at accomplishing each student's educational and employment goals.

The Photography Department requires students to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Freelance Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.

9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

PHOT 125	Photo Business Operations (Active)	2.0
PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 150	History of Photography (Active)	3.0
PHOT 165	Online Portfolio: Websites for Photographers (Active)	3.0
PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 181	Photo Editing: Photoshop (Active)	3.0
PHOT 201A	Photographic Lighting Techniques I (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

FREELANCE PHOTOGRAPHY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Freelance Photography Certificate of Performance prepares students for entry-level employment and/or self-employment in commercial photography. Emphasis is placed on the fundamentals of digital photography, photography business best practices, image manipulation and retouching, and the award culminates in the development of a comprehensive online portfolio to showcase the technical and creative aspects of the student's work.

Faculty recommend PHOT 143 be taken in the first semester.

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 Freelance Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

PHOT 125	Photo Business Operations (Active)	2.0
PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 165	Online Portfolio: Websites for Photographers (Active)	3.0

FRENCH - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The study of languages provides communication skills, provides exposure to the richness of cultural variety, increases transfer options to universities with language requirements, opens new career opportunities, enriches global travel, and provides personal enrichment. The program is designed to prepare students for transfer to a baccalaureate institution and for proficiency in a language in a variety of settings.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the French Program will be able to:

1. Demonstrate preparedness for successful transition to the language program of four year institutions.
2. Demonstrate accurate language grammar including writing, speaking, and listening in the target language.
3. Discuss the social and cultural life of Language speakers in the target language.
4. Read and analyze writings in Language target areas.
5. Demonstrate through discussion and actions the acceptance and value of other peoples.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 26.0

FREN 101	First Course in French (Active)	5.0
FREN 102	Second Course in French (Active)	5.0
FREN 201	Third Course in French (Active)	5.0
FREN 202	Fourth Course in French (Active)	5.0
FREN 210	Conversation and Composition in French I (Active)	3.0
FREN 211	Conversation and Composition French II (Active)	3.0

FUNDAMENTALS OF ACCOUNTING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Fundamentals of Accounting is designed for students seeking to gain skills and knowledge in the field of accounting. Possible entry-level positions for this certificate include accounting clerk, accounts payable/receivable clerk, claims clerk, bookkeeper, data-entry specialist, or comparable positions. ACCT 116A and ACCT 116B provide students a comprehensive introduction to the field of accounting and an avenue to meet the core requirements for accounting majors at universities.

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 Fundamentals of Accounting Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

ACCT 116A	Financial Accounting (Active)	4.0
ACCT 116B	Managerial Accounting (Active)	4.0

FUNDAMENTALS OF BUSINESS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Fundamentals of Business is designed to provide students with the skills necessary for various business careers. Emphasis is placed on building fundamental competencies for jobs requiring skills in entry-level business operation and professional communication. Coursework provides students a comprehensive introduction to business-focused careers and an avenue to meet the core requirements for business majors at universities.

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 Fundamentals of Business Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

BUSE 119	Business Communications (Active)	3.0
BUSE 140	Business Law and the Legal Environment (Active)	3.0

FUNDAMENTALS OF ECONOMICS - CERTIFICATE OF PERFORMANCE: CITY

This Certificate of Performance in Economics provides students the opportunity to learn core concepts and gain insight into the field of economics as well as serves as a stepping stone toward higher academic degrees in the field of economics.

ECON 120 and ECON 121 provides students a comprehensive introduction to the field of economics and fulfills the lower division general education requirements for the transfer and SDCCD General Education requirement for an associate 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 Fundamentals of Economics Program will be able to:

1. Define scarcity, and show how it relates to the concepts of choice and cost.
2. Explain the role of prices in allocating goods, services and factors of production.
3. Outline the role of comparative advantage in exchange.
4. Utilize the demand and supply model and use the model to critically analyze real world examples.
5. Analyze the impacts of economics on social values and policy.

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

FUNDAMENTALS OF MARKETING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Fundamentals of Marketing is designed to provide students with the skills necessary for marketing careers. Emphasis is placed on building fundamental competencies for jobs requiring skills in developing and designing marketing and promotional plans and forecasts. Coursework provides students a comprehensive introduction to the field of marketing and an avenue to meet the core requirements for marketing majors at universities.

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 Fundamentals of Marketing Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

MARK 100	Principles of Marketing (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

MARK 105	Professional Selling (Active)	3.0
MARK 130	Advertising Principles (Active)	3.0

GAME PROGRAMMING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The goal of the Certificate of Performance in Game Programming is to prepare students for entry-level employment in the field of Information Technology as computer game programmers.

The Certificate of Performance in Game Programming is designed to provide students with training in the theory and practice of computer programming emphasizing the design of software games.

The Computer Information Systems Department requires students to complete all course requirements for the certificate within five years.

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 Game Programming Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.

2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

CISC 220	Fundamentals of Computer Game Programming (Active)	4.0
CISC 221	Intermediate Computer Game Programming (Active)	4.0

GENERAL BIOLOGY TRACK - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

Biology is a natural science that focuses on physical and chemical processes of living organisms. This discipline explores how organisms acquire and use energy to maintain homeostasis, how they reproduce, and how they interact with each other and their environment. Scientific processes are emphasized as a means of answering these biological questions. Biologists rely heavily on a chemistry foundation since living organisms are chemical systems.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the General Biology Track Program will be able to:

1. Apply core biological concepts that serve as the foundation for higher-level science courses. These include theories of evolution, natural selection, processes of scientific inquiry, and proper laboratory techniques, among others.
2. Evaluate the quality of scientific methodology when it is reported by the popular media.
3. Describe the relationship between the processes of science, human culture and the environment.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0-24.0

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
		5.0-6.0
		6.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
AND		
MATH 122	Basic Techniques of Calculus II (Active)	3.0
OR		
MATH 150	Calculus with Analytic Geometry I (Active)	5.0

GEOGRAPHY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Geography for Transfer Degree is intended for students who plan to complete a bachelor's degree in Geography 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 Geography Program will be able to:

1. Demonstrate an understanding and appreciation of the scientific method.
2. Communicate an understanding of the connections between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

GEOG 101	Physical Geography (Active)	3.0
GEOG 101L	Physical Geography Laboratory (Active)	1.0
Select one course from the following:		3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0

SELECT 4-5 COURSES FROM THE FOLLOWING (NOT SELECTED ABOVE): **Semester Units:** 12.0-13.0

ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0
GISG 104	Geographic Information Science and Spatial Reasoning (Active)	3.0
GISG 110	Introduction to Mapping and Geographic Information Systems (Active)	3.0
GEOG 135	Geography of California (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
OR		

GEOG 104	World Regional Geography (Active)	3.0

GEOGRAPHY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

Physical and cultural geography, including remote sensing, cartography, and geographic information science, are disciplines classified as geography. They generally involve the principles of fundamental relationships and laws in the universe and the culture interactions in a spatial setting.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Geography Program will be able to:

1. Demonstrate an understanding and appreciation of the scientific method.
2. Communicate an understanding of the connections between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

GEOG 101	Physical Geography (Active)	3.0
GEOG 101L	Physical Geography Laboratory (Active)	1.0
GEOG 102	Cultural Geography (Active)	3.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0

Select eight units from: **Semester Units:** 8.0

BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
MATH 107	Introduction to Scientific Programming (Active)	3.0
MATH 107L	Introduction to Scientific Programming Lab (Active)	1.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0
MATH 150	Calculus with Analytic Geometry I (Active)	5.0
POLS C1000	American Government and Politics (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0

GEOLOGY - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

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 an understanding and appreciation of the scientific method.
2. Communicate an understanding of the connections between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

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

GEOLOGY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

Geology is the study of the history and structure of the Earth (and other worlds), as well as the physical processes that act upon the world. It is a field that uncovers fundamental relationships and laws in the universe.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Geology Program will be able to:

1. Demonstrate an understanding and appreciation of the scientific method.
2. Communicate an understanding of the connections between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0-38.0

GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0
BIOL 107	General Biology-Lecture and Laboratory (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
		10.0-15.0
		10.0
PHYS 181A	General Physics Laboratory I (Active)	1.0
AND		
PHYS 181B	General Physics Laboratory II (Active)	1.0
AND		
PHYS 180A	General Physics I (Active)	4.0
AND		
PHYS 180B	General Physics II (Active)	4.0
OR		
		15.0
PHYS 195	Mechanics (Active)	5.0
AND		
PHYS 196	Electricity and Magnetism (Active)	5.0
AND		
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0

GERONTOLOGY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The certificate of Achievement in Gerontology is designed to introduce students to the field of social gerontology. The program provides information on psychological, sociological, and biological aspects of aging and offers students insights into their own aging process as well as that of the growing population of older adults. By the middle of the 21st century, 1 in 5 Americans will be over 65, and there will be 15 to 18 million persons over the age of 85. These forecasts are expected to result in demand for career opportunities in gerontology across many disciplines and professions. This program is both vocational and academic, offering courses in theoretical and practical topics related to human aging.

Learning Outcome(s): Students who complete the Gerontology Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging(e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/ neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0-20.0

HUMS 95	Public Assistance and Benefits Program (Active)	1.0
HUMS 101	Introduction to Human Aging (Active)	3.0
HUMS 103	Introduction to Community Health Work (Active)	3.0
HUMS 110	Social Work Fields of Service (Active)	3.0
HUMS 276	Field Work in Gerontological Services (Active)	2.0-4.0
PSYC 111	Psychological/Social Aspects of Aging, Death, and Dying (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0

GRAPHIC DESIGN - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Graphic design is a field that uses visual communication and conceptual strategy to solve graphic problems. The program starts with strong foundational coursework and an early emphasis on typography and design principles. Guided by instructors who are working professionals, students use current industry software and processes to create professional design projects. With an emphasis on process, conceptual strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. Using both print and digital formats, students produce projects that demonstrate an understanding of visual communication through brand strategy, interaction design, and typographic systems. The program culminates in a professional body of work that could be used to obtain employment or transfer to a four-year design program.

The Design Department requires students to complete all requirements for the award within seven years.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Graphic Design Program will be able to:

1. Incorporate research processes and conceptual strategies to solve design problems.
2. Demonstrate an understanding of visual coherence by building typographic systems.
3. Demonstrate proficiency with current industry standard design software.
4. Produce a body of work that demonstrates a unique voice, vision, and viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DSGN 100	Introduction to Graphic Design (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
DSGN 104	Graphic Design History (Active)	3.0
DSGN 106	Typography I (Active)	3.0
		3.0
DSGN 120	Illustration (Active)	3.0
OR		
ARTF 174A	Book Arts I (Active)	3.0
DSGN 124	Page Layout (Active)	3.0
DSGN 206	Typography II (Active)	3.0
DSGN 210	Branding and Packaging (Active)	3.0

Complete three additional courses from the following: **Semester Units:** 9.0

DSGN 120	Illustration (Active)	3.0
ARTF 174A	Book Arts I (Active)	3.0
DSGN 143	Interaction Design I (Active)	3.0
DSGN 153	Interaction Design II (Active)	3.0

DSGN 202	Digital Media II (Active)	3.0
DSGN 203	Interaction Design III (Active)	3.0
DSGN 213	Interaction Design IV (Active)	3.0
DSGN 216A	Design Studio I (Active)	3.0
DSGN 216B	Design Studio II (Active)	3.0
DSGN 216C	Design Studio III (Active)	3.0
DSGN 218	Internship (Active)	3.0
		3.0-6.0
DSGN 222	Book Arts II (Active)	3.0
OR		
		6.0
DSGN 248	Portfolio I (Active)	3.0
AND		
DSGN 258	Portfolio II (Active)	3.0

GRAPHIC DESIGN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Graphic design is a field that uses visual communication and conceptual strategy to solve graphic problems. The program starts with strong foundational coursework and an early emphasis on typography and design principles. Guided by instructors who are working professionals, students use current industry software and processes to create professional design projects. With an emphasis on process, conceptual strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. Using both print and digital formats, students produce projects that demonstrate an understanding of visual communication through brand strategy, interaction design, and typographic systems. The program culminates in a professional body of work that could be used to obtain employment or transfer to a four-year design program.

The Design Department requires students to complete all requirements for the certificate within seven years.

Learning Outcome(s): Students who complete the Graphic Design Program will be able to:

1. Incorporate research processes and conceptual strategies to solve design problems.
2. Demonstrate an understanding of visual coherence by building typographic systems.
3. Demonstrate proficiency with current industry standard design software.
4. Produce a body of work that demonstrates a unique voice, vision, and viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DSGN 100	Introduction to Graphic Design (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
DSGN 104	Graphic Design History (Active)	3.0
DSGN 106	Typography I (Active)	3.0
		3.0
DSGN 120	Illustration (Active)	3.0
OR		
ARTF 174A	Book Arts I (Active)	3.0
DSGN 124	Page Layout (Active)	3.0
DSGN 206	Typography II (Active)	3.0
DSGN 210	Branding and Packaging (Active)	3.0

Complete two additional courses from the following: **Semester Units:** 6.0

DSGN 120	Illustration (Active)	3.0
ARTF 174A	Book Arts I (Active)	3.0
DSGN 143	Interaction Design I (Active)	3.0
DSGN 153	Interaction Design II (Active)	3.0
DSGN 202	Digital Media II (Active)	3.0
DSGN 203	Interaction Design III (Active)	3.0
DSGN 213	Interaction Design IV (Active)	3.0
DSGN 216A	Design Studio I (Active)	3.0
DSGN 216B	Design Studio II (Active)	3.0
DSGN 216C	Design Studio III (Active)	3.0
DSGN 218	Internship (Active)	3.0
		3.0-6.0
DSGN 222	Book Arts II (Active)	3.0
OR		
		6.0
DSGN 248	Portfolio I (Active)	3.0
AND		
DSGN 258	Portfolio II (Active)	3.0

GRAPHIC DESIGN FUNDAMENTALS - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This Graphic Design Fundamentals Certificate of Achievement provides students with foundational graphic design skills and knowledge. Using current industry software, students combine graphics, images, and typography, to represent ideas and messages. This award gives students a basic understanding of visual communication and software that can be applied to non-design careers.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Graphic Design Fundamentals Program will be able to:

1. Incorporate research processes and conceptual strategies to solve design problems.
2. Demonstrate an understanding of visual coherence by building typographic systems.
3. Demonstrate proficiency with current industry standard design software.
4. Produce a body of work that demonstrates a unique voice, vision, and viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

DSGN 100	Introduction to Graphic Design (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
DSGN 104	Graphic Design History (Active)	3.0
DSGN 106	Typography I (Active)	3.0

GREEN BUILDING ENERGY PROFESSIONAL - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Green Building Energy Professional provides students with a whole systems approach to construction and building operations that minimizes the large impact that our built environment has on our environment, as well as the benefits of zero-net energy design and construction. The pathway includes preparation for various industry-recognized certifications pertaining to the HVAC/R and energy industries.

Upon successfully completing this award the students will be able to:

- explain the role of mechanical systems and their relationship to building performance;
- recognize conservation strategies and energy saving measures by examining the house-as-a-system;
- evaluate current issues and concerns regarding indoor air quality, the ozone layer, and computer technology in the environment;
- compare and contrast the advantages and disadvantages of energy resources in terms of the effects on the environment;
- examine evolving technologies and implementation challenges to manage and meet growing energy demands;
- examine the relationship between energy use and society;
- explore energy efficiency in various energy conversion devices;
- distinguish various types of appliances by energy ratings and performance;
- distinguish between various applications for lighting;
- identify relevant electrical and building codes that govern photovoltaic (pv) systems at various locations; and
- examine energy storage technology performance, benefits, and costs.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Green Building Energy Professional Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

EGEE 50	Building Science Principles (Active)	3.0
EGEE 55	Air Quality Management and Systems (Active)	3.0
EGEE 70	Energy Industry Principles (Active)	3.0
EGEE 72	Energy Conservation Strategies (Active)	3.0
EGEE 78	Solar Electric Systems (Active)	3.0
EGEE 80	Energy Storage (Active)	3.0

GREEN BUILDING ENERGY PROFESSIONAL - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Green Building Energy Professional provides students with a whole systems approach to construction and building operations that minimizes the large impact that our built environment has on our environment, as well as the benefits of zero-net energy design and construction. The pathway includes preparation for various industry-recognized certifications pertaining to the HVAC/R and energy industries.

Learning Outcome(s): Students who complete the Green Building Energy Professional Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

EGEE 50	Building Science Principles (Active)	3.0
EGEE 55	Air Quality Management and Systems (Active)	3.0
EGEE 70	Energy Industry Principles (Active)	3.0
EGEE 72	Energy Conservation Strategies (Active)	3.0
EGEE 78	Solar Electric Systems (Active)	3.0
EGEE 80	Energy Storage (Active)	3.0

HEALTH AND WELLNESS COACHING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Health and Wellness Coaching certificate prepares the student for the American Council on Exercise's (ACE) national certification examination for health coaching. This is a valuable supplemental certificate to a personal training or group exercise certification.

The Certificate of Performance in Health and Wellness Coaching is designed to prepare students for careers in health and wellness coaching. Emphasis is placed on providing students with effective communication strategies for explaining and applying the basic principles of physiology and nutrition, as well as emotional, spiritual, social, cognitive, and environmental health. Students create and implement safe and effective healthy eating strategies and exercise plans based on client assessment data. Students also demonstrate effective approaches to modifying behavior-change programs to promote program adherence based on client needs.

Upon successful completion of this program, the student is able to apply knowledge and skill in communication, behavior change, nutrition, weight management, exercise program development, exercise leadership, and disease/injury prevention to health and wellness coaching clients.

To be eligible to take the American Council on Exercise National Certification Examination in Health Coaching, students need to have completed one of the following:

- Pass an accredited certification exam through the National Commission for Certifying Agencies (NCCA);
- Obtain a license in fitness, nutrition, health care, wellness, human resources or a related field;
- Earn an associate's degree or higher from an accredited college or university in fitness, exercise science, nutrition, health care, wellness, human resources or a related field;
- Complete at least two years of comparable work experience in any of the industries specified above.

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 Health and Wellness Coaching Program will be able to:

1. Demonstrate movement competence as it relates to physical activity, fitness, and sport.
2. Design exercise programs to improve key fitness components, including cardiovascular endurance, muscular endurance, muscular strength, flexibility, and body composition.
3. Articulate knowledge of how physical activity influences health across the lifespan, emphasizing its role in chronic disease prevention and quality of life.
4. Apply concepts of wellness, physical activity, and exercise to develop programs that promote overall health and well-being for individuals and communities.

5. Utilize current exercise science technologies, tools and software for assessment, program design, and analysis to enhance learning, performance, and research outcomes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0-11.0

EXSC 294	Health and Wellness Coaching (Active)	3.0
		2.0-3.0
EXSC 284	Fitness and Sports Nutrition (Active)	2.0
OR		
NUTR 170	Nutrition and Fitness (Active)	3.0
HEAL 101	Health and Lifestyle (Active)	3.0
EXSC 270	Exercise Science Internship / Work Experience (Active)	1.0-2.0

Complete one (1) unit from the following: **Semester Units:** 1.0

EXSC 123	Adapted Physical Fitness (Active)	0.5-1.0
EXSC 124A	Core and Cardio Fitness I (Active)	0.5-1.0
EXSC 125A	Aerobic Dance I (Active)	0.5-1.0
EXSC 126A	Cardio Conditioning I (Active)	0.5-1.0
EXSC 127A	Cardio Kickboxing I (Active)	0.5-1.0
EXSC 129A	Step Aerobics I (Active)	0.5-1.0
EXSC 134	Adapted Weight Training (Active)	0.5-1.0
EXSC 135A	Individual Conditioning I (Active)	0.5-1.0
EXSC 139A	Weight Training I (Active)	0.5-1.0
EXSC 142	Hiking for Fitness I- Fundamentals (Active)	0.5-2.0
EXSC 145A	Yoga I (Active)	0.5-1.0
EXSC 147A	Kickboxing I (Active)	0.5-1.0
EXSC 148A	Mixed Martial Arts I (Active)	0.5-1.0

HEATING, VENTILATION, AND AIR CONDITIONING SYSTEMS DESIGN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Heating, Ventilation, and Air Conditioning Systems Design focuses on the integration of HVAC components and equipment into the design of optimally functional and energy efficient building air conditioning systems.

Learning Outcome(s): Students who complete the Heating, Ventilation, and Air Conditioning Systems Design Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0

AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 128	Comfort Heating Systems Theory (Active)	4.0

AIRE 129	Comfort Heating Systems Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 138	HVAC System Design (Active)	3.0
AIRE 139	HVAC System Design Lab (Active)	2.0

HISTORY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in History for Transfer is intended for students who plan to complete a bachelor's degree in History 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. Critically analyze primary and secondary sources in college-level essays, written assignments, and research papers.
2. Identify and describe historic periods, movements, trends, people, and events important in the study of World, U.S., Asian and Latin American history, and Western Civilization.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

HIST 109	History of the United States I (Active)	3.0
HIST 110	History of the United States History II (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

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

Select two courses not selected above from the following: **Semester Units:** 6.0

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 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 123	U.S. History from the Asian Pacific American Perspective (Active)	3.0

HISTORY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

History is the study of human experience from the dawn of time to the present. It examines people, institutions, ideas and events of the past and the present. The primary objectives of the History program are: to meet general education requirements for American Institutions, Humanities and Social Sciences; completion of the Associate of Arts degree; and preparation for transfer to a four-year institution and completion of general education requirements for the student enrolled in a four-year institution.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the History Program will be able to:

1. Critically analyze primary and secondary sources in college-level essays, written assignments, and research papers.
2. Identify and describe historic periods, movements, trends, people, and events important in the study of World, U.S., Asian and Latin American history, and Western Civilization.

Requirements

COURSES REQUIRED FOR THE MAJOR: Select three of the 6-unit course sequences or 18 units **Semester Units:** 18.0

		6.0
		6.0
HIST 100	World History I (Active)	3.0
AND		
HIST 101	World History II (Active)	3.0
OR		
		6.0
HIST 105	Introduction to Western Civilization I (Active)	3.0
AND		
HIST 106	Introduction to Western Civilization II (Active)	3.0
OR		
		6.0
HIST 109	History of the United States I (Active)	3.0
AND		
HIST 110	History of the United States History II (Active)	3.0
OR		

		6.0
HIST 115A	History of the Americas I (Active)	3.0
AND		
HIST 115B	History of the Americas II (Active)	3.0
OR		
		6.0
HIST 120	Introduction to Asian Civilizations (Active)	3.0
AND		
HIST 121	Asian Civilizations in Modern Times (Active)	3.0
OR		
		6.0
HIST 109	History of the United States I (Active)	3.0
AND		
HIST 123	U.S. History from the Asian Pacific American Perspective (Active)	3.0

HISTORY AND POLITICS OF AMERICAN LABOR - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Labor Studies program provides students a sound foundation in the law, history, culture, politics, institutions, and contemporary issues of American work life. Students will gain a comprehensive introduction to the role and contributions of organized labor to American society, a thorough grounding in the rights of employees on the job, knowledge of broader social justice interconnections with labor, and specialized training in the skills necessary to be an effective leader in labor unions or non-profit organizations and in other contexts for labor-management relations.

This certificate confirms successful completion of courses in American Labor Movement and Labor and Politics.

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 History and Politics of American Labor Program will be able to:

1. Identify the role of working people in the U.S. and analyze how concepts of work informed the origins of unionization in the country as well as theoretical developments of labor as a field of study.
2. Describe current and emerging labor issues in ways that demonstrate awareness of issues of equity such as race, ethnicity and gender in the labor force, immigrant workers, and young workers.
3. Identify strategies used in a variety of work settings and organizations and analyze for their effectiveness in promoting fair and equitable labor practices.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

LABR 100	American Labor Movement (Active)	3.0
LABR 108	Labor and Politics (Active)	3.0

HOMELESSNESS PREVENTION STRATEGIES - CERTIFICATE OF PERFORMANCE : CITY

Summary

The Certificate of Performance in Homelessness Prevention Strategies provides students with a foundation in analysis of behavior and service systems. Students apply human service and social work theories through practice with individuals, groups, and communities. This program is designed for students interested in working in public and private organizations addressing homelessness, students majoring in social work, alcohol and other drug studies, psychology, or those interested in expanding their knowledge base to the helping professions.

Students pursuing employment in social work and/or are majoring in social work are recommended to complete Human Services 110 in addition to the course requirements. Because major preparation requirements vary at each transfer institution, courses used to complete the social work major should be selected with the assistance of a San Diego City College counselor.

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 Homelessness Prevention Strategies Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging (e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

HUMS 75	Working with Homeless and At-Risk Populations (Active)	2.0
HUMS 95	Public Assistance and Benefits Program (Active)	1.0
HUMS 120	Introduction to Social Work (Active)	3.0
PSYC 161	Introduction to Counseling (Active)	3.0

HVAC/R MECHANICAL SYSTEMS INSTALLATION AND REPAIR - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in HVAC/R Mechanical Systems Installation and Repair provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the HVAC/R Mechanical Systems Installation and Repair Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0
EGEE 50	Building Science Principles (Active)	3.0

INFORMATION TECHNOLOGY MANAGEMENT - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Information Technology Management provides students with a comprehensive education in teamwork and leadership, networking and security, and information systems management. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in installation, administration, and management of computer and network systems. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

The Computer Information Systems department requires student to complete all requirements for the degree within five years.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Information Technology Management Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.0

BUSE 119	Business Communications (Active)	3.0
CBTE 180	Microsoft Office (Active)	3.0
INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 111	Windows Desktop Administration (Active)	3.0
INWT 112	Windows Infrastructure Administration (Active)	3.0

INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 125	Cloud Architecture (Cloud+) (Active)	3.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0

INFORMATION TECHNOLOGY MANAGEMENT - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Information Technology Management provides students with a comprehensive education in teamwork and leadership, networking and security, and information systems management. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in installation, administration, and management of computer and network systems. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

The Computer Information Systems department requires student to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Information Technology Management Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.0

BUSE 119	Business Communications (Active)	3.0
CBTE 180	Microsoft Office (Active)	3.0
INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 111	Windows Desktop Administration (Active)	3.0
INWT 112	Windows Infrastructure Administration (Active)	3.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 125	Cloud Architecture (Cloud+) (Active)	3.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0

INTERACTION DESIGN - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Interaction design is a field that blends visual communication and technology to create interactive experiences on a wide variety of digital platforms. Students apply industry standard user experience processes to the development of effective information architecture, intuitive user interfaces, and compelling interactive content. With an emphasis on research, strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. The program culminates in a professional body of work that could be used to obtain employment or transfer to a four-year design program.

The Design Department requires students to complete all requirements for the award within seven years.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Interaction Design Program will be able to:

1. Incorporate research processes and conceptual strategies to solve design problems.
2. Demonstrate an understanding of visual coherence by building typographic systems.
3. Demonstrate proficiency with current industry standard design software.
4. Produce a body of work that demonstrates a unique voice, vision, and viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DSGN 100	Introduction to Graphic Design (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
DSGN 104	Graphic Design History (Active)	3.0
DSGN 106	Typography I (Active)	3.0
DSGN 124	Page Layout (Active)	3.0
DSGN 143	Interaction Design I (Active)	3.0
DSGN 153	Interaction Design II (Active)	3.0
DSGN 203	Interaction Design III (Active)	3.0

Complete three additional courses from the following: **Semester Units:** 9.0

DSGN 120	Illustration (Active)	3.0
ARTF 174A	Book Arts I (Active)	3.0
DSGN 202	Digital Media II (Active)	3.0
DSGN 206	Typography II (Active)	3.0
DSGN 210	Branding and Packaging (Active)	3.0
DSGN 213	Interaction Design IV (Active)	3.0
DSGN 216A	Design Studio I (Active)	3.0
DSGN 216B	Design Studio II (Active)	3.0
DSGN 216C	Design Studio III (Active)	3.0
DSGN 218	Internship (Active)	3.0
		3.0-6.0
DSGN 222	Book Arts II (Active)	3.0
OR		
		6.0
DSGN 248	Portfolio I (Active)	3.0
AND		
DSGN 258	Portfolio II (Active)	3.0

INTERACTION DESIGN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Interaction design is a field that blends visual communication and technology to create interactive experiences on a wide variety of digital platforms. Students apply industry standard user experience processes to the development of effective information architecture, intuitive user interfaces, and compelling interactive content. With an emphasis on research, strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. The program culminates in a professional body of work that could be used to obtain employment or transfer to a four-year design program.

The Design Department requires students to complete all requirements for the award within seven years.

Learning Outcome(s): Students who complete the Interaction Design Program will be able to:

1. Incorporate research processes and conceptual strategies to solve design problems.
2. Demonstrate an understanding of visual coherence by building typographic systems.
3. Demonstrate proficiency with current industry standard design software.
4. Produce a body of work that demonstrates a unique voice, vision, and viewpoint.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DSGN 100	Introduction to Graphic Design (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
DSGN 104	Graphic Design History (Active)	3.0
DSGN 106	Typography I (Active)	3.0
DSGN 124	Page Layout (Active)	3.0
DSGN 143	Interaction Design I (Active)	3.0
DSGN 153	Interaction Design II (Active)	3.0
DSGN 203	Interaction Design III (Active)	3.0

Choose three courses from the following: **Semester Units:** 9.0

DSGN 120	Illustration (Active)	3.0
ARTF 174A	Book Arts I (Active)	3.0
DSGN 202	Digital Media II (Active)	3.0
DSGN 206	Typography II (Active)	3.0
DSGN 210	Branding and Packaging (Active)	3.0
DSGN 213	Interaction Design IV (Active)	3.0
DSGN 216A	Design Studio I (Active)	3.0
DSGN 216B	Design Studio II (Active)	3.0
DSGN 216C	Design Studio III (Active)	3.0
DSGN 218	Internship (Active)	3.0
		3.0-6.0
DSGN 222	Book Arts II (Active)	3.0
OR		
		6.0
DSGN 248	Portfolio I (Active)	3.0
AND		
DSGN 258	Portfolio II (Active)	3.0

INTERMEDIATE C++ - CERTIFICATE OF PERFORMANCE: CITY

Summary

Intermediate C++ provides students with an in-depth understanding of object-oriented programming in the C++ language, including classes, operator overloading, inheritance, polymorphism, exception handling, and the

standard template library (STL). This is followed by an advanced study of best practices, templates, robust coding practices, unit testing, and adding a user interface. This curriculum is based upon meaningful programming assignments that are created, debugged, and tested in a contemporary Integrated Development Environment (IDE).

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 Intermediate C++ Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

CISC 201	Advanced C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0

INTRODUCTION TO C++ - CERTIFICATE OF PERFORMANCE: CITY

Summary

Introduction to C++ provides students with a basic understanding of programming in the C++ language. It includes control structures, functions, file-handling, and pointers, followed by a study of data structures including linked lists, stacks, queues, recursion, and binary trees. This curriculum includes meaningful programming assignments that take advantage of contemporary Integrated Development Environments (IDE) to develop/ debug/ test working code.

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 Introduction to C++ Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 8.0

CISC 187	Data Structures in C++ (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0

INTRODUCTION TO MANUFACTURING - CERTIFICATE OF PERFORMANCE: CITY

Summary

This certificate prepares students with necessary skills, knowledge and experience to continue on with the coursework and projects in MFET program.

Note: MFET 101 and MFET 105 could be taken in the same semester.

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 Introduction to Manufacturing Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0

MFET 101 and MFET 105 may be taken in the same semester.

Choose one of the following: **Semester Units:** 1.5

MFET 107D	STEM Drone Building (Active)	1.5
MFET 107G	STEM Guitar Building (Active)	1.5
MFET 107H	STEM High Tech Device Building (Active)	1.5

ITALIAN - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The study of languages provides communication skills, provides exposure to the richness of cultural variety, increases transfer options to universities with language requirements, opens new career opportunities, enriches global travel, and provides personal enrichment. The program is designed to prepare students for transfer to a baccalaureate institution and for proficiency in a language in a variety of settings.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Italian Program will be able to:

1. Demonstrate preparedness for successful transition to the language program of four year institutions.
2. Demonstrate accurate language grammar including writing, speaking, and listening in the target language.
3. Discuss the social and cultural life of Language speakers in the target language.
4. Read and analyze writings in Language target areas.
5. Demonstrate through discussion and actions the acceptance and value of other peoples.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

ITAL 101	First Course in Italian (Active)	5.0
ITAL 102	Second Course in Italian (Active)	5.0
ITAL 201	Third Course in Italian (Active)	5.0
ITAL 210	The Grammar of Spoken Italian I (Active)	3.0
ITAL 211	The Grammar of Spoken Italian II (Active)	3.0

JOURNALISM - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Journalism for Transfer is intended for students who plan to complete a bachelor's degree in Journalism 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 Journalism Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.

3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 132	Multiplatform Journalism Production (Active)	3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
Select one course from the following:		
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0

JOURNALISM - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Journalism offers hands-on training and experience in the fundamentals of journalism, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on planning, writing, producing, directing, editing, and performing across platforms. Other topics addressed include social media production and management, photojournalism and documentary photography, and studio operations. Students contribute to the award-winning City Times Media platform and its partners, including digital news, magazine, TV news, radio podcast and independent film. This program is designed for students interested in enhancing their skills and knowledge of journalism, students majoring in Journalism, and for those seeking entry-level employment in media-related industries.

The skills acquired with this A.S. degree may lead to employment, freelance work, or business ownership. These jobs include, but are not limited to, multimedia journalist, digital content producer, production assistant, news producer, on-air talent, news reporter, news writer, public information officer, communications director, social media producer, operations engineer, news photographer, audio engineer, studio camera operator, and sound technician.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Journalism Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 102	Social Media in the Digital Age (Active)	3.0
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
		3.0

FJMP 132	Multiplatform Journalism Production (Active)	3.0
OR		
FJMP 133	Broadcast News Production (Active)	3.0
		3.0
FJMP 143	On-Camera Performance (Active)	3.0
OR		
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 132	Multiplatform Journalism Production (Active)	3.0
FJMP 133	Broadcast News Production (Active)	3.0
FJMP 134	Multiplatform Magazine Production (Active)	3.0
PHOT 215	Photojournalism and Documentary Photography (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0
FJMP 232B	Multiplatform Journalism Workshop II (Active)	3.0
FJMP 233A	Broadcast News Workshop I (Active)	3.0
FJMP 233B	Broadcast News Workshop II (Active)	3.0

KINESIOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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.

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, points, 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.

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. Demonstrate movement competence as it relates to physical activity, fitness, and sport.
2. Design exercise programs to improve key fitness components, including cardiovascular endurance, muscular endurance, muscular strength, flexibility, and body composition.
3. Articulate knowledge of how physical activity influences health across the lifespan, emphasizing its role in chronic disease prevention and quality of life.
4. Apply concepts of wellness, physical activity, and exercise to develop programs that promote overall health and well-being for individuals and communities.
5. Utilize current exercise science technologies, tools and software for assessment, program design, and analysis to enhance learning, performance, and research outcomes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

EXSC 241B	Introduction to Kinesiology (Active)	3.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0

Select a maximum of one course from any 3 of the following areas (3-3.5 units) **Semester Units:** 3.0-3.5

Combatives **Semester Units:** 0.0

EXSC 147A	Kickboxing I (Active)	1.0
EXSC 147B	Kickboxing II (Active)	1.0
EXSC 147C	Kickboxing III (Active)	1.0
EXSC 148A	Mixed Martial Arts I (Active)	1.0
EXSC 148B	Mixed Martial Arts II (Active)	1.0
EXSC 148C	Mixed Martial Arts III (Active)	1.0

Dance **Semester Units:** 0.0

DANC 112A	Ballet I (Active)	1.5
DANC 112B	Ballet II (Active)	1.5
DANC 112C	Ballet III (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 117B	Tap Dance II (Active)	1.5
DANC 117C	Tap Dance III (Active)	1.5
DANC 122A	Hip Hop I (Active)	1.5
DANC 122B	Hip Hop II (Active)	1.5
DANC 122C	Hip Hop III (Active)	1.5
DANC 125A	Latin American Dance I (Active)	1.0
DANC 125B	Latin American Dance II (Active)	1.0
DANC 137A	Jazz Dance I (Active)	1.5
DANC 137B	Jazz Dance II (Active)	1.5
DANC 137C	Jazz Dance III (Active)	1.5
DANC 142A	Modern Dance I (Active)	1.5
DANC 142B	Modern Dance II (Active)	1.5
DANC 142C	Modern Dance III (Active)	1.5
DANC 145A	Ballroom Dance I (Active)	1.0
DANC 145B	Ballroom Dance II (Active)	1.0

Fitness **Semester Units:** 0.0

DANC 160A	Pilates - Stretch and Conditioning (Active)	1.0
DANC 160B	Pilates - Alignment and Correctives (Active)	1.0
EXSC 122A	Cardio Zumba I (Active)	1.0
EXSC 122B	Cardio Zumba II (Active)	1.0
EXSC 124A	Core and Cardio Fitness I (Active)	1.0
EXSC 124B	Core and Cardio Fitness II (Active)	1.0
EXSC 124C	Core and Cardio Fitness III (Active)	1.0
EXSC 125A	Aerobic Dance I (Active)	1.0
EXSC 125B	Aerobic Dance II (Active)	1.0
EXSC 125C	Aerobic Dance III (Active)	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 127A	Cardio Kickboxing I (Active)	1.0
EXSC 127B	Cardio Kickboxing II (Active)	1.0
EXSC 127C	Cardio Kickboxing III (Active)	1.0
EXSC 129A	Step Aerobics I (Active)	1.0
EXSC 129B	Step Aerobics II (Active)	1.0
EXSC 129C	Step Aerobics III (Active)	1.0
EXSC 130A	Indoor Cycling I (Active)	1.0
EXSC 130B	Indoor Cycling II (Active)	1.0
EXSC 135A	Individual Conditioning I (Active)	1.0
EXSC 135B	Individual Conditioning II (Active)	1.0
EXSC 135C	Individual Conditioning III (Active)	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 142	Hiking for Fitness I- Fundamentals (Active)	1.0
EXSC 143A	Outdoor Cycling Level I (Active)	1.0
EXSC 143B	Outdoor Cycling Level II (Active)	1.0
EXSC 144A	Fitness Walking I (Active)	1.0
EXSC 145A	Yoga I (Active)	1.0
EXSC 145B	Yoga II (Active)	1.0
EXSC 145C	Yoga III (Active)	1.0

Individual Sports **Semester Units:** 0.0

EXSC 154A	Badminton I (Active)	1.0
EXSC 154B	Badminton II (Active)	1.0
EXSC 154C	Badminton III (Active)	1.0
EXSC 166A	Golf I (Active)	1.0
EXSC 166B	Golf II (Active)	1.0
EXSC 166C	Golf III (Active)	1.0
EXSC 178A	Tennis I (Active)	1.0
EXSC 178B	Tennis II (Active)	1.0
EXSC 178C	Tennis III (Active)	1.0
EXSC 179A	Pickleball I (Active)	1.0
EXSC 179B	Pickleball II (Active)	1.0

Team Sports **Semester Units:** 0.0

EXSC 156A	Baseball I (Active)	1.0
EXSC 156B	Baseball II (Active)	1.0

EXSC 156C	Baseball III (Active)	1.0
EXSC 158A	Basketball I (Active)	1.0
EXSC 158B	Basketball II (Active)	1.0
EXSC 174A	Soccer I (Active)	1.0
EXSC 174B	Soccer II (Active)	1.0
EXSC 174C	Soccer III (Active)	1.0
EXSC 176A	Softball I (Active)	1.0
EXSC 176B	Softball II (Active)	1.0
EXSC 176C	Softball III (Active)	1.0
EXSC 182A	Volleyball I (Active)	1.0
EXSC 182B	Volleyball II (Active)	1.0
EXSC 182C	Volleyball III (Active)	1.0
EXSC 183A	Beach Volleyball I (Active)	1.0
EXSC 183B	Beach Volleyball II (Active)	1.0

Select two courses, one course and one course sequence, or two course sequences from the following options (6-10 units) **Semester Units:** 6.0-10.0

		3.0
BUSE 115	Statistics for Business (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
POLI 201	Elementary Statistics for Political Science (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
		5.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
AND		
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
		5.0
PHYS 125	General Physics (Active)	5.0
OR		
		5.0
PHYS 180A	General Physics I (Active)	4.0
AND		
PHYS 181A	General Physics Laboratory I (Active)	1.0
OR		
PHYS 195	Mechanics (Active)	5.0
		3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
OR		
SOCO 101	Principles of Sociology (Active)	3.0

LABOR STUDIES - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Labor Studies provides union members, organizers, and officers as well as those students interested in social justice majors and non-profit community organizing work the skills needed to qualify for and to be effective in their positions.

Students who successfully complete the Certificate of Achievement in Labor Studies will have a working knowledge of labor organizations, their history, philosophy, structure, and day-to-day operations.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Labor Studies Program will be able to:

1. Identify the role of working people in the U.S. and analyze how concepts of work informed the origins of unionization in the country as well as theoretical developments of labor as a field of study.
2. Describe current and emerging labor issues in ways that demonstrate awareness of issues of equity such as race, ethnicity and gender in the labor force, immigrant workers, and young workers.
3. Identify strategies used in a variety of work settings and organizations and analyze for their effectiveness in promoting fair and equitable labor practices.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

LABR 100	American Labor Movement (Active)	3.0
LABR 102	Labor Law (Active)	3.0
LABR 107	Organizing (Active)	3.0
LABR 108	Labor and Politics (Active)	3.0

LAW, PUBLIC POLICY, AND SOCIETY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Law, Public Policy, and Society for Transfer Degree is intended for students who plan to complete a bachelor's degree in Law, Public Policy, and Society 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. Critically analyze the study of human behavior as it relates to political situations in college-level essays, written assignments, and research papers.

2. Identify and describe main concepts in the study of political science including, but not limited to, political power, sovereignty, nation-state; legitimacy; authority, political culture, political socialization, political ideology; social contract; separation of powers; federalism; unitary system; rule of law and globalization.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

ENGL C1000	Academic Reading and Writing (Active)	3.0
PADM 110	Introduction to Law and Society (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
		3.0
Select one course from the following:		3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 170	Small Group Communication (Active)	3.0
Select one course from the following:		3.0
COMS 160	Argumentation and Critical Thinking (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
Select one course from the following:		3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
Select one course from the following:		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 COURSE FROM TWO OF THE FOLLOWING AREAS (2 COURSES, 6 UNITS TOTAL) **Semester Units:** 6.0

Business		
BUSE 140	Business Law and the Legal Environment (Active)	3.0
Economics		
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
Political Science		
POLI 101	Introduction to Political Science (Active)	3.0
POLI 103	Comparative Politics (Active)	3.0
POLI 124	Power and Justice: An Introduction to Political Theory (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
Public Policy		
PADM 200	Introduction to Public Administration (Active)	3.0
Diversity		
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
COMS 180	Intercultural Communication (Active)	3.0
GEND 101	Introduction to Gender Studies (Active)	3.0

LEAN SIX SIGMA - CERTIFICATE OF PERFORMANCE: CITY

Summary

This certificate covers topics in quality, lean and six sigma, with both theoretical and hands-on training contents. The certificate prepares students for quality-related jobs, and also for taking the six sigma green belt or other quality-related certification.

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 Lean Six Sigma Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

		9.0
MFET 210	Statistical Process Control (Active)	3.0
AND		
MFET 230	Lean Manufacturing (Active)	3.0
AND		
MFET 240	Six Sigma and Lean Implementation (Active)	3.0

LIBERAL ARTS AND SCIENCES: LANGUAGE ARTS AND HUMANITIES - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Liberal Arts and Sciences Degree is designed to enable students to complete the requirements for an Associate of Arts Degree with a minimum of 18 units in an area of emphasis and transfer to a University of California, a California State University or an independent/private college and university.

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 San Diego City College counselor.

Common university majors in this emphasis include: Classics, Communication, Comparative Literature, Creative Writing, Deaf Studies, English, French, German, Global Cultures, History, Humanities, Italian Studies, Latin American and Latino Studies, Linguistics, Literary Studies, Literature, Literature and Culture, Media Studies, Mass Communications, Philosophy, Professional Writing and Rhetoric, Religious Studies, Spanish, Spanish Studies.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Students should complete a minimum of 18 units in Arts and Humanities courses:		
AMSL 120	American Sign Language Level I (Active)	5.0
AMSL 121	American Sign Language Level II (Active)	5.0
AMSL 220	American Sign Language Level III (Active)	5.0
AMSL 221	American Sign Language Level IV (Active)	5.0
AMSL 150	Introduction to Deaf Culture (Active)	3.0
ARAB 101	First Course in Arabic (Active)	5.0
ARAB 102	Second Course in Arabic (Active)	5.0
BLAS 110	African American Art (Active)	3.0
BLAS 120	Black Music (Active)	3.0
BLAS 155	African American Literature (Active)	3.0
CHIC 130	Mexican Literature in Translation (Active)	3.0
CHIC 135	Chicana/o Literature (Active)	3.0
CHIC 190	Chicano Images in Film (Active)	3.0
CHIC 210	Chicano Culture (Active)	3.0
COMS 101	Voice and Articulation (Active)	3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
COMS 104	Advanced Public Communication (Active)	3.0
COMS 111	Oral Interpretation (Active)	3.0
COMS 135	Interpersonal 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
ENGL C1000	Academic Reading and Writing (Active)	3.0
ENGL 105	Composition and Literature (Active)	3.0
ENGL 202	Introduction to Linguistics (Active)	3.0
ENGL C1001	Critical Thinking and Writing (Active)	3.0
ENGL 208	Introduction to 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 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 237	Women in Literature (Active)	3.0
ENGL 238	Evaluating Children's Literature (Active)	3.0
ENGL 240	Shakespeare (Active)	3.0
ENGL 245A	Writing Creative Nonfiction (Active)	3.0
ENGL 252A	Fundamentals of Fiction Writing (Active)	3.0
ENGL 247A	Writing Seminar - Poetry (Active)	3.0
ENGL 249A	Introduction to Creative Writing I (Active)	3.0
FREN 101	First Course in French (Active)	5.0
FREN 201	Third Course in French (Active)	5.0
FREN 102	Second Course in French (Active)	5.0

FREN 202	Fourth Course in French (Active)	5.0
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
HUMA 101	Introduction to the Humanities I (Active)	3.0
HUMA 102	Introduction to the Humanities II (Active)	3.0
HUMA 103	Introduction to the New Testament (Active)	3.0
HUMA 106	World Religions (Active)	3.0
HUMA 201	Mythology (Active)	3.0
ITAL 101	First Course in Italian (Active)	5.0
ITAL 102	Second Course in Italian (Active)	5.0
ITAL 201	Third Course in Italian (Active)	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 104A	History Of Western Philosophy: Ancient to Medieval (Active)	3.0
PHIL 104B	History of Western Philosophy: Modern to Contemporary (Active)	3.0
PHIL 105	Contemporary Philosophy (Active)	3.0
PHIL 106	Asian Philosophy (Active)	3.0
PHIL 107	Reflections on Human Nature (Active)	3.0
PHIL 108	Perspectives on Human Nature and Society (Active)	3.0
PHIL 111	Philosophy in Literature and Other Fiction (Active)	3.0
PHIL 125	Philosophy of Women (Active)	3.0
PHIL 126	Philosophy of Contemporary Gender Issues (Active)	3.0
PHIL 130	Philosophy of Art and Music (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
SPAN 215	Spanish for Spanish Speakers I (Active)	5.0
SPAN 216	Spanish for Spanish Speakers II (Active)	5.0

LIBERAL ARTS AND SCIENCES: SCIENTIFIC STUDIES IN BIOLOGICAL SCIENCE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Liberal Arts and Sciences: Scientific Studies in Biological Sciences Associate Degree offers students the theoretical knowledge, practical laboratory experience, and quantitative reasoning skills necessary to transfer to a University of California, a California State University, or an independent/private college or university in a variety of specializations in the Biological Sciences, including: General Biology, Biology Education, Biochemistry, Biopsychology, Cell Biology, Biotechnology, Cell and Developmental Biology, Chemical Biology, Developmental Biology, Ecological, Evolutionary, and Organismal Biology, Ecology, Behavior, and Evolution, Ecology and Environmental Biology, Ecology and Evolutionary Biology, Environmental Biology, Human Biology, Integrative Biology, Marine Biology, Microbiology, Microbial Biology, Microbiology and Immunology, Neurobiology Biology Education, Organismal Biology, Plant Biology, Molecular and Cell Biology, and Molecular Environmental Biology.

The Liberal Arts and Sciences Degree is designed to enable students to complete the requirements for an Associate in Arts Degree with a minimum of 18 units in an area of emphasis and transfer to a University of California, a California State University, or an independent/private college. 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 San Diego City College counselor.

Common university majors in this field include: Agricultural Science, Biochemistry, Bioengineering, Bioinformatics, Biological Sciences, Biophysics, Biotechnology, Botany, Cell Biology, Conservation, Developmental Biology, Ecology, Entomology, Life Science, Genetics, Marine Biology, Medical Sciences, Microbiology, Molecular Biology, Natural Sciences, Neuroscience, Psychobiology, Toxicology, and Zoology/Animal Sciences.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Complete a minimum of 18 units from the courses listed below:		
BIOL 101	Issues in Environmental Science & Sustainability (Active)	4.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
BIOL 130	Human Heredity (Active)	3.0
BIOL 180	Plants and People (Active)	3.0
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 111	Cancer Biology (Active)	3.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 232	Experience in Human Dissection (Active)	1.0
BIOL 235	Human Physiology (Active)	4.0
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
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
		3.0-4.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
MATH 115	Gateway to Experimental Statistics (Active)	4.0
OR		
BUSE 115	Statistics for Business (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 180A	General Physics I (Active)	4.0

PHYS 180B	General Physics II (Active)	4.0
PHYS 181A	General Physics Laboratory I (Active)	1.0
PHYS 181B	General Physics Laboratory II (Active)	1.0
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 255	Introduction to Psychological Research (Active)	3.0
PSYC 259	Behavioral Science Statistics Laboratory (Active)	1.0

LIBERAL ARTS AND SCIENCES: SCIENTIFIC STUDIES MATHEMATICS AND PRE-ENGINEERING - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Liberal Arts and Sciences: Scientific Studies in Mathematics and Pre-Engineering Associate Degree offer students the mathematical and scientific knowledge, practical experience, and quantitative reasoning skills necessary to transfer to a University of California, a California State University, or an independent/private college or university in a variety specializations, including Aerospace Engineering, Applied Electronics, Applied Mathematics, Astrophysics, Civil Engineering, Computer Engineering, Computer Science, Construction Engineering, Data Science, Electrical Engineering, Engineering, Engineering Technology, Environmental Engineering, Industrial Engineering Technology, Information Systems, Manufacturing Engineering, Materials Science, Mathematics, Robotics, Statistics, Mechanical Engineering, Network and Digital Technology, Nuclear Engineering, Software Engineering, and Structural Engineering.

The Liberal Arts and Sciences Degree is designed to enable students to complete the requirements for an Associate in Arts Degree with a minimum of 18 units in an area of emphasis and transfer to a University of California, a California State University, or an independent/private college. 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 San Diego City College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Liberal Arts and Sciences: Scientific Studies Mathematics and Pre-Engineering Program will be able to:
1.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Complete a minimum of 18 units from the courses listed below:

		3.0-4.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
MATH 115	Gateway to Experimental Statistics (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
CISC 179	Introduction to Python Programming (Active)	4.0
CISC 181	Principles of Information Systems (Active)	4.0

CISC 186	Visual Basic Programming (Active)	4.0
CISC 187	Data Structures in C++ (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
CISC 205	Object Oriented Programming using C++ (Active)	4.0
CISC 220	Fundamentals of Computer Game Programming (Active)	4.0
ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ENGE 101	Introduction to Engineering (Active)	1.5
ENGE 108	Dimensioning and Tolerancing (Active)	3.0
ENGE 111	Introduction to Computer-Aided Design (Active)	3.0
ENGE 116	Computational Methods in Engineering (Active)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0
ENGE 152	Engineering Design (Active)	3.0
ENGE 200	Statics (Active)	3.0
ENGE 210	Properties of Materials (Active)	3.0
ENGE 240	Digital Systems (Active)	3.0
ENGE 250	Dynamics (Active)	3.0
ENGE 260	Electric Circuits (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 245	Discrete Mathematics (Active)	3.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
MATH 254	Introduction to Linear Algebra (Active)	3.0
MATH 255	Differential Equations (Active)	3.0
MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 110	Industrial Safety (Active)	2.0
MFET 120	Manufacturing Processes (Active)	4.0
MFET 210	Statistical Process Control (Active)	3.0
PHYS 180A	General Physics I (Active)	4.0
PHYS 180B	General Physics II (Active)	4.0
PHYS 181A	General Physics Laboratory I (Active)	1.0
PHYS 181B	General Physics Laboratory II (Active)	1.0
PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0

LIBERAL ARTS AND SCIENCES: SCIENTIFIC STUDIES PHYSICAL AND EARTH SCIENCES SPECIALIZATION - ASSOCIATE OF ARTS DEGREE: CITY

The specialization in Physical and Earth Sciences is intended for students who plan to complete a bachelor's degree at a transfer institution in a physical and earth science-related major.

Common university majors in this field include: Astronomy, Astrophysics, Biochemistry, Biophysics, Chemical Engineering, Chemical Physics, Chemistry, Earth Sciences, Environmental Chemistry, Environmental Sciences, Engineering Physics, Geographic Information Science, Geology, Hydrologic Sciences, Meteorology, Natural Sciences, Oceanography, Physical Geography, Physical Science and Physics.

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 San Diego City College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Complete a minimum of 18 units from the courses listed below:		
AGRI 100	Principles of Sustainable Agriculture (Active)	3.0
ASTR 101	Descriptive Astronomy (Active)	3.0
ASTR 109	Practice in Observing (Active)	1.0
ASTR 111	Astronomy Laboratory (Active)	1.0
		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
CHEM 111	Chemistry in Society (Active)	3.0
CHEM 111L	Chemistry in Society Laboratory (Active)	1.0
CHEM 130	Introduction to Organic and Biological Chemistry (Active)	3.0
CHEM 130L	Introduction to Organic and Biological Chemistry Laboratory (Active)	1.0
CHEM 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
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0
CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
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
CISC 181	Principles of Information Systems (Active)	4.0
CISC 190	Java Programming (Active)	4.0
CISC 192	C/C++ Programming (Active)	4.0
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

GEOL 100	Physical Geology (Active)	3.0
GEOL 101	Physical Geology Laboratory (Active)	1.0
GEOL 104	Earth Science (Active)	3.0
GISG 104	Geographic Information Science and Spatial Reasoning (Active)	3.0
GISG 110	Introduction to Mapping and Geographic Information Systems (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
PHYN 100	Survey of Physical Science (Active)	3.0
PHYN 101	Survey of Physical Science Laboratory (Active)	1.0
PHYS 100	Introductory Physics (Active)	4.0
PHYS 125	General Physics (Active)	5.0
PHYS 126	General Physics II (Active)	5.0
PHYS 180A	General Physics I (Active)	4.0
PHYS 180B	General Physics II (Active)	4.0
PHYS 181A	General Physics Laboratory I (Active)	1.0
PHYS 181B	General Physics Laboratory II (Active)	1.0
PHYS 195	Mechanics (Active)	5.0
PHYS 196	Electricity and Magnetism (Active)	5.0
PHYS 197	Waves, Optics and Modern Physics (Active)	5.0
SUST 101	Introduction to Sustainability (Active)	3.0

LIBERAL ARTS AND SCIENCES: SOCIAL AND BEHAVIORAL SCIENCES - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts Degree in Liberal Arts and Sciences: Social and Behavioral Sciences is designed to enable students to complete the requirements for an associate degree with a minimum of 18 units in an area of emphasis and transfer to a University of California, a California State University, or an independent/private college and university.

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 San Diego City College counselor.

Common university majors related to this emphasis include: Afro American Studies, Anthropology, Archeology, Behavioral Science, Black Studies, Chicano Studies, Child Development, Cognitive Science, Community Studies, Criminal Justice/Justice Studies, Cultural Geography, Developmental Studies, Ethnic Studies, Family and Consumer Studies, Gerontology, Global Studies, History, Human Services, International Relations, Law, Peace and Conflict Studies, Policy Analysis, Political Science, Psychobiology, Psychology, Public Administration, Social Work, Social Science, Sociology.

Students should complete a minimum of 18 units in Social and Behavioral Sciences courses.

General Education
In addition to the courses listed, students must complete one of the following general education options:

- San Diego Community College District General Education and District Requirements. This GE pattern may fulfill all lower division general education requirements at an independent/private college or university.
- The California General Education Transfer Curriculum (Cal-GETC). Cal-GETC is accepted by all California State University (CSU) campuses and most University of California (UC) campuses and majors. It is also accepted by some private/independent or out-of-state universities.
- San Diego Community College District General Education and additional courses needed to meet all lower division general education requirements of an accredited U.S. postsecondary institution which awards the

baccalaureate degree, as detailed in an interinstitutional articulation or transfer agreement and certified by a San Diego City College counselor.

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 Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Students should complete a minimum of 18 units in Social and Behavioral Science courses:		
ADJU 101	Introduction to Administration of Justice (Active)	3.0
ADJU 102	Criminal 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
ANTH 115	Introduction to Archaeological Field Work (Active)	4.0
ANTH 210	Introduction to the Indigenous People of California (Active)	3.0
BLAS 100	Introduction to Black Studies (Active)	3.0
BLAS 104	Black Psychology (Active)	3.0
BLAS 115	Sociology from a Black Perspective (Active)	3.0
BLAS 116	Contemporary Social Problems from a Black Perspective (Active)	3.0
BLAS 120	Black Music (Active)	3.0
BLAS 130	The Black Family (Active)	3.0
BLAS 135	Introduction to Black Politics (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
BLAS 145A	Introduction to African History (Active)	3.0
BLAS 145B	Introduction to African History (Active)	3.0
BLAS 150	Black Women in Literature, Film and the Media (Active)	3.0
BLAS 155	African American Literature (Active)	3.0
BLAS 165	Sexuality and Black Culture (Active)	3.0
CHIC 110A	Introduction to Chicana and Chicano Studies (Active)	3.0
CHIC 110B	Introduction to Chicana and Chicano Studies (Active)	3.0
CHIC 130	Mexican Literature in Translation (Active)	3.0
CHIC 135	Chicana/o Literature (Active)	3.0
CHIC 138	Literature of La Raza in Latin America in Translation (Active)	3.0
CHIC 141A	United States History from a Chicano Perspective (Active)	3.0
CHIC 141B	United States History from a Chicano Perspective (Active)	3.0
CHIC 150	History of Mexico (Active)	3.0
CHIC 170	La Chicana (Active)	3.0
CHIC 190	Chicano Images in Film (Active)	3.0
CHIC 201	The Indigenous Tradition of Mexico and Ancient Mesoamerica (Active)	3.0
CHIC 210	Chicano Culture (Active)	3.0
CHIL 101	Human Growth and Development (Active)	3.0
CHIL 133	Curriculum: Language, Literacy, and Art (Active)	3.0
CHIL 135	Curriculum: Science, Math, and Music and Movement (Active)	3.0
CHIL 141	The Child, Family and Community (Active)	3.0
CHIL 151	Program Planning (Active)	3.0

CHIL 161	Observations and Issues in Child Development (Active)	2.0
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
CHIL 202	Administration of Early Childhood Programs (Active)	3.0
CHIL 210	Supervision of Early Childhood Programs (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0
CISC 190	Java Programming (Active)	4.0
GEND 101	Introduction to Gender Studies (Active)	3.0
GEOG 102	Cultural Geography (Active)	3.0
GEOG 104	World Regional Geography (Active)	3.0
GISG 104	Geographic Information Science and Spatial Reasoning (Active)	3.0
GISG 110	Introduction to Mapping and Geographic Information Systems (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 123	U.S. History from the Asian Pacific American Perspective (Active)	3.0
HUMS 101	Introduction to Human Aging (Active)	3.0
HUMS 110	Social Work Fields of Service (Active)	3.0
HUMS 120	Introduction to Social Work (Active)	3.0
LIBS 101	Information Literacy and Research Skills (Active)	1.0
PEAC 101	Introduction to Peace Studies (Active)	3.0
POLI 101	Introduction to Political Science (Active)	3.0
POLI 103	Comparative Politics (Active)	3.0
POLI 121	American Political Development (Active)	3.0
POLI 124	Power and Justice: An Introduction to Political Theory (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
		3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
PSYC C1000	Introduction to Psychology (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 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
PSYC 255	Introduction to Psychological Research (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0
PSYC 283	Introduction to Cognitive Psychology (Active)	3.0

SOCO 101	Principles of Sociology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0
SOCO 125	Sociology of the Family (Active)	3.0
SOCO 150	Sociology of Latinos/Latinas (Active)	3.0
SOCO 145	Health and Society (Active)	3.0
SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 220	Introduction to Research Methods in Sociology (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0
		5.0
AMSL 220	American Sign Language Level III (Active)	5.0
OR		
ARAB 201A	Third Course in Arabic (Active)	5.0
OR		
FREN 201	Third Course in French (Active)	5.0
OR		
ITAL 201	Third Course in Italian (Active)	5.0
OR		
SPAN 201	Third Course in Spanish (Active)	5.0

LIBERAL ARTS AND SCIENCES: VISUAL AND PERFORMING ARTS - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Liberal Arts and Sciences Visual and Performing Arts Associate Degree offers students theoretical and practical approaches to the Arts, including Fine Arts, Theatre Arts, Dance, Music, and Photography. The varied program of study allows students to select courses that optimize their artistic goals. Students may select a program of courses to prepare them for continued study at the university level and/ or for artistic work in the private sector.

Common university majors related to this emphasis include: Applied Design, Art, Art History, Arts and Crafts, Dance, Drama, Industrial Arts, Painting and Printmaking, Photography, Sculpture, Studio Arts, Multimedia, Theatre Arts, Performing Arts.

Common employment and business opportunities in the private sector related to this emphasis include: Audio and Video Equipment Technician, Sound Engineering Technician, Photographer, Art Educator, Arts Administrator, Ceramicist, Display Designer, Muralist, Painter, Sculptor, Amusement Park Entertainer/Dancer, Dance Instructor, Dance Company Manager, Dance Studio Owner, Stage Manager, Theatre/Stage Technical Work.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

Students should complete a minimum of 18 units in Visual and Performing Arts courses. Courses can only be counted once toward the major.		
ARTF 100	Art Orientation (Active)	3.0
ARTF 104	Artists and Designers Today (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 115	African Art (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 156A	Drawing for Animation (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 175A	Sculpture I (Active)	3.0
ARTF 175B	Sculpture II (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 196	Clay and Glaze Technology (Active)	3.0
ARTF 197A	Handbuilding Ceramics I (Active)	3.0
ARTF 197B	Handbuilding Ceramics II (Active)	3.0
ARTF 198A	Introduction to Printmaking I (Active)	3.0
ARTF 205A	Installation, Performance, and New Genres (Active)	3.0
ARTF 206	Art Entrepreneurship (Active)	3.0
ARTF 207A	Industrial and Architectural Ceramic Design I (Active)	3.0
ARTF 207B	Industrial and Architectural Ceramic Design II (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0
ARTF 210B	Life Drawing II (Active)	3.0
ARTF 212	Sustainable Art and Design (Active)	3.0
DANC 111	Global Dance Traditions (Active)	2.0
DANC 112A	Ballet I (Active)	1.5
DANC 112B	Ballet II (Active)	1.5
DANC 112C	Ballet III (Active)	1.5
DANC 112D	Ballet IV (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 117B	Tap Dance II (Active)	1.5
DANC 117C	Tap Dance III (Active)	1.5
DANC 117D	Tap Dance IV (Active)	1.5
DANC 122A	Hip Hop I (Active)	1.5
DANC 122B	Hip Hop II (Active)	1.5
DANC 122C	Hip Hop III (Active)	1.5
DANC 122D	Hip Hop IV (Active)	1.5
DANC 127	Movement for Wellness (Active)	2.0
DANC 130A	Dance Repertoire (Active)	1.0
DANC 137A	Jazz Dance I (Active)	1.5
DANC 137B	Jazz Dance II (Active)	1.5
DANC 137C	Jazz Dance III (Active)	1.5
DANC 137D	Jazz Dance IV (Active)	1.5
DANC 142A	Modern Dance I (Active)	1.5
DANC 142B	Modern Dance II (Active)	1.5
DANC 142C	Modern Dance III (Active)	1.5
DANC 142D	Modern Dance IV (Active)	1.5
DANC 145A	Ballroom Dance I (Active)	1.0-1.5
DANC 145B	Ballroom Dance II (Active)	1.0-1.5
DANC 150A	Dance Making: Ballet (Active)	1.0

DANC 151A	Dance Making: Jazz (Active)	1.0
DANC 152A	Dance Making: Modern (Active)	1.0
DANC 153A	Dance Making: Dance Theatre (Active)	1.0
DANC 176A	Dance Improvisation (Active)	1.5
DANC 176B	Dance Improvisation II (Active)	1.5
DANC 178A	Advanced Commercial Dance I (Active)	1.5
DANC 178B	Advanced Commercial Dance II (Active)	1.5
DANC 179A	Advanced Classical Dance I (Active)	1.5
DANC 179B	Advanced Classical Dance II (Active)	1.5
DANC 180A	Advanced Contemporary Dance I (Active)	1.5
DANC 180B	Advanced Contemporary Dance II (Active)	1.5
DANC 181	History of Dance (Active)	3.0
DANC 183	Music for Dance (Active)	2.0
DANC 253	Choreography (Active)	2.0
DANC 261A	Dance Performance I (Active)	2.0
DANC 261B	Dance Performance II (Active)	2.0
DANC 261C	Dance Performance III (Active)	2.0
DANC 261D	Dance Performance IV (Active)	2.0
DANC 271A	Stage Costuming for Dance (Active)	1.0-2.0
DANC 271B	Makeup for Dance Productions (Active)	1.0-2.0
DANC 271C	Lighting Design for Dance Production (Active)	1.0-2.0
DANC 271D	Sound Design for Dance Production (Active)	1.0-2.0
DRAM 103	Acting for Non-majors (Active)	3.0
DRAM 105	Introduction to Dramatic Arts (Active)	3.0
DRAM 107	Study of Filmed Plays (Active)	3.0
DRAM 108	Playwriting (Active)	3.0
DRAM 109	Theatre and Social Issues (Active)	3.0
DRAM 123	Beginning Stagecraft (Active)	3.0
DRAM 124	Makeup for the Stage (Active)	3.0
DRAM 126	Advanced Stagecraft (Active)	3.0
DRAM 132	Beginning Acting (Active)	3.0
DRAM 133	Intermediate Acting (Active)	3.0
DRAM 134	Beginning Voice for Actors (Active)	3.0
DRAM 136	Theatre History I: Ancient Greece to the Renaissance (Active)	3.0
DRAM 137	Theatre History II: Restoration to the Present (Active)	3.0
DRAM 143	Beginning Costuming (Active)	3.0
DRAM 165	Introduction to Stage Movement (Active)	3.0
DRAM 240A	Musical Theatre Repertoire I (Active)	4.0
DRAM 240B	Musical Theatre Repertoire II (Active)	4.0
DRAM 242A	Rehearsal and Performance I (Active)	3.0
DRAM 242B	Rehearsal and Performance II (Active)	3.0
MUSC 104	Composition Technology (Active)	3.0
MUSC 118	Music Entrepreneurship (Active)	3.0
MUSC 160	Introduction to Electro-Acoustic Music (Active)	3.0
MUSC 162	Introduction to Recording and Sound Reinforcement (Active)	3.0
MUSC 170A	Electro-Acoustic Ensemble I (Active)	1.0
MUSC 220A	Music Marketing and Promotion I (Active)	2.0
MUSC 252	Sound Design and Digital Audio Post Production (Active)	3.0
MUSC 260	Electro-Acoustic Music Composition (Active)	3.0
MUSC 262	Intermediate Recording and Sound Reinforcement (Active)	3.0
MUSI 108	The Business of Music (Active)	3.0
PHOT 100	Introduction to Black & White Photography (Active)	3.0

PHOT 109	Photographic Composition and Design (Active)	3.0
PHOT 125	Photo Business Operations (Active)	2.0
PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 150	History of Photography (Active)	3.0
PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 181	Photo Editing: Photoshop (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

LICENSED VOCATIONAL NURSE TO REGISTERED NURSE (ADVANCED PLACEMENT) - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Nursing (ADN) LVN to RN step-up program curriculum prepares entry-level Registered Nurses (RN) as providers of care across the health/illness continuum and as members within the profession. The curriculum respects the individuality of the student and aims to provide a positive, innovative learning model that fosters the development of critical thinking and problem solving skills so that the Registered Nurse is equipped to deliver care to a culturally diverse population in a variety of healthcare settings. Registered Nurses collaborate with members of the health care team, are effective communicators, are politically aware, and demonstrate a commitment to lifelong learning. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

The Board of Registered Nursing (BRN) requires 6 units of Communication, verbal, written and group; and 16 units of Natural, Behavioral and Social sciences. For more details, visit the San Diego City College Nursing Education webpage.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions. Students interested in transfer should meet with the nursing education counselor.

It is strongly recommended that part or all of the general education requirements be completed prior to admission to the nursing education program.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Licensed Vocational Nurse to Registered Nurse (Advanced Placement) Program will be able to:

1. Apply concepts and skills to successfully pass the National Council Licensure Exam for Registered Nurses (NCLEX-RN).
2. Make clinical judgments and management decisions to ensure accurate and safe client care.
3. Practice within the ethical, legal, and regulatory frameworks of the professional nursing practice.
4. Use standards of nursing practice to perform and evaluate client care in entry-level practice.
5. Participate in life-long learning.

Accreditation

The San Diego City College Nursing Education program is fully approved by the California Board of Registered Nursing (BRN) and the Accreditation Commission for Education in Nursing (ACEN). Inquiries regarding accreditation may be made by contacting the BRN at P.O. Box 944210, Sacramento, CA 94244, 916-322-3350 or ACEN at 33343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, 404-975-5000.

Directed Clinical Practice Requirement

Students accepted into this program will be required to successfully complete Directed Clinical Practice/clinically-based courses held in health care facilities. These facilities require background checks and urine drug screening as a condition of placement.

Refusal to submit to a background check, or failure to meet clearance criteria established by the health care facility, may prevent placement in the Directed Clinical Practice/clinically-based course and thus, it may not be possible to successfully progress in or complete the program.

Health care facilities also require adherence to strict standards of conduct. Facilities may refuse educational access to any person who does not adhere to the facility's standards of safety, health and ethical behavior. This may be cause for removal from the program.

Admission Criteria

Admission to the program is by special application. Information packets and applications are available San Diego City College Nursing website.

Prospective students are responsible for obtaining these materials in order to acquaint themselves with the admission policies and procedures. Information is also available at the Nursing workshops, held once a month. Schedule found on Nursing website.

Returning students previously accepted to the City College's Nursing Education Program (NEP) may be required to repeat a successfully completed course prior to program re-admittance. Consult a Nursing Advisor for more details.

Progression in the Nursing Education Program (NEP) requires a passing grade of 75% or higher in each NRSE course. Successful completion of each course is required to progress in the NEP regardless of the course taken. The student may re-apply to return the following year.

Requirements

Program Prerequisites		**Semester Units:** 13.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 32.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
		3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
OR		
COMS 135	Interpersonal Communication (Active)	3.0
		3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
OR		
SOCO 101	Principles of Sociology (Active)	3.0
OR		
SOCO 110	Contemporary Social Problems (Active)	3.0
NRSE 235	LVN to RN Transition (Active)	2.0
NRSE 240	Medical/Surgical Nursing III (Active)	4.5
NRSE 242	Mental Health & Gerontological Nursing (Active)	4.5
NRSE 244	Medical Surgical Nursing IV (Active)	4.5
NRSE 246	Leadership in Nursing (Active)	4.5

Additional courses required for the associate degree: *Humanities

LICENSED VOCATIONAL NURSE TO REGISTERED NURSE, THIRTY-UNIT OPTION - LICENSURE ONLY (NO PAPER AWARD GIVEN): CITY

Summary

The LVN to RN 30 Unit Option program curriculum prepares entry-level Registered Nurses (RN) as providers of care across the health/illness continuum and as members within the profession. The curriculum respects the individuality of the student and aims to provide a positive, innovative learning model that fosters the development of critical thinking and problem solving skills so that the Registered Nurse is equipped to deliver care to a culturally diverse population in a variety of healthcare settings. Registered Nurses collaborate with members of the health care team, are effective communicators, are politically aware, and demonstrate a commitment to lifelong learning. Upon successful completion of program requirements, the person completing the LVN to RN 30 Unit Option will be eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

The Board of Registered Nursing (BRN) requires 6 units of Communication, verbal, written and group; and 16 units of Natural, Behavioral and Social Sciences. For more details, visit the San Diego City College Nursing Education webpage.

It is strongly recommended that all of the general education requirements be completed prior to admission to the nursing education program.

Other States may not recognize the LVN to RN Thirty Unit Option as a method to satisfy the requirements for licensure as a Registered Nurse. Interested candidates are urged to contact the respective Boards of Nursing for additional information.

Learning Outcome(s): Students who complete the Licensed Vocational Nurse to Registered Nurse, Thirty-Unit Option Program will be able to:

1. Apply concepts and skills to successfully pass the National Council Licensure Exam for Registered Nurses (NCLEX-RN).
2. Make clinical judgments and management decisions to ensure accurate and safe client care.
3. Practice within the ethical, legal, and regulatory frameworks of the professional nursing practice.
4. Use standards of nursing practice to perform and evaluate client care in entry-level practice.
5. Participate in life-long learning.

Accreditation

The San Diego City College Nursing Education program is fully approved by the California Board of Registered Nursing (BRN) and the Accreditation Commission for Education in Nursing (ACEN). Inquiries regarding accreditation may be made by contacting the BRN at P.O. Box 944210, Sacramento, CA 94244, 916-322-3350 or ACEN at 33343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, 404-975-5000.

Directed Clinical Practice Requirement

Students accepted into this program will be required to successfully complete Directed Clinical Practice/clinically-based courses held in health care facilities. These facilities require background checks and urine drug screening as a condition of placement.

Refusal to submit to a background check, or failure to meet clearance criteria established by the health care facility, may prevent placement in the Directed Clinical Practice/clinically-based course and thus, it may not be possible to successfully progress in or complete the program.

Health care facilities also require adherence to strict standards of conduct. Facilities may refuse educational access to any person who does not adhere to the facility's standards of safety, health and ethical behavior. This may be cause for removal from the program.

Admission Criteria

Admission to the program is by special application. Information packets and applications are available San Diego City College Nursing website.

Prospective students are responsible for obtaining these materials in order to acquaint themselves with the admission policies and procedures. Information is also available at the Nursing workshops, held once a month. Schedule found on Nursing website.

Returning students previously accepted to the City College's Nursing Education Program (NEP) may be required to repeat a successfully completed course prior to program re-admittance. Consult a Nursing Advisor for more details.

Progression in the Nursing Education Program (NEP) requires a passing grade of 75% or higher in each NRSE course. Successful completion of each course is required to progress in the NEP regardless of the course taken. The student may re-apply to return the following year.

Requirements

****PROGRAM PREREQUISITES:** **Semester Units:** 9.0

BIOL 205	General Microbiology (Active)	5.0
BIOL 235	Human Physiology (Active)	4.0

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0

NRSE 235	LVN to RN Transition (Active)	2.0
NRSE 240	Medical/Surgical Nursing III (Active)	4.5
NRSE 242	Mental Health & Gerontological Nursing (Active)	4.5
NRSE 244	Medical Surgical Nursing IV (Active)	4.5
NRSE 246	Leadership in Nursing (Active)	4.5

LINEMAN - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Lineman is designed to prepare students for lineman opportunities. Students may also install, maintain, and operate intricate electrical systems, including power lines and underground equipment. Completion of this program will not guarantee employment as a Lineman with San Diego Gas and Electric Company.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Lineman Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.
5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

SDGE 90	Electric Lineman IA (Active)	5.0
SDGE 91	Electric Lineman IB (Active)	5.0
SDGE 92	Electric Lineman IIA (Active)	5.0
SDGE 93	Electric Lineman IIB (Active)	5.0
SDGE 94	Electric Lineman IIIA (Active)	5.0
SDGE 95	Electric Lineman IIIB (Active)	5.0

LINEMAN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Lineman is designed to prepare students for lineman opportunities. Students may also install, maintain, and operate intricate electrical systems, including power lines and underground equipment. Completion of this program will not guarantee employment as a Lineman with San Diego Gas and Electric Company.

Learning Outcome(s): Students who complete the Lineman Program will be able to:

1. Demonstrate knowledge of electrical codes and blueprints.
2. Discuss and demonstrate knowledge of safety in the electrical field.
3. Evaluate electrical wiring diagrams as they relate to implementation.
4. Demonstrate a basic knowledge of generators and motors.
5. Prepare and apply to take the State of California electrician certification exam.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

SDGE 90	Electric Lineman IA (Active)	5.0
SDGE 91	Electric Lineman IB (Active)	5.0
SDGE 92	Electric Lineman IIA (Active)	5.0
SDGE 93	Electric Lineman IIB (Active)	5.0
SDGE 94	Electric Lineman IIIA (Active)	5.0
SDGE 95	Electric Lineman IIIB (Active)	5.0

MANAGEMENT AND TEAM BUILDING - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Management and Team Building prepares individuals for a variety of employment opportunities in business. Emphasis is placed on managing a small business, leadership, communication, conflict resolution, and building teamwork dynamics. This certificate is designed for individuals who currently own, operate, or work for a business and want to strengthen their business skills.

The Business Department recommends that students planning to transfer completes BUSE 119 instead of BUSE 92.

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 Management and Team Building Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

		3.0

BUSE 92	Introduction to Business Communication (Active)	3.0
OR		
BUSE 119	Business Communications (Active)	3.0
BUSE 150	Human Relations in Business (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0

MANUFACTURING ENGINEERING TECHNOLOGY - OPTION: ELECTRONICS - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Manufacturing Engineering Technology with Electronics Option prepares students with necessary skills, knowledge and experience to take on important roles as team members or leaders in an electronics manufacturing enterprise.

The courses for this degree include the courses which make up the Certificate of Performance in Advanced Manufacturing and the Certificate of Performance in Manufacturing Fundamentals as well as additional courses. MFET 110 Industrial Safety can be taken any semester available. Electronics course(s) may be taken when offered.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Manufacturing Engineering Technology - Option: Electronics Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0
MFET 110	Industrial Safety (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0
MFET 150	Manufacturing Automation (Active)	3.0
MFET 210	Statistical Process Control (Active)	3.0
MFET 230	Lean Manufacturing (Active)	3.0
		4.0

ELDT 123	Introduction to Digital Circuits (Active)	3.0
AND		
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
		4.0
PHYS 100	Introductory Physics (Active)	4.0
OR		
		4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
AND		
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0

MANUFACTURING ENGINEERING TECHNOLOGY - OPTION: FABRICATION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Manufacturing Engineering Technology with Fabrication Option prepares students with necessary skills, knowledge and experience to take on important roles as team members or leaders in a fabrication manufacturing enterprise.

The courses for this degree/certificate include the courses which make up the Certificate of Performance in Advanced Manufacturing and the Certificate of Performance in Manufacturing Fundamentals as well as additional courses.

MFET 110 Industrial Safety can be taken any semester available. Electronics course(s) may be taken when offered.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Manufacturing Engineering Technology - Option: Fabrication Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0

MFET 110	Industrial Safety (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0
MFET 150	Manufacturing Automation (Active)	3.0
MFET 210	Statistical Process Control (Active)	3.0
MFET 230	Lean Manufacturing (Active)	3.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
MACT 160M	Introduction to CAD/CAM (Active)	4.0
		4.0
PHYS 100	Introductory Physics (Active)	4.0
OR		
		4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
AND		
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0

MANUFACTURING FUNDAMENTALS - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

Award Description

This certificate prepares students with necessary skills, knowledge, and experience to continue on with the coursework and projects in MFET program.

Learning Outcome(s): Students who complete the Manufacturing Fundamentals Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0
MFET 114	Problem Solving and Corrective Action (Active)	3.0
MFET 115	Properties of Materials (Active)	3.0

MFET 120	Manufacturing Processes (Active)	4.0

Select ONE of the following courses: **Semester Units:** 1.5

MFET 107D	STEM Drone Building (Active)	1.5
MFET 107G	STEM Guitar Building (Active)	1.5
MFET 107H	STEM High Tech Device Building (Active)	1.5

MANUFACTURING FUNDAMENTALS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance on Manufacturing Fundamentals provides fundamental knowledge for students to enter the workforce in a manufacturing field.

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 Manufacturing Fundamentals Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.
   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.
   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MFET 105	Print Reading and Symbology (Active)	3.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0

MATHEMATICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

Summary

The Associate in Science in Mathematics for Transfer Degree 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.

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 solve and accurately describe their process for real-world problems relevant to their major.
2. Solve routine mathematical problems using proper mathematical notation, in multiple ways if applicable.
3. Apply technology to enhance mathematical thinking and understanding and to solve mathematical problems.
4. Know about on-campus resources that will promote success in their math classes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

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

SELECT AT LEAST ONE COURSE OR COURSE SEQUENCE FROM THE FOLLOWING: **Semester Units:** 3.0-5.0

CISC 179	Introduction to Python Programming (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
MATH 255	Differential Equations (Active)	3.0
PHYS 195	Mechanics (Active)	5.0
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

MATHEMATICS - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Mathematics is the study of numbers, structures, and associated relationships using rigorously defined literal, numerical, and operational symbols. Given certain conditions about systems of numbers or other objects, mathematicians derive conclusions based on logical arguments. The development of analytic mathematical skills enable a person to solve numerical problems encountered in daily life, and are applied to numerous applications in the physical, social, and life sciences. The Mathematics Program at San Diego City College strives to provide a learner-centered environment where students can develop and become practitioners of mathematics. We emphasize the development of quantitative analysis and critical thinking, to prepare students to become life-long scholars, and contribute to the global community as independent and informed thinkers and professionals.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Mathematics Program will be able to:

1. Apply mathematical skills to solve and accurately describe their process for real-world problems relevant to their major.
2. Solve routine mathematical problems using proper mathematical notation, in multiple ways if applicable.
3. Apply technology to enhance mathematical thinking and understanding and to solve mathematical problems.
4. Know about on-campus resources that will promote success in their math classes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

MATH 150	Calculus with Analytic Geometry I (Active)	5.0
MATH 151	Calculus with Analytic Geometry II (Active)	4.0
MATH 245	Discrete Mathematics (Active)	3.0
MATH 252	Calculus with Analytic Geometry III (Active)	4.0
MATH 254	Introduction to Linear Algebra (Active)	3.0

Select 3-4 units from: **Semester Units:** 3.0-4.0

		4.0
MATH 107	Introduction to Scientific Programming (Active)	3.0
AND		
MATH 107L	Introduction to Scientific Programming Lab (Active)	1.0
STAT C1000	Introduction to Statistics (Active)	3.0
MATH 255	Differential Equations (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0

MECHANICAL DESIGN - CERTIFICATE OF PERFORMANCE: CITY

Summary

Mechanical Design Technology graduates pursue careers in industry in the areas of industrial machinery, consumer products, construction, automotive, power transmission, automation, and other mechanical machinery related fields. Related areas of employment include sales, manufacturing and testing mechanical products. Graduates create designs as well as analyze and specify the components and systems of machinery and products.

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 Mechanical Design Program will be able to:

1. Demonstrate a basic knowledge of Manufacturing and Manufacturing Engineering Technology at the 2-year college level.

   MFET Option 1: Electronics Manufacturing
2. Utilize, operate and measure the results of various test equipment to support product development.
3. Demonstrate the knowledge of design tools used in electronics industry for product development.
4. Identify and apply quality control tools used in electronics manufacturing industry.
5. Explain and apply the fundamentals of electronics applications and theory.
6. Describe different types of materials, process flows, equipment and techniques used to manufacture electronics products.

   MFET Option 2: Fabrication Manufacturing
7. Identify and utilize CAD/CAM applications in various manufacturing processes, e.g. MasterCAM.
8. Explain product design to optimize manufacturing efficiency.
9. Identify and apply quality control tools and instruments used in a manufacturing environment.
10. Demonstrate proficiency in programming and operation of NC/CNC equipment.
11. Describe different types of materials, process flows, equipment and techniques used in manufacturing.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
		3.0
MFET 105	Print Reading and Symbology (Active)	3.0
OR		
ENGE 108	Dimensioning and Tolerancing (Active)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0

MECHANICAL SYSTEMS AND SOLID-STATE ELECTRONICS TECHNICIAN - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Mechanical Systems and Solid-State Electronics Technician provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Mechanical Systems and Solid-State Electronics Technician Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0

AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0
AIRE 144	Direct Digital Controls Theory (Active)	4.0
AIRE 145	Direct Digital Controls Lab (Active)	2.0
		3.0
EGEE 50	Building Science Principles (Active)	3.0
OR		
EGEE 55	Air Quality Management and Systems (Active)	3.0

MECHANICAL SYSTEMS AND SOLID-STATE ELECTRONICS TECHNICIAN - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Mechanical Systems and Solid-State Electronics Technician provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Learning Outcome(s): Students who complete the Mechanical Systems and Solid-State Electronics Technician Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0
AIRE 144	Direct Digital Controls Theory (Active)	4.0
AIRE 145	Direct Digital Controls Lab (Active)	2.0
		3.0
EGEE 50	Building Science Principles (Active)	3.0
OR		
EGEE 55	Air Quality Management and Systems (Active)	3.0

MECHANICAL SYSTEMS PROJECT DEVELOPMENT - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Mechanical Systems Project Development provides students with provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air-conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Mechanical Systems Project Development Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 138	HVAC System Design (Active)	3.0
AIRE 139	HVAC System Design Lab (Active)	2.0
		3.0
EGEE 50	Building Science Principles (Active)	3.0
OR		
EGEE 55	Air Quality Management and Systems (Active)	3.0

MECHANICAL SYSTEMS PROJECT DEVELOPMENT - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Mechanical Systems Project Development provides students with provides students with competencies fundamental for preparing for employment or advanced training in heating, ventilation, air conditioning (HVAC/R) and appliance installation, maintenance, and repair. The pathway includes preparation for a Class C California License and various industry-recognized certifications pertaining to the HVAC/R industry.

Learning Outcome(s): Students who complete the Mechanical Systems Project Development Program will be able to:

1. Demonstrate HVAC/R industry readiness through certification training.
2. Gain essential skills necessary to perform as a mechanical system installer.
3. Gain essential skills necessary to perform a as an HVAC/R Technician.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0

AIRE 60	Construction Safety and Health (Active)	2.0
AIRE 94	HVAC/R Certification Training (Active)	3.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 138	HVAC System Design (Active)	3.0
AIRE 139	HVAC System Design Lab (Active)	2.0
		3.0
EGEE 50	Building Science Principles (Active)	3.0
OR		
EGEE 55	Air Quality Management and Systems (Active)	3.0

MEDIA PRODUCTION - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associates of Science Degree in Media Production offers hands-on training and experience in the fundamentals of content creation, using new and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on production, writing, audio recording, and video editing. Other topics addressed include voice-over performance, audio editing, and radio station and podcast marketing. Students can contribute to the award-winning City Times Media platform and its many partners, including TV news, digital news, radio/podcast, and independent film. This program is designed for students interested in enhancing their skills and knowledge of media production, students majoring in Media Production, and for those seeking entry-level employment in related industries.

The skills acquired with this AS Degree may lead to employment, freelance assignments, or corporate media work. These jobs include, but are not limited to, social media content producers, multimedia producers, directors, writers, reporters, program assistants, camera operators, videographers, audio technicians, studio technicians, video editors, and motion graphics designers.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Media Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 112	Introduction to Audio Production (Active)	3.0

		3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
OR		
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 122	Documentary Film Production (Active)	3.0
FJMP 132	Multiplatform Journalism Production (Active)	3.0
FJMP 133	Broadcast News Production (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 123	The Producer's Role in Film (Active)	3.0
FJMP 124	Video Motion Graphics (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 134	Multiplatform Magazine Production (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 143	On-Camera Performance (Active)	3.0
FJMP 145	Art Direction for Film and Media Production (Active)	3.0
FJMP 146	Lighting for Film and Media Production (Active)	3.0
FJMP 211	Single Camera Production Workshop (Active)	3.0
FJMP 222	Documentary Film Production Workshop (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0
FJMP 233A	Broadcast News Workshop I (Active)	3.0
FJMP 242A	Radio and Podcast Workshop I (Active)	3.0

MEDIA PRODUCTION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Media Production offers hands-on training and experience in the fundamentals of content creation, using new and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on production, writing, audio recording, and video editing. Other topics addressed include voiceover performance, audio editing, and radio station and podcast marketing. Students can contribute to the award-winning City Times Media platform and its many partners, including TV news, digital news, radio/podcast, and independent film. This program is designed for students interested in enhancing their skills and knowledge of media production, students majoring in Media Production, and for those seeking entry-level employment in related industries.

The skills acquired with this certificate may lead to employment, freelance assignments, or corporate media work. These jobs include, but are not limited to, multimedia producers, social media content producers, directors, writers, reporters, program assistants, camera operators, videographers, audio technicians, studio technicians, video editors, and motion graphics designers.

Learning Outcome(s): Students who complete the Media Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

FJMP 112	Introduction to Audio Production (Active)	3.0
		3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
OR		
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
		3.0
FJMP 122	Documentary Film Production (Active)	3.0
OR		
FJMP 132	Multiplatform Journalism Production (Active)	3.0
OR		
FJMP 133	Broadcast News Production (Active)	3.0
OR		
FJMP 142	Radio and Podcast Production (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

Complete three (3) units from the following: **Semester Units:** 3.0

FJMP 123	The Producer's Role in Film (Active)	3.0
FJMP 124	Video Motion Graphics (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 134	Multiplatform Magazine Production (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 143	On-Camera Performance (Active)	3.0
FJMP 145	Art Direction for Film and Media Production (Active)	3.0
FJMP 146	Lighting for Film and Media Production (Active)	3.0
FJMP 211	Single Camera Production Workshop (Active)	3.0
FJMP 222	Documentary Film Production Workshop (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0
FJMP 233A	Broadcast News Workshop I (Active)	3.0
FJMP 242A	Radio and Podcast Workshop I (Active)	3.0

MEDIA PRODUCTION - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Media Production offers hands-on training and experience in the fundamentals of content creation, using new and emerging multimedia tools and technologies in our state-of-the-art facilities.

The program emphasis is placed on production, writing, audio recording, and video editing. Other topics addressed include voiceover performance, audio editing, and radio station and podcast marketing. Students can contribute to the award-winning City Times Media platform and its many partners, including TV news, digital news, radio/podcast, and independent film. This program is designed for students interested in enhancing their skills and knowledge of media production, students majoring in Media Production, and for those seeking entry-level employment in related industries.

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 Media Production Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

FJMP 101	Introduction to Mass Media (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 110	Introduction to Video Editing (Active)	3.0
FJMP 111	Single Camera Production (Active)	3.0
FJMP 112	Introduction to Audio Production (Active)	3.0
FJMP 122	Documentary Film Production (Active)	3.0
FJMP 124	Video Motion Graphics (Active)	3.0
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 132	Multiplatform Journalism Production (Active)	3.0
FJMP 133	Broadcast News Production (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
FJMP 143	On-Camera Performance (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

MENTAL HEALTH WORK - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This certificate program is designed to prepare entry-level mental health workers for the workforce and to serve as a stepping stone toward higher academic degrees in the field of mental health. Potential entry-level mental health work positions include: mental health technician, social services assistant, residential home counselor, child care worker assistant, counselor aid, gerontology aid, research assistant, youth counselor, foster care worker, behavior analyst, case management aid, family services aid, patient care specialist and patient advocate assistant. Employment options for students who complete the Certificate of Achievement in Mental Health Work include Mental Health Worker/ Counselor, Behavioral Health Technician/Educator, Peer Mentor, Residential Counselor, Outreach Worker and Patient Care Specialist.

Students must complete all required courses within ten years in order to receive the Mental Health Work Certificate of Achievement.

The Psychology Department recommends that students take PSYC 276 Field Work in Psychological Services in their final semester.

Learning Outcome(s): Students who complete the Mental Health Work Program will be able to:

1. Demonstrate skills appropriate for entry level mental health work.
2. Develop an understanding of current career opportunities in the entry-level mental health field.
3. Develop skills to evaluate resources available to address specific, culturally relevant, and diverse mental health and social services needs.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 19.0

PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 130	Introduction to Community Psychology (Active)	3.0
PSYC 161	Introduction to Counseling (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
HUMS 95	Public Assistance and Benefits Program (Active)	1.0
HUMS 105	Family Strengthening Models in Behavioral Health (Active)	3.0
PSYC 276	Field Work in Psychological Services (Active)	3.0

MICROSOFT EXCEL ESSENTIALS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Microsoft Excel Essentials Certificate of Performance is designed to provide students with the Microsoft Excel efficiency that is usually required for most positions, regardless of the industry. Emphasis is placed on building fundamental competencies for jobs requiring skills in developing and designing spreadsheets and charts and processing data in this widely-used Microsoft Office application.

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 Microsoft Excel Essentials Program will be able to:

1. Identify computer operating systems functions; define key features of different software applications; and demonstrate how to use a Web browser, and conduct an Internet search.
2. Create office documents utilizing the Microsoft Office Suite programs (i.e. Word, Excel, Access, PowerPoint, Outlook, and Publisher).
3. Analyze work environments, labor force, and organizational types and structures.
4. Employ critical thinking as a basis for continual learning and problem solving.
5. Demonstrate interpersonal skills (soft skills) such as leadership, delegation of authority, accountability, consensus building, communication, conflict resolution, and teambuilding.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 5.0

CBTE 140	Beginning Microsoft Excel (Active)	2.0
CBTE 143	Intermediate Microsoft Excel (Active)	3.0

MICROSOFT OFFICE ESSENTIALS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Microsoft Office Essentials Certificate of Performance is designed to provide students with the Microsoft Office efficiency that is usually required for most positions, regardless of the industry. Emphasis is placed on building fundamental competencies for jobs requiring skills in documenting, organizing information, delivering presentations, writing and preparing reports, and processing data in the widely-used Microsoft Office application.

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 Microsoft Office Essentials Program will be able to:

1. Identify computer operating systems functions; define key features of different software applications; and demonstrate how to use a Web browser, and conduct an Internet search.
2. Create office documents utilizing the Microsoft Office Suite programs (i.e. Word, Excel, Access, PowerPoint, Outlook, and Publisher).
3. Analyze work environments, labor force, and organizational types and structures.
4. Employ critical thinking as a basis for continual learning and problem solving.
5. Students who complete the program will be able to demonstrate interpersonal skills (soft skills) such as leadership, delegation of authority, accountability, consensus building, communication, conflict resolution, and teambuilding

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 4.0

CBTE 164	Introduction to Microsoft Outlook (Active)	1.0
CBTE 180	Microsoft Office (Active)	3.0

MICROSOFT TECHNOLOGY SPECIALIST - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Microsoft Technology Specialist provides students with an in-depth study of infrastructure, cloud services, and packaged software offerings of Microsoft Technology. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios using best practices and design patterns to architect and support optimal IT solutions using Microsoft's products and services. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

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 Microsoft Technology Specialist Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.

5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

INWT 100	Computing Fundamentals (A+) (Active)	4.0
INWT 111	Windows Desktop Administration (Active)	3.0
INWT 112	Windows Infrastructure Administration (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0

MULTIMEDIA JOURNALISM - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Multimedia Journalism offers hands-on training and experience in the fundamentals of journalism, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on planning, writing, producing, directing, editing, and performing across platforms. Other topics addressed include social media production and management, photojournalism and documentary photography, and studio operations. Students contribute to the award-winning City Times Media platform and its partners, including digital news, magazine, TV news, radio podcast and independent film. This program is designed for students interested in enhancing their skills and knowledge of journalism, students majoring in Journalism, and for those seeking entry-level employment in media-related industries.

The skills acquired with this certificate may lead to employment, freelance work, or business ownership. These jobs include, but are not limited to, multimedia journalist, digital content producer, production assistant, news producer, on-air talent, news reporter, news writer, public information officer, communications director, social media producer, operations engineer, news photographer, audio engineer, studio camera operator, and sound technician.

Learning Outcome(s): Students who complete the Multimedia Journalism Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
		3.0
FJMP 132	Multiplatform Journalism Production (Active)	3.0
OR		
FJMP 133	Broadcast News Production (Active)	3.0
		3.0
FJMP 143	On-Camera Performance (Active)	3.0
OR		
FJMP 144	Multi-Camera Studio Operations (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 134	Multiplatform Magazine Production (Active)	3.0
PHOT 215	Photojournalism and Documentary Photography (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0
FJMP 232B	Multiplatform Journalism Workshop II (Active)	3.0
FJMP 233A	Broadcast News Workshop I (Active)	3.0
FJMP 233B	Broadcast News Workshop II (Active)	3.0

MULTIMEDIA JOURNALISM - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Multimedia Journalism offers hands-on training and experience in the fundamentals of journalism, using current and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on planning, writing, producing, directing, editing, and performing across platforms. Other topics addressed include social media production and management, photojournalism and documentary photography, and studio operations. Students contribute to the award-winning City Times Media platform and its partners, including digital news, magazine, TV news, radio podcast and independent film. This program is designed for students interested in enhancing their skills and knowledge of journalism, students majoring in Journalism, and for those seeking entry-level employment in media-related industries.

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 Multimedia Journalism Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

FJMP 102	Social Media in the Digital Age (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 132	Multiplatform Journalism Production (Active)	3.0
FJMP 133	Broadcast News Production (Active)	3.0
FJMP 134	Multiplatform Magazine Production (Active)	3.0
PHOT 215	Photojournalism and Documentary Photography (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
FJMP 143	On-Camera Performance (Active)	3.0
FJMP 144	Multi-Camera Studio Operations (Active)	3.0
FJMP 232A	Multiplatform Journalism Workshop I (Active)	3.0
FJMP 233A	Broadcast News Workshop I (Active)	3.0

MUSIC PRODUCTION TECHNOLOGY - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science in Music Production Technology is designed to provide students with practical, career-oriented skills in professional audio production using current music industry technologies. The certificate emphasizes basic musical fundamentals, live sound reinforcement, microphone and recording techniques, mixing and mastering skills, MIDI (Musical Instrument Digital Interface) sequencing and programming, audio software and hardware development, and audio post production for video and gaming. In addition, students are introduced to, and guided through, marketing and promotion skills using multimedia and social networking tools specific to the music industry.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Music Production Technology Program will be able to:

1. Demonstrate proficiency with industry standard DAW (Digital Audio Workstations) software including Avid Pro Tools, Ableton Live, Propellerhead Reason, Cycling '74 Max, and Apple Logic Pro X.
2. Utilize and demonstrate proficiency with music fundamentals, sound design principles in the creation of successful original music compositions in various formats.
3. Demonstrate competent operation of and familiarity with common hardware equipment used in a professional level commercial recording studio environment including mixing consoles, pre-amps, microphones, patch bays, signal processors, and audio interfaces.
4. Demonstrate proficiency with industry standard notation and third party extension audio processing plug-in software including Sibelius and iZotope.
5. Demonstrate an understanding of the physics of sound, sound isolation, and room acoustics as it pertains to studio recording and audio production.
6. Demonstrate an understanding of the history and development of music technology.
7. Demonstrate an understanding of the role of and opportunities with music technology in today's modern multi-cultural society.
8. Produce a professional quality portfolio in preparation for academic transfer or for sharing with potential clients and employers.
9. Produce and perform in concerts and music events that incorporate new technologies and media.
10. Demonstrate proficiency with sound design and post production audio techniques for TV, film, video, gaming, and multimedia formats.
11. Demonstrate an understanding of music business elements including music publishing, copyrights, licensing, management, marketing, music contracts, self promotion.
12. Recognize and incorporate music technology elements such as mixing, editing, mastering, sequencing, synthesis, signal flow, controller mapping, signal processing, elastic audio, automation, and quantization in the creation of original compositions.
13. To prepare students for entry-level positions in the commercial music industry.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 31.0

MUSC 104	Composition Technology (Active)	3.0
MUSC 118	Music Entrepreneurship (Active)	3.0
MUSC 160	Introduction to Electro-Acoustic Music (Active)	3.0
MUSC 162	Introduction to Recording and Sound Reinforcement (Active)	3.0
MUSC 170A	Electro-Acoustic Ensemble I (Active)	1.0
MUSC 170B	Electro-Acoustic Ensemble II (Active)	1.0
MUSC 170C	Electro-Acoustic Ensemble III (Active)	1.0
MUSC 220A	Music Marketing and Promotion I (Active)	2.0

MUSC 220B	Music Marketing and Promotion II (Active)	2.0
MUSC 260	Electro-Acoustic Music Composition (Active)	3.0
MUSC 252	Sound Design and Digital Audio Post Production (Active)	3.0
MUSC 262	Intermediate Recording and Sound Reinforcement (Active)	3.0
MUSI 108	The Business of Music (Active)	3.0

MUSICAL THEATRE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Musical Theatre is the most diversified area of the dramatic arts, our focus is to integrate three art forms—acting, singing, and dancing—into a single mode of expression. Our students explore the unique relationship that exists among these three disciplines in order to find employment as performers in a challenging job market or to prepare for transfer to similar programs at four-year institutions. Graduates are qualified to transfer with a major in Musical Theatre to UCs and CSUs as well as private colleges and universities.

The Associate of Arts in Musical Theatre 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 San Diego City College counselor.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Musical Theatre Program will be able to:

1. Effectively practice the theatre arts through involvement in the creation and presentation of public performances in theatre.
2. Develop a structural approach to interpretation of language in dramatic text.
3. Explain and practice basic production processes such as acting, scenic, costume, and make-up design, and technical operation related to production.
4. Identify the historical and cultural dimension of theatre, including the works of leading playwrights, actors, directors, and designers.
5. Acquire intercultural and multicultural understanding, as well as perception of the universal and timeless human conflicts presented in dramatic works.
6. Augment the discipline, cooperation, accountability, and perseverance necessary for positive self-identification and success in life.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 26.5

DRAM 105	Introduction to Dramatic Arts (Active)	3.0
		3.0
DRAM 123	Beginning Stagecraft (Active)	3.0
OR		
DRAM 143	Beginning Costuming (Active)	3.0
DRAM 132	Beginning Acting (Active)	3.0
DRAM 133	Intermediate Acting (Active)	3.0
DRAM 134	Beginning Voice for Actors (Active)	3.0
DRAM 165	Introduction to Stage Movement (Active)	3.0
DRAM 205	The American Musical on Stage and Screen (Active)	3.0
DANC 112A	Ballet I (Active)	1.5
DANC 117A	Tap Dance I (Active)	1.5
DANC 137A	Jazz Dance I (Active)	1.5

NAIL TECHNICIAN - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Nail Technician Certificate of Performance prepares students for the California Board of Barbering and Cosmetology Nail Technician exam and employment in a nail salon, nail salon management, and/or ownership of a nail salon.

The goal of the Nail Technician Certificate of Performance is to prepare students for success as an employee, manager, and/or owner of a nail salon. The curriculum emphasizes sanitation, disinfection, and sterilization of the nail salon and nail technician tools and health and safety in the nail salon, as well as the basic anatomy of the hand and foot, nail diseases and disorders, manicuring, pedicuring, massage, reflexology, nail wraps, nail tips, nail design, chemistry for the nail technicians, and salon management.

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 Nail Technician Program will be able to:

1. Apply cosmetology concepts, procedures and practices to successfully pass the State Board Examination.
2. Practice safety, health, and sanitation procedures as set forth by the California Bureau of Cosmetology.
3. Utilize professional practice terminology and techniques as required by the California Bureau of Cosmetology examination.
4. Perform all practical applications required for the State board examination-State licensure.
5. Explain basic cosmetology concepts, terms and definitions.
6. Compare and contrast cosmetology procedures and practices.
7. Apply cosmetology products and procedures in providing services to clients.

Admission Criteria

The San Diego City College's Cosmetology Program offers courses during the spring, summer, and fall semesters. Spring and fall semester daytime programs begin at every eight-week session. Spring and fall semester evening programs begin at every twelve-week session. Prospective students must be admitted to the program in order to register for cosmetology courses. Admitted students must attend an orientation to receive important information, program rules and regulations, and program expectations. Students transferring into the San Diego City College's Cosmetology Program cannot apply previous coursework towards the college's cosmetology degrees and certificates. Permission numbers are required to register for cosmetology courses.

Orientation

Orientation is mandatory prior to registration. Contact the Cosmetology Department Chair for a schedule of days and times.

State Board Verification

Students with previous course hours in cosmetology from another community college program or private institution must provide written State Board documentation. The California State Board of Barbering and Cosmetology requires:

- Cosmetology: 1000 hours of instruction
- Esthetics: 600 hours of instruction
- Nail Technician: 400 hours of instruction
- Barber Crossover: 100 hours of instruction

All careers require a passing score on the State Board examination to become licensed and eligible for employment.

This program is approved by: Board of Barbering and Cosmetology, 2420 Del Paseo Road Suite 100, Sacramento, CA 94244-2260.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 11.0

COSM 85	Nail Technician I (Active)	5.5
COSM 86	Nail Technician II (Active)	5.5

NETWORK SECURITY I - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Network Security I provides students with the entry-level skills to design and implement secure network architecture concepts and systems design. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in installation and administration of network technologies and tools, encryption and public key infrastructure (PKI), and identity and access management. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

The Computer Information Systems department requires student to complete all requirements for the degree within five years.

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 Network Security I Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0

NETWORK SECURITY II - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Network Security II provides students with the intermediate-level skills to apply behavioral analytics to networks and devices to prevent, detect, and combat cybersecurity threats through continuous security monitoring. This curriculum includes hands-on experience in virtual environments that simulate real-world scenarios in threat and vulnerability management, compliance and assessment, and incident response. This pathway includes preparation for industry-recognized certifications geared towards preparing students for a successful career in IT roles that are vital for building, protecting, and maintaining information and technology assets.

The Computer Information Systems department requires student to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Network Security II Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

INWT 120	Network Fundamentals (Network+) (Active)	4.0
INWT 140	Security Fundamentals (Security+) (Active)	3.0
INWT 146	Linux Administration (Linux+) (Active)	3.0
INWT 170	Network Defense & Countermeasures (CySA+) (Active)	3.0
INWT 201	Ethical Hacking and Penetration Testing (Active)	3.0

NUTRITION AND DIETETICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

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. Explain physiological processes such as digestion, absorption, transport, and metabolism of nutrients.
2. Analyze dietary intake by food groups and/or by nutrients (RDA) and write recommendations based on the data gathered from the analysis.
3. Apply the scientific principles of nutrition to the planning of meals and preparation of food.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

BIOL 205	General Microbiology (Active)	5.0
CHEM 200	General Chemistry I - Lecture (Active)	3.0
CHEM 200L	General Chemistry I - Laboratory (Active)	2.0
NUTR 150	Nutrition Science and Global Food Issues (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0

Select two courses (7-9 units) from the following: **Semester Units:** 7.0-9.0

BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0
		5.0
CHEM 201	General Chemistry II - Lecture (Active)	3.0
AND		
CHEM 201L	General Chemistry II - Laboratory (Active)	2.0
		3.0
STAT C1000	Introduction to Statistics (Active)	3.0
OR		
PSYC 258	Behavioral Science Statistics (Active)	3.0

Select one course (3-5 units) from the following: **Semester Units:** 3.0-5.0

NUTR 153	Cultural Foods (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
		5.0
CHEM 231	Organic Chemistry I - Lecture (Active)	3.0
AND		
CHEM 231L	Organic Chemistry I - Laboratory (Active)	2.0
		5.0
CHEM 233	Organic Chemistry II - Lecture (Active)	3.0
AND		
CHEM 233L	Organic Chemistry II - Laboratory (Active)	2.0
MATH 116	College and Matrix Algebra (Active)	3.0
MATH 121	Basic Techniques of Applied Calculus I (Active)	3.0

MATH 150	Calculus with Analytic Geometry I (Active)	5.0

OFFICE ADMINISTRATIVE ASSISTANT - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Office Administration Assistant Certificate of Achievement is designed to prepare students for entry-level office and administrative support in a variety of fields or businesses. The goal of the Office Administration Assistant Certificate of Achievement is to prepare students for entry-level office and administrative support in the following areas: Basic oral and written business communications; basic computer application skills, including beginning Excel and Outlook; the fundamentals of computer systems; and critical thinking and problem solving. This certificate allows students desiring office skills to select courses that best serve their particular interests and meet the ever-changing demands and requirements of the job market.

The Computer Business Technology Department requires students to complete all CBTE requirements for the certificate within five years.
Program Description:

The Computer Business Technology program offers hands-on training in Microsoft Office applications. Skills learned in this program can be applied to any career field. Emphasis is placed on enhancing computer skills for college success and/or employment in entry-level business office environments.

Learning Outcome(s): Students who complete the Office Administrative Assistant Program will be able to:

1. Identify computer operating systems functions; define key features of different software applications; and demonstrate how to use a Web browser, and conduct an Internet search.
2. Create office documents utilizing the Microsoft Office Suite programs (i.e. Word, Excel, Access, PowerPoint, Outlook, and Publisher).
3. Analyze work environments, labor force, and organizational types and structures.
4. Employ critical thinking as a basis for continual learning and problem solving.
5. Demonstrate interpersonal skills (soft skills) such as leadership, delegation of authority, accountability, consensus building, communication, conflict resolution, and teambuilding.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 18.0-19.0
ACCT 150	Computer Accounting Applications (Active)	3.0
BUSE 101	Business Mathematics (Active)	3.0
BUSE 102	Introduction to Customer Service (Active)	3.0
BUSE 119	Business Communications (Active)	3.0
		2.0-3.0
CBTE 140	Beginning Microsoft Excel (Active)	2.0
OR		
CBTE 143	Intermediate Microsoft Excel (Active)	3.0
CBTE 164	Introduction to Microsoft Outlook (Active)	1.0
CBTE 180	Microsoft Office (Active)	3.0

OPERATING AND MAINTENANCE ENGINEERS - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year apprenticeship program for Operating and Maintenance Engineers. Applications for this program should be directed to Operating and Maintenance Engineers Trade, Local 501, 2501 Wester Third Street, Los Angeles, CA 90057.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 35.0

ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0

AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0

OPERATING AND MAINTENANCE ENGINEERS - CERTIFICATE OF ACHIEVEMENT: CITY

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Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 35.0

ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0

AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
AIRE 122	Construction Drawings and Estimating (Active)	3.0
AIRE 123	Construction Drawings and Estimating Lab (Active)	1.0
AIRE 124	Power & Control Systems Theory (Active)	3.0
AIRE 125	Power & Control Systems Lab (Active)	2.0
AIRE 126	Fluid Flow Dynamics (Active)	3.0
AIRE 127	Fluid Flow Dynamics Lab (Active)	2.0
AIRE 132	Advanced Refrigeration & AC Theory (Active)	3.0
AIRE 133	Advanced Refrigeration & AC Lab (Active)	2.0

ORGANIC GARDENING FOR THE CULINARY ARTS - CERTIFICATE OF PERFORMANCE: CITY

Summary

This certificate is designed for students who want to learn or improve their organic gardening knowledge and skills. The program provides the skills and knowledge to implement a healthier, sustainable food system that emphasizes small-scale urban food production.

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 Organic Gardening for the Culinary Arts Program will be able to:

1. Understand and explain the three facets of sustainability (economic, environmental and social) both in general and as they apply specifically to landscaping practices.
2. Understand and explain the components of a food system.
3. Design an organic urban farm that supports natural ecosystems, human health, and water conservation.
4. Evaluate the soil food web.
5. Create a crop plan that is appropriate for the southwest region.
6. Identify plant disease and pests and incorporate integrated pest management and other organic strategies for a resilient food system.
7. Demonstrate basic propagation techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 7.0

AGRI 102	Sustainable Urban Agricultural Practice (Active)	3.0
AGRI 128	Food Preservation Skills (Active)	1.0
AGRI 104	Sustainable Vegetable Production (Active)	3.0

PERSONAL TRAINER - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This program trains students to be personal trainers and group exercise leaders. Emphasis is placed on the principles of exercise and physical conditioning, techniques of leading individual and group exercise classes, assessment protocols, strategies for working with special populations, appropriate methods to establishing healthy behavior, and the designing of personalized exercise programs. Students learn to develop safe, effective exercise plans for a variety of clients.

The fitness industry continues to experience growth and has an ongoing need for professionally qualified group exercise instructors and personal trainers in health clubs, gyms, fitness centers, and sports medicine clinics.

This program prepares students for the American College of Sports Medicine (ACSM), American Council of Exercise (ACE), National Academy of Sports Medicine (NASM), and many other National Commission for Certifying Agencies (NCCA) accredited Personal Trainer and Group Exercise Instructor certification exams. Please note that students enrolled in an occupational program must earn a grade of "C" or better in courses required for the major.

Learning Outcome(s): Students who complete the Personal Trainer Program will be able to:

1. Demonstrate movement competence as it relates to physical activity, fitness, and sport.
2. Design exercise programs to improve key fitness components, including cardiovascular endurance, muscular endurance, muscular strength, flexibility, and body composition.
3. Articulate knowledge of how physical activity influences health across the lifespan, emphasizing its role in chronic disease prevention and quality of life.
4. Apply concepts of wellness, physical activity, and exercise to develop programs that promote overall health and well-being for individuals and communities.
5. Utilize current exercise science technologies, tools and software for assessment, program design, and analysis to enhance learning, performance, and research outcomes.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 20.0-23.0

EXSC 242B	Care and Prevention of Injuries (Active)	3.0
EXSC 280	Applied Exercise Physiology (Active)	2.0
EXSC 281	Applied Kinesiology (Active)	2.0
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
NUTR 170	Nutrition and Fitness (Active)	3.0

PHILOSOPHY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Philosophy for Transfer Degree 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. Consider fundamental philosophical concerns such as the nature of correct reasoning, the scope and limits of human knowledge, characteristics of reality and questions of value and obligation.

Requirements

COURSES REQUIRED FOR THE MAJOR **Semester Units:** 15.0

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

SELECT ONE COURSE FROM THE FOLLOWING **Semester Units:** 3.0

PHIL 105	Contemporary Philosophy (Active)	3.0
PHIL 106	Asian Philosophy (Active)	3.0
PHIL 125	Philosophy of Women (Active)	3.0
PHIL 126	Philosophy of Contemporary Gender Issues (Active)	3.0
PHIL 131	Environmental Ethics (Active)	3.0

PHILOSOPHY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The study of philosophy acquaints students with the nature of philosophical activity and helps them increase critical thinking skills about fundamental philosophical concerns such as the nature of correct reasoning, the scope and limits of human knowledge, characteristics of reality, and questions of value and obligation. As such, the first objective of the philosophy program is to teach students how to think critically, with an emphasis on analytic reasoning. The program's second objective is to prepare students for university-level philosophy courses, and, because philosophy relates to many other academic disciplines and stresses systematic and abstract thought, university-level courses generally.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Philosophy Program will be able to:

1. Consider fundamental philosophical concerns such as the nature of correct reasoning, the scope and limits of human knowledge, characteristics of reality and questions of value and obligation.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

PHIL 100	Logic and Critical Thinking (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0

Select one of the two-semester sequences: **Semester Units:** 6.0

		6.0
		6.0
PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
AND		
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
OR		
		6.0
PHIL 104A	History Of Western Philosophy: Ancient to Medieval (Active)	3.0
AND		
PHIL 104B	History of Western Philosophy: Modern to Contemporary (Active)	3.0

Select six units from: **Semester Units:** 6.0

PHIL 102A	Introduction to Philosophy: Reality and Knowledge (Active)	3.0
PHIL 102B	Introduction to Philosophy: Values (Active)	3.0
PHIL 103	Historical Introduction To Philosophy (Active)	3.0
PHIL 104A	History Of Western Philosophy: Ancient to Medieval (Active)	3.0
PHIL 104B	History of Western Philosophy: Modern to Contemporary (Active)	3.0
PHIL 106	Asian Philosophy (Active)	3.0
PHIL 107	Reflections on Human Nature (Active)	3.0
PHIL 109	Issues in Social Philosophy (Active)	3.0
PHIL 110	Philosophy of Religion (Active)	3.0
PHIL 111	Philosophy in Literature and Other Fiction (Active)	3.0
PHIL 125	Philosophy of Women (Active)	3.0
PHIL 126	Philosophy of Contemporary Gender Issues (Active)	3.0
PHIL 130	Philosophy of Art and Music (Active)	3.0
PHIL 131	Environmental Ethics (Active)	3.0
PHIL 205	Critical Thinking and Writing in Philosophy (Active)	3.0
PHIL 290	Independent Study (Active)	1.0-3.0

PHOTOGRAPHY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts in Photography provides students with strong foundational coursework, emphasizing photographic concepts and camera handling techniques needed to enter the field. Students benefit from instructors who are working professionals in the field. Students receive hands-on experience in studio practices and current industry software to create projects for the real world. The award culminates in a professional portfolio that could be used to obtain employment. The award is primarily designed for students interested in entering the photography field and for students pursuing entry-level job opportunities related to photography.

The award offers a wide range of theory, technique, and skills coursework from beginning through advanced levels that is structured to emphasize the development of creative expression, visual awareness, and technical skills required to enter the photography field or to prepare for transfer to four-year and private institutions. With an emphasis on process, conceptual strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. Working with photography and illustration, students create images to illustrate a client's needs. Using both print and digital formats they produce projects that demonstrate an understanding of visual communication. This diverse body of work is refined into a strategic professional portfolio aimed at accomplishing each student's educational and employment goals.

The Photography Department requires students to complete all requirements for the degree within five years.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 26.0

PHOT 100	Introduction to Black & White Photography (Active)	3.0
PHOT 109	Photographic Composition and Design (Active)	3.0
PHOT 125	Photo Business Operations (Active)	2.0
PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 150	History of Photography (Active)	3.0
PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 181	Photo Editing: Photoshop (Active)	3.0
PHOT 201A	Photographic Lighting Techniques I (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

PHOT 201B	Photographic Lighting Techniques II (Active)	3.0
PHOT 220	Portraiture (Active)	3.0
PHOT 230	Advertising Photography (Active)	3.0
PHOT 250	Fashion Photography (Active)	3.0
PHOT 257	Wedding and Event Photography (Active)	2.0

Complete nine (9) units from the following: **Semester Units:** 9.0

PHOT 135	Intermediate Black & White Photography (Active)	3.0
PHOT 165	Online Portfolio: Websites for Photographers (Active)	3.0
PHOT 205	Travel Photography (Active)	3.0
PHOT 215	Photojournalism and Documentary Photography (Active)	3.0
PHOT 235	Advanced Black and White Photography (Active)	3.0
PHOT 243	Advanced Digital Photography (Active)	3.0
PHOT 245	Landscape and Nature Photography (Active)	3.0

PHOTOGRAPHY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Photography provides students with strong foundational coursework, emphasizing photographic concepts and camera handling techniques needed to enter the field. Students benefit from instructors who are working professionals in the field. Students receive hands-on experience in studio

practices and current industry software to create projects for the real world. The award culminates in a professional portfolio that could be used to obtain employment. The award is primarily designed for students interested in entering the photography field and for students pursuing entry-level job opportunities related to photography.

The award offers a wide range of theory, technique, and skills coursework from beginning through advanced levels that is structured to emphasize the development of creative expression, visual awareness, and technical skills required to enter the photography field. With an emphasis on process, conceptual strategy, and professional practices, students are given broad opportunities to develop a unique voice, vision, and viewpoint. Working with photography and illustration, students create images to illustrate a client's needs. Using both print and digital formats they produce projects that demonstrate an understanding of visual communication. This diverse body of work is refined into a strategic professional portfolio aimed at accomplishing each student's educational and employment goals.

The Photography Department requires students to complete all requirements for the degree within five years.

Learning Outcome(s): Students who complete the Photography Program will be able to:

1. Demonstrate competent use of reciprocal exposures utilizing shutter speeds and apertures.
2. Utilize compositional elements in the creation of original photographs in various formats.
3. Develop black and white film and make gelatin silver prints in a traditional darkroom.
4. Utilize Adobe Lightroom and Photoshop in digital color correction and image manipulation.
5. Demonstrate an understanding of the history of photography and the role of photographs in today's society.
6. Illustrate abilities in various professional presentation techniques utilizing archival mounting and matting materials.
7. Apply theories and principles of photographic light and lighting control for both film and digital capture.
8. Create a marketing plan and business materials such as letterhead and business cards.
9. Produce professional quality, color-corrected photographs utilizing archival pigment and chromogenic materials.
10. Produce professional portfolios suitable for sharing with potential clients or grad-school entrance.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 26.0

PHOT 100	Introduction to Black & White Photography (Active)	3.0
PHOT 109	Photographic Composition and Design (Active)	3.0
PHOT 125	Photo Business Operations (Active)	2.0
PHOT 143	Introduction to Digital Photography (Active)	3.0
PHOT 150	History of Photography (Active)	3.0
PHOT 180	Photo Editing: Lightroom (Active)	3.0
PHOT 181	Photo Editing: Photoshop (Active)	3.0
PHOT 201A	Photographic Lighting Techniques I (Active)	3.0
PHOT 259A	Photographic Portfolio I (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

PHOT 201B	Photographic Lighting Techniques II (Active)	3.0
PHOT 220	Portraiture (Active)	3.0
PHOT 230	Advertising Photography (Active)	3.0
PHOT 250	Fashion Photography (Active)	3.0
PHOT 257	Wedding and Event Photography (Active)	2.0

Complete nine (9) units from the following: **Semester Units:** 9.0

PHOT 135	Intermediate Black & White Photography (Active)	3.0
PHOT 165	Online Portfolio: Websites for Photographers (Active)	3.0
PHOT 205	Travel Photography (Active)	3.0

PHOT 215	Photojournalism and Documentary Photography (Active)	3.0
PHOT 235	Advanced Black and White Photography (Active)	3.0
PHOT 243	Advanced Digital Photography (Active)	3.0
PHOT 245	Landscape and Nature Photography (Active)	3.0

PHYSICS - ASSOCIATE IN SCIENCE FOR TRANSFER DEGREE: CITY

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 an understanding and appreciate of the scientific method.
2. Communicate an understanding of the connection between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

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

PHYSICS - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Physics certifies that the student has emphasized the theory and practice of physics and has met the preparation for the major in physics and related fields, such as astronomy, geophysics, and engineering.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Physics Program will be able to:

1. Demonstrate an understanding and appreciate of the scientific method.
2. Communicate an understanding of the connection between science and other human activities.
3. Examine the universe in a variety of courses.
4. Utilize critical thinking skills in a variety of scientific applications.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 38.0

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
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

POLITICAL SCIENCE - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Political Science for Transfer Degree 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. Critically analyze the study of human behavior as it relates to political situations in college-level essays, written assignments, and research papers.
2. Identify and describe main concepts in the study of political science including, but not limited to, political power, sovereignty, nation-state; legitimacy; authority, political culture, political socialization, political ideology; social contract; separation of powers; federalism; unitary system; rule of law and globalization.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

POLS C1000	American Government and Politics (Active)	3.0
POLI 103	Comparative Politics (Active)	3.0
POLI 121	American Political Development (Active)	3.0
POLI 124	Power and Justice: An Introduction to Political Theory (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
Select one course from the following:		3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

POLITICAL SCIENCE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The primary objectives of the Political Science program are to meet general education requirements for American Institutions and Social Sciences for the associate degree and to complete general education requirements for baccalaureate degrees. Political science is the study of human behavior as it relates to political situations. It involves the examination of institutions, processes, people, ideas and policies. The study of political science develops cultural literacy, critical thinking and other useful skills.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Political Science Program will be able to:

1. Critically analyze the study of human behavior as it relates to political situations in college-level essays, written assignments, and research papers.
2. Identify and describe main concepts in the study of political science including, but not limited to, political power, sovereignty, nation-state; legitimacy; authority, political culture, political socialization, political ideology; social contract; separation of powers; federalism; unitary system; rule of law and globalization.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

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 121	American Political Development (Active)	3.0
POLI 140	Contemporary International Politics (Active)	3.0
		3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0

PRE-ENGINEERING TECHNOLOGY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Pre-Engineering Technology prepares students for entry level positions in engineering, manufacturing, and other engineering technology jobs. Courses in this certificate provide basic skills and knowledge in machining, manufacturing, engineering drawing, and strengthens their communication skills in preparation for these positions. These foundation courses prepare students for more academically rigorous engineering technology programs.

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 Pre-Engineering Technology Program will be able to:

1. Develop analytical problem solving skills in Engineering.
2. Demonstrate introductory skills in engineering drawing and design.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

MFET 101	Introduction to Manufacturing Engineering Technology (Active)	3.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0

PSYCHOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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.

The Psychology Department recommends that students planning to transfer to SDSU complete PSY 201 in addition to the above. The Psychology Department recommends that students complete PSYC 259 the semester after they complete PSYC 258.

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. Describe the field of psychology including its philosophical, theoretical, and scientific roots and the multitude of professional options.
2. Explain how the scientific method lends itself to the goals of psychological research and statistical analysis of research data.
3. Distinguish between various components of the nervous system, and explain how they work together to influence behavior and mental health processes.
4. Analyze the influence of biological and environmental factors in the development of psychological processes such as sensation & perception, learning, memory, intelligence, personality, emotion, motivation, sexuality, mental health and social behavior.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 255	Introduction to Psychological Research (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
PSYC 259	Behavioral Science Statistics Laboratory (Active)	1.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0

Complete six to seven units from the following: **Semester Units:** 6.0-7.0

		4.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
OR		
BIOL 210A	Introduction to the Biological Sciences I (Active)	4.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 283	Introduction to Cognitive Psychology (Active)	3.0

The Psychology Department recommends that students planning to transfer to SDSU complete PSYC 201 in addition to the above. The Psychology Department recommends that students complete PSYC 259 the semester after they complete PSYC 258.

PSYCHOLOGY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The psychology program is suited to the needs of both the two-year student and the transfer student who plan to major or minor in psychology or related fields. It provides students with an understanding of human behaviors and mental processes, and provides critical thinking and analytical skills that are applicable to many fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Psychology Program will be able to:

1. Describe the field of psychology including its philosophical, theoretical, and scientific roots and the multitude of professional options.
2. Explain how the scientific method lends itself to the goals of psychological research and statistical analysis of research data.

3. Distinguish between various components of the nervous system, and explain how they work together to influence behavior and mental health processes.
4. Analyze the influence of biological and environmental factors in the development of psychological processes such as sensation & perception, learning, memory, intelligence, personality, emotion, motivation, sexuality, mental health and social behavior.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

PSYC C1000	Introduction to Psychology (Active)	3.0
PSYC 255	Introduction to Psychological Research (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
PSYC 260	Introduction to Physiological Psychology (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

PSYC 137	Human Sexual Behavior (Active)	3.0
PSYC 166	Introduction to Social Psychology (Active)	3.0
PSYC 211	Learning (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
PSYC 283	Introduction to Cognitive Psychology (Active)	3.0

PUBLIC ADMINISTRATION - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Public Administration is designed to provide students with a broad understanding of the Public Administration field and to prepare them for transfer to baccalaureate-level Public Administration programs.

Emphasis is placed on administrative theory and practice at the local, state, and national levels, including governmental institutions and structures, public decision-making processes, organizational behavior, the effectiveness of criminal justice policies, urban policy, and land use considerations. Coursework encourages students to conduct research and critically analyze data while developing real-world management and leadership skills.

Students interested in transferring to San Diego State University in Public Administration may combine this Certificate with the Associate of Arts for Transfer in Law, Public Policy, and Society to facilitate preparation for the major and to enhance practical skills relevant to working in the public sector.

Learning Outcome(s): Students who complete the Public Administration Program will be able to:

1. Critically analyze the study of human behavior as it relates to political situations in college-level essays, written assignments, and research papers.
2. Identify and describe main concepts in the study of political science including, but not limited to, political power, sovereignty, nation-state; legitimacy; authority, political culture, political socialization, political ideology; social contract; separation of powers; federalism; unitary system; rule of law and globalization.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

PADM 200	Introduction to Public Administration (Active)	3.0
POLS C1000	American Government and Politics (Active)	3.0
		3.0

POLI 201	Elementary Statistics for Political Science (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
ACCT 116A	Financial Accounting (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
ECON 121	Principles of Microeconomics (Active)	3.0
CISC 181	Principles of Information Systems (Active)	4.0

RADIO AND PODCAST - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Radio and Podcast offers hands-on training and experience in the fundamentals of radio and podcast production principles, using new and emerging multimedia tools and technologies in our state-of the-art facilities. The program emphasis is placed on production, writing, on-air skills, and audio storytelling. Other topics addressed include voiceover performance, audio editing, and radio station and podcast marketing. Students can contribute to the City Times Media platform and CT Sound, the award-winning student radio station broadcast on 88.3 KSDS HD-2. This program is designed for students interested in enhancing their skills and knowledge of radio and podcast production, students majoring in Radio and Podcast, and for those seeking entry-level employment in related industries.

The skills acquired with this AS degree may lead to employment, freelance work or business ownership. These jobs include, but are not limited to, multimedia producers, directors, radio and podcast hosts, writers, reporters, program managers, sound board operators, sound designers, sound technicians, audio editors, and broadcast news analysts.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Radio and Podcast Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 15.0

FJMP 101	Introduction to Mass Media (Active)	3.0
FJMP 112	Introduction to Audio Production (Active)	3.0
		3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
OR		
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
		3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
OR		
FJMP 132	Multiplatform Journalism Production (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 242A	Radio and Podcast Workshop I (Active)	3.0
FJMP 242B	Radio and Podcast Workshop II (Active)	3.0

RADIO AND PODCAST - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Radio and Podcast offers hands-on training and experience in the fundamentals of radio and podcast production principles, using new and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on production, writing, on-air skills, and audio storytelling. Other topics addressed include voiceover performance, audio editing, and radio station and podcast marketing. Students can contribute to the City Times Media platform and CT Sound, the award-winning student radio station broadcast on 88.3 KSDS HD-2. This program is designed for students interested in enhancing their skills and knowledge of radio and podcast production, students majoring in Radio and Podcast, and for those seeking entry-level employment in related industries.

The skills acquired with this certificate may lead to employment, freelance work or business ownership. These jobs include, but are not limited to, multimedia producers, directors, radio and podcast hosts, writers, reporters, program managers, sound board operators, sound designers, sound technicians, audio editors, and broadcast news analysts.

Learning Outcome(s): Students who complete the Radio and Podcast Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

FJMP 112	Introduction to Audio Production (Active)	3.0
		3.0
FJMP 120	Introduction to Screenwriting (Active)	3.0
OR		
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
		3.0
FJMP 142	Radio and Podcast Production (Active)	3.0
OR		
FJMP 132	Multiplatform Journalism Production (Active)	3.0

Complete six (6) units from the following: **Semester Units:** 6.0

FJMP 131	Multimedia Journalism Reporting (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 242A	Radio and Podcast Workshop I (Active)	3.0
FJMP 242B	Radio and Podcast Workshop II (Active)	3.0

RADIO AND PODCAST - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Radio and Podcast offers hands-on training and experience in the fundamentals of radio and podcast production principles, using new and emerging multimedia tools and technologies in our state-of-the-art facilities. The program emphasis is placed on production, writing, on-air skills, and audio storytelling. Other topics addressed include voiceover performance, audio editing, and radio station and podcast marketing. Students can contribute to the City Times Media platform and CT Sound, the award-winning student radio station broadcast on 88.3 KSDS HD-2. This program is designed for students interested in enhancing their skills and knowledge of radio and podcast production, students majoring in Radio and Podcast, and for those seeking entry-level employment in related industries.

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 Radio and Podcast Program will be able to:

1. Apply tools and technologies appropriate for the media professions in which they work.
2. Write in forms and styles appropriate for media professions, audiences, and purposes they serve.
3. Conduct research and evaluate information by methods appropriate to the media professions in which they work.
4. Apply principles of diversity, equity, and media law and ethics.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 3.0
FJMP 101	Introduction to Mass Media (Active)	3.0

Complete six (6) units from the following:		**Semester Units:** 6.0
FJMP 112	Introduction to Audio Production (Active)	3.0
FJMP 130	Newswriting for Multiplatform Journalism (Active)	3.0
FJMP 131	Multimedia Journalism Reporting (Active)	3.0
DRAM 106	Voice-Over Performance (Active)	3.0
FJMP 141	Audio Storytelling for Radio and Podcast (Active)	3.0
FJMP 142	Radio and Podcast Production (Active)	3.0

RECORDKEEPING FOR A SMALL BUSINESS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Record Keeping for a Small Business certificate prepares a small business owner to organize business records and accurately prepare payroll.

Students who complete the certificate will be able to:

- Accurately prepare and organize accounting records and produce financial statements for a small business.
- Accurately prepare all the state and federal payroll tax forms required by a small business in California.

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 Recordkeeping for a Small Business Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 3.0

ACCT 128A	Recordkeeping (Active)	1.5
ACCT 128B	Payroll (Active)	1.5

REGISTERED NURSE: GENERIC - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Nursing (ADN) curriculum prepares entry-level Registered Nurses (RN) as providers of care across the health/illness continuum and as members within the profession. The curriculum respects the individuality of the student and aims to provide a positive, innovative learning model that fosters the development of critical thinking and problem solving skills so that the Registered Nurse is equipped to deliver care to a culturally diverse population in a variety of healthcare settings. Registered Nurses collaborate with members of the health care team, are effective communicators, are politically aware, and demonstrate a commitment to lifelong learning. Upon successful completion of program requirements, graduates are eligible to take the National Council Licensure Examination for Registered Nurses (NCLEX-RN).

The Board of Registered Nursing (BRN) requires 6 units of Communication, verbal, written and group; and 16 units of Natural, Behavioral and Social sciences. For more details, visit the San Diego City College Nursing Education webpage.

This degree is designed to accommodate the differing requirements of a wide variety of transfer institutions. Students interested in transfer should meet with the nursing education counselor.

It is strongly recommended that all of the general education requirements be completed prior to admission to the nursing education program or during summer sessions.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Registered Nurse: Generic Program will be able to:

1. Apply nursing concepts and skills to successfully pass the NCLEX-RN.
2. Make clinical judgments and management decisions to ensure accurate and safe client care.
3. Practice within the ethical, legal and regulatory frameworks of professional nursing practice.
4. Use standards of nursing practice to perform and evaluate client care in entry level practice.
5. Participate in life-long learning.

Accreditation

The San Diego City College Nursing Education program is fully approved by the California Board of Registered Nursing (BRN) and the Accreditation Commission for Education in Nursing (ACEN). Inquiries regarding accreditation may be made by contacting the BRN at P.O. Box 944210, Sacramento, CA 94244, 916-322-3350 or ACEN at 33343 Peachtree Road NE, Suite 500, Atlanta, GA 30326, 404-975-5000.

Directed Clinical Practice Requirement

Students accepted into this program will be required to successfully complete Directed Clinical Practice/clinically-based courses held in health care facilities. These facilities require background checks and urine drug screening as a condition of placement.

Refusal to submit to a background check, or failure to meet clearance criteria established by the health care facility, may prevent placement in the Directed Clinical Practice/clinically-based course and thus, it may not be possible to successfully progress in or complete the program.

Health care facilities also require adherence to strict standards of conduct. Facilities may refuse educational access to any person who does not adhere to the facility's standards of safety, health and ethical behavior. This may be cause for removal from the program.

Admission Criteria

Admission to the program is by special application. Information packets and applications are available San Diego City College Nursing website.

Prospective students are responsible for obtaining these materials in order to acquaint themselves with the admission policies and procedures. Information is also available at the Nursing workshops, held once a month. Schedule found on Nursing website.

Returning students previously accepted to the City College's Nursing Education Program (NEP) may be required to repeat a successfully completed course prior to program re-admittance. Consult a Nursing Advisor for more details.

Progression in the Nursing Education Program (NEP) requires a passing grade of 75% or higher in each NRSE course. Successful completion of each course is required to progress in the NEP regardless of the course taken. The student may re-apply to return the following year.

Requirements

Program Prerequisites		**Semester Units:** 13.0
BIOL 205	General Microbiology (Active)	5.0
BIOL 230	Human Anatomy (Active)	4.0
BIOL 235	Human Physiology (Active)	4.0

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 49.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
		3.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0
OR		
COMS 135	Interpersonal Communication (Active)	3.0
		3.0
ANTH 103	Introduction to Cultural Anthropology (Active)	3.0
OR		
SOCO 101	Principles of Sociology (Active)	3.0
OR		
SOCO 110	Contemporary Social Problems (Active)	3.0
NRSE 140	Foundations of Nursing (Active)	4.5
NRSE 141	Pharmacology for Nursing (Active)	1.0
NRSE 142	Medical Surgical Nursing I (Active)	4.5
NRSE 144	Medical Surgical Nursing II (Active)	4.5
NRSE 146	Maternal-Child Health Nursing (Active)	4.5
NRSE 240	Medical/Surgical Nursing III (Active)	4.5
NRSE 242	Mental Health & Gerontological Nursing (Active)	4.5
NRSE 244	Medical Surgical Nursing IV (Active)	4.5
NRSE 246	Leadership in Nursing (Active)	4.5

Additional Courses required for the associate degree: *Humanities

ROBOTICS ENGINEERING PROJECT TEAM LEVEL 1 - CERTIFICATE OF PERFORMANCE: CITY

Summary

Robotics in an engineering field that includes the electronic, mechanical and computer science disciplines. Students also participate in documentation, web design, construction, testing and deployment of an autonomous underwater vehicle for competition. The competition is sponsored by the Office of Naval Research (ONR) and the Association for Unmanned Vehicle Systems International (AUVSI).

Students completing the certificate will have an entry level understanding of the interpersonal skills needed to work with engineers from a variety of disciplines, and the engineering skills needed to produce a design within a fixed time frame.

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 Robotics Engineering Project Team Level 1 Program will be able to:

1. Develop analytical problem solving skills in Engineering.
2. Demonstrate introductory skills in engineering drawing and design.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 4.5

ENGE 50A	Introduction to Robotics Team Project Design (Active)	1.5
ENGE 50B	Introduction to Robotics Team Project Construction (Active)	1.5
ENGE 50C	Introduction to Robotics Team Project Testing and Deployment (Active)	1.5

SAN DIEGO GAS AND ELECTRIC COMPANY LINEMAN APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A three-year apprenticeship program in various electrical trades at the San Diego Gas and Electric Company (SDG&E). Applications for the following trades are accepted at San Diego Gas & Electric Company IBEW #465, 9060 Friars road, SD1150, San Diego, CA 92108:

- Electrician;
- Lineman; and
- Meter Tester

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Gas and Electric Company Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the SDGE Apprenticeship Standards.

2. Illustrate procedures utilized for SDGE trade and industry specific practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in SDGE occupations.
3. Identify and utilize equipment and related components of SDGE professions to meet SDGE standards for measurement, calibration and SDGE practices at Journeyman levels.
4. Read, comprehend and apply SDGE instructions and design standards for SDGE construction or production outcomes as required by SDGE practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

SDGE 302	Electric Lineman IA (Active)	5.0
SDGE 304	Electric Lineman IB (Active)	5.0
SDGE 310	Electric Lineman IIA (Active)	5.0
SDGE 312	Electric Lineman IIB (Active)	5.0
SDGE 320	Electric Lineman IIIA (Active)	5.0
SDGE 322	Electric Lineman IIIB (Active)	5.0

SAN DIEGO GAS AND ELECTRIC COMPANY LINEMAN APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A three-year apprenticeship program in various electrical trades at the San Diego Gas and Electric Company (SDG&E). Applications for the following trades are accepted at San Diego Gas & Electric Company IBEW #465, 9060 Friars road, SD1150, San Diego, CA 92108:

- Electrician;
- Lineman; and
- Meter Tester

Learning Outcome(s): Students who complete the San Diego Gas and Electric Company Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the SDGE Apprenticeship Standards.
2. Illustrate procedures utilized for SDGE trade and industry specific practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in SDGE occupations.
3. Identify and utilize equipment and related components of SDGE professions to meet SDGE standards for measurement, calibration and SDGE practices at Journeyman levels.
4. Read, comprehend and apply SDGE instructions and design standards for SDGE construction or production outcomes as required by SDGE practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

SDGE 302	Electric Lineman IA (Active)	5.0

SDGE 304	Electric Lineman IB (Active)	5.0
SDGE 310	Electric Lineman IIA (Active)	5.0
SDGE 312	Electric Lineman IIB (Active)	5.0
SDGE 320	Electric Lineman IIIA (Active)	5.0
SDGE 322	Electric Lineman IIIB (Active)	5.0

SAN DIEGO TRANSIT ELECTRONIC TECHNICIAN APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The San Diego Transit apprenticeship program is a four-year program designed to prepare the student for a career as a bus Electronics Technician. For application to the program, please contact San Diego Transit Corporation, 100 16th Street, San Diego, CA 92101. More information is available at: www.sdcommute.com.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Transit Electronic Technician Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for San Diego Bus Electronic Technicians practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in San Diego Transit work as an apprentice bus electronic technician.
3. Identify and utilize equipment and related components of bus electronic technicians to meet standards for measurement, calibration and bus electronic technician practices at Journeyman levels.
4. Read, comprehend and apply Electronic Technician instructions and design standards for construction or production outcomes as required by San Diego Transit practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or

industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

MATH 96	Intermediate Algebra and Geometry (Active)	5.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0

SAN DIEGO TRANSIT ELECTRONIC TECHNICIAN APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The San Diego Transit apprenticeship program is a four-year program designed to prepare the student for a career as a bus Electronics Technician. For application to the program, please contact San Diego Transit Corporation, 100 16th Street, San Diego, CA 92101. More information is available at: www.sdcommute.com.

Learning Outcome(s): Students who complete the San Diego Transit Electronic Technician Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for San Diego Bus Electronic Technicians practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in San Diego Transit work as an apprentice bus electronic technician.
3. Identify and utilize equipment and related components of bus electronic technicians to meet standards for measurement, calibration and bus electronic technician practices at Journeyman levels.
4. Read, comprehend and apply Electronic Technician instructions and design standards for construction or production outcomes as required by San Diego Transit practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the

policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 32.0

MATH 96	Intermediate Algebra and Geometry (Active)	5.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
ELDT 144	OP-AMPS, Sensors and Computers (Active)	3.0
ELDT 144L	OP-AMPS and Sensors Laboratory (Active)	1.5
ELDT 228	Communication Circuits (Active)	3.0
ELDT 228L	Communication Circuits and Certification Laboratory (Active)	1.0

SAN DIEGO TROLLEY INC LIGHT RAIL VEHICLE LINEMAN APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);
- Lineman (Wayside);
- Revenue Maintainer I; and

- Revenue Maintainer II.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Trolley Inc Light Rail Vehicle Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 32.0-33.0
		3.0-4.0
BUSE 101	Business Mathematics (Active)	3.0

OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
TROL 301	San Diego Trolley Light Rail Vehicle I (Active)	2.0
TROL 302	San Diego Trolley Light Rail Vehicle II (Active)	1.5
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
TROL 303	San Diego Trolley Light Rail Vehicle III (Active)	3.0
TROL 304	San Diego Trolley Light Rail Vehicle IV (Active)	3.0

SAN DIEGO TROLLEY INC LIGHT RAIL VEHICLE LINEMAN APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);
- Lineman (Wayside);
- Revenue Maintainer I; and
- Revenue Maintainer II.

Learning Outcome(s): Students who complete the San Diego Trolley Inc Light Rail Vehicle Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in

the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 29.0-30.0

		3.0-4.0
BUSE 101	Business Mathematics (Active)	3.0
OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0
TROL 301	San Diego Trolley Light Rail Vehicle I (Active)	2.0
TROL 302	San Diego Trolley Light Rail Vehicle II (Active)	1.5
ELDT 143	Semiconductor Devices (Active)	3.0
ELDT 143L	Semiconductor Devices Laboratory (Active)	1.5
AIRE 100	Basic Refrigeration & AC Theory (Active)	4.0
AIRE 103	Basic Refrigeration & AC Lab (Active)	2.0
TROL 303	San Diego Trolley Light Rail Vehicle III (Active)	3.0

SAN DIEGO TROLLEY INC REVENUE MAINTAINER APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);

- Lineman (Wayside);
- Revenue Maintainer I; and
- Revenue Maintainer II.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Trolley Inc Revenue Maintainer Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR:	**Semester Units:** 36.0-37.0
	3.0-4.0

BUSE 101	Business Mathematics (Active)	3.0
OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELDT 227	Introduction to Lasers and Fiber Optics (Active)	3.0
ELDT 227L	Lasers and Fiber Optics Laboratory (Active)	1.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0

SAN DIEGO TROLLEY INC REVENUE MAINTAINER APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);
- Lineman (Wayside);
- Revenue Maintainer I; and
- Revenue Maintainer II.

Learning Outcome(s): Students who complete the San Diego Trolley Inc Revenue Maintainer Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship;

authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 36.0-37.0

		3.0-4.0
BUSE 101	Business Mathematics (Active)	3.0
OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELDT 124	Basic DC Electronics (Active)	4.0
ELDT 124L	Basic DC Laboratory (Active)	1.0
ELDT 125	AC Circuit Analysis (Active)	4.0
ELDT 125L	DC/AC Circuit Analysis Laboratory with Pspice (Active)	1.0
ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELDT 227	Introduction to Lasers and Fiber Optics (Active)	3.0
ELDT 227L	Lasers and Fiber Optics Laboratory (Active)	1.0
INWT 120	Network Fundamentals (Network+) (Active)	4.0

SAN DIEGO TROLLEY INC WAYSIDE LINEMAN APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);
- Lineman (Wayside);
- Revenue Maintainer I; and
- Revenue Maintainer II.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the San Diego Trolley Inc Wayside Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 33.0-34.0

		3.0-4.0
BUSE 101	Business Mathematics (Active)	3.0
OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELCT 30	Modern Commercial Wiring (Active)	3.0
ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELCT 141	Electrical Theory IV (Active)	3.0
ELCT 141L	Electrical Laboratory IV (Active)	2.0
ELCT 20	Blueprint Reading for Electricians (Active)	3.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0

SAN DIEGO TROLLEY INC WAYSIDE LINEMAN APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A four-year apprenticeship in electro-mechanical trades at San Diego Trolley, Inc (SDTI). Applications for the following trades are accepted at 1255 Imperial Avenue, Suite 900, San Diego, CA 92101-7492:

- Assistant Lineman (Light Rail Vehicle);
- Assistant Lineman (Wayside);
- Lineman (Light Rail Vehicle);
- Lineman (Wayside);
- Revenue Maintainer I; and
- Revenue Maintainer II.

Learning Outcome(s): Students who complete the San Diego Trolley Inc Wayside Lineman Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for trolley practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in trolley occupations.
3. Identify and utilize equipment and related components of the trolley profession to meet San Diego Trolley standards for measurement, calibration and trolley practices at Journeyman levels.
4. Read, comprehend and apply Trolley trade instructions and design standards for construction or production outcomes in Trolley work as required by San Diego Trolley practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship;

authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 33.0-34.0
ELCT 20	Blueprint Reading for Electricians (Active)	3.0
ELCT 30	Modern Commercial Wiring (Active)	3.0
		3.0-4.0
BUSE 101	Business Mathematics (Active)	3.0
OR		
MATH 92	Applied Beginning and Intermediate Algebra (Active)	4.0
ELCT 111	Electrical Theory I (Active)	3.0
ELCT 111L	Electrical Laboratory I (Active)	2.0
ELCT 121	Electrical Theory II (Active)	3.0
ELCT 121L	Electrical Laboratory II (Active)	2.0
ELCT 131	Electrical Theory III (Active)	3.0
ELCT 131L	Electrical Laboratory III (Active)	2.0
ELCT 141	Electrical Theory IV (Active)	3.0
ELCT 141L	Electrical Laboratory IV (Active)	2.0
ELDT 123	Introduction to Digital Circuits (Active)	3.0
ELDT 123L	Digital Circuits Laboratory (Active)	1.0

SMALL BUSINESS MANAGEMENT - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Associate of Science Degree in Small Business Management is designed for individuals planning to start, operate, or work in a small business. Students develop a strong foundation for business success with a focus on management processes in planning, organizing, directing, and controlling a business across diverse settings. The program includes essential skills in key areas of entrepreneurial interest as well as offers students hands-on

experience managing a business. The program emphasis is placed on starting and managing a business focusing on day-to-day decision making in key areas, such as management, marketing, finance, and communication. Students who successfully complete the award are prepared to start and/ or manage a business as well as prepare students currently working in a business for advancement into management positions.

The Business Department recommends that students planning to transfer completes BUSE 119 instead of BUSE 92.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Small Business Management Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.0

ACCT 128A	Recordkeeping (Active)	1.5
ACCT 128B	Payroll (Active)	1.5
		3.0
BUSE 92	Introduction to Business Communication (Active)	3.0
OR		
BUSE 119	Business Communications (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 270	Business Internship / Work Experience (Active)	1.0

Complete nine (9) units from the following: **Semester Units:** 9.0

BUSE 102	Introduction to Customer Service (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
MARK 100	Principles of Marketing (Active)	3.0
MARK 105	Professional Selling (Active)	3.0
MARK 130	Advertising Principles (Active)	3.0

SMALL BUSINESS MANAGEMENT - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Small Business Management is designed for individuals planning to start, operate, or work in a small business. Students develop a strong foundation for business success with a focus on management processes in planning, organizing, directing, and controlling a business across diverse settings. The program includes essential skills in key areas of entrepreneurial interest as well as offers students hands-on experience. The program emphasis is placed on starting and managing a small business focusing on day-to-day decision making in key areas, such as management, marketing, finance, and communication. Students who successfully complete the award are prepared to start and/or manage a business, prepare students currently working in a business for advancement into management positions, or prepare students interested in pursuing an associate degree in small business management.

The Business Department recommends that students planning to transfer completes BUSE 119 instead of BUSE 092.

Learning Outcome(s): Students who complete the Small Business Management Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 10.0

ACCT 128A	Recordkeeping (Active)	1.5
ACCT 128B	Payroll (Active)	1.5
		3.0
BUSE 92	Introduction to Business Communication (Active)	3.0
OR		
BUSE 119	Business Communications (Active)	3.0
BUSE 155	Small Business Management (Active)	3.0
BUSE 270	Business Internship / Work Experience (Active)	1.0

Complete nine (9) units from the following: **Semester Units:** 9.0

BUSE 102	Introduction to Customer Service (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
MARK 100	Principles of Marketing (Active)	3.0
MARK 105	Professional Selling (Active)	3.0
MARK 130	Advertising Principles (Active)	3.0

SOCIAL WORK - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Social Work is an applied behavioral science that emphasizes the application of behavioral science principles in a variety of cultural contexts. Social Work students are expected to think critically and scientifically about behavior, to apply the principles of the behavioral sciences, and to understand the role of values in diverse cultural settings. As a profession, social work focuses on methods for helping people from many different social groups to improve the quality of their lives.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Social Work Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging (e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/ neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 22.0

HUMS 110	Social Work Fields of Service (Active)	3.0
HUMS 120	Introduction to Social Work (Active)	3.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
		3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

PSYC 161	Introduction to Counseling (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0

SOCIAL WORK - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Social Work provides students a strong foundation in scientific assessment and analysis of behavior. Students apply social work theories through practice with individuals, groups, and communities. This program is designed for students interested in working in public and private organizations, students majoring in social work, and students pursuing an associate's or bachelor's degree in social work.

Students intending to transfer into this major at a CSU or UC should consult with a counselor and visit www.assist.org for guidance on appropriate transfer coursework.

Learning Outcome(s): Students who complete the Social Work Program will be able to:

1. Recognize, identify, assess, and address key concepts in aging(e.g., physical and mental health, exercise, nutrition, the normal aging process, etc.) affecting optimal aging and older adulthood functioning.
2. Identify and compare the various public benefits available through local, state, federal, public assistance programs.
3. Identify and make referral to appropriate services.
4. Recognize and identify risk of caregiver stress, particularly in caring for individuals suffering from Alzheimer's and other dementia.
5. Make a report of an incident or suspected incident of an abuse/ neglect of dependent adults and elders.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 22.0

HUMS 110	Social Work Fields of Service (Active)	3.0
HUMS 120	Introduction to Social Work (Active)	3.0
BIOL 107	General Biology-Lecture and Laboratory (Active)	4.0
ECON 120	Principles of Macroeconomics (Active)	3.0
PSYC C1000	Introduction to Psychology (Active)	3.0
		3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		

STAT C1000	Introduction to Statistics (Active)	3.0
SOCO 101	Principles of Sociology (Active)	3.0

Complete two courses from the following: **Semester Units:** 6.0

PSYC 161	Introduction to Counseling (Active)	3.0
PSYC 230	Psychology of Lifespan Development (Active)	3.0
PSYC 245	Abnormal Psychology (Active)	3.0
SOCO 110	Contemporary Social Problems (Active)	3.0

SOCIOLOGY - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Sociology for Transfer Degree 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. Apply the sociological imagination and be able to differentiate between sociology and other social sciences.
2. Analyze critical inquiry of personal experience, over-generalization, and simplistic understandings of human behavior through the application of various sociological theories.
3. Propose critical questions and issues facing our society today, particularly the U.S. role in a globalized world.
4. Critically assess how the theoretical underpinnings of sociology explicitly challenge the dominant ideologies in US society and the role of sociology to produce social change.

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
PSYC 258	Behavioral Science Statistics (Active)	3.0
SOCO 220	Introduction to Research Methods in Sociology (Active)	3.0

		3.0
SOCO 125	Sociology of the Family (Active)	3.0
OR		
GEND 101	Introduction to Gender Studies (Active)	3.0
OR		
SOCO 201	Advanced Principles of Sociology (Active)	3.0

Select one course not selected above from the following (3 units): **Semester Units:** 3.0

GEND 101	Introduction to Gender Studies (Active)	3.0
SOCO 125	Sociology of the Family (Active)	3.0
SOCO 145	Health and Society (Active)	3.0
SOCO 150	Sociology of Latinos/Latinas (Active)	3.0
SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0

SOCIOLOGY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

Sociology is a behavioral science that emphasizes relationships through formal organizations to whole societies. Sociology's subject matter ranges from the intimate family to the hostile mob, from crime to religion, from divisions of race and social class to the shared beliefs of a common culture, from the Sociology of work to the Sociology of sports. Sociologists seek to understand interaction of individuals with institutions and social organizations and the norms, values, beliefs, and traditions that make social life possible and meaningful. It stresses how behavior is influenced by societal structures and how consensus (agreement) and conflict (disagreement) among groups affects society. Sociology students are expected to be able to think critically and scientifically about human behavior, and to be able to apply the principles of sociology to an understanding of behavior.

The sociology program aims to provide sociology courses that are foundations for further understanding of other courses in sociology and related fields and to prepare for transfer to baccalaureate institutions for further study. The sociology program also offers courses that may provide additional information regarding sociology of interest to community college students, or that are applications of sociological principles.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Sociology Program will be able to:

1. Apply the sociological imagination and be able to differentiate between sociology and other social sciences.
2. Analyze critical inquiry of personal experience, over-generalization, and simplistic understandings of human behavior through the application of various sociological theories.
3. Propose critical questions and issues facing our society today, particularly the U.S. role in a globalized world.
4. Critically assess how the theoretical underpinnings of sociology explicitly challenge the dominant ideologies in US society and the role of sociology to produce social change.

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
		3.0

PSYC 258	Behavioral Science Statistics (Active)	3.0
OR		
STAT C1000	Introduction to Statistics (Active)	3.0
SOCO 201	Advanced Principles of Sociology (Active)	3.0
SOCO 220	Introduction to Research Methods in Sociology (Active)	3.0

Select two courses from the following: **Semester Units:** 6.0

SOCO 125	Sociology of the Family (Active)	3.0
SOCO 145	Health and Society (Active)	3.0
SOCO 150	Sociology of Latinos/Latinas (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0
GEND 101	Introduction to Gender Studies (Active)	3.0

SOLAR TURBINES, INCORPORATED APPRENTICESHIP - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

A four-year indentured apprenticeship program in a number of manufacturing or technical trades is available. Applications for the following trades are accepted at Solar Turbines, Incorporated, 2200 Pacific Coast Highway, P.O. Box 85376 MZ-M1, San Diego, CA 92186-5376:

- Master Machinist
- Tool and Die Maker
- Sheet Metal Experimental Mechanics
- Precision Machine Tool Mechanic

Enrollment in classes other than those listed will be allowed with the approval of the Solar Turbines, Incorporated Apprenticeship Coordinator.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Solar Turbines, Incorporated Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for Solar Turbine industry specific practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in Solar Turbine.
3. Identify and utilize equipment and related components of the Solar Turbine profession to meet standards for measurement, calibration and Solar Turbine practices at Journeyman levels.
4. Read, comprehend and apply Solar Turbine instructions and design standards for construction or production outcomes as required by Solar Turbine practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship;

authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

MFET 105	Print Reading and Symbology (Active)	3.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
MATH 98	Technical Intermediate Algebra and Geometry (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0
MFET 120	Manufacturing Processes (Active)	4.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0

SOLAR TURBINES, INCORPORATED APPRENTICESHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

A four-year indentured apprenticeship program in a number of manufacturing or technical trades is available. Applications for the following trades are accepted at Solar Turbines, Incorporated, 2200 Pacific Coast Highway, P.O. Box 85376 MZ-M1, San Diego, CA 92186-5376:

- Master Machinist
- Tool and Die Maker
- Sheet Metal Experimental Mechanics
- Precision Machine Tool Mechanic

Enrollment in classes other than those listed will be allowed with the approval of the Solar Turbines, Incorporated Apprenticeship Coordinator.

Learning Outcome(s): Students who complete the Solar Turbines, Incorporated Apprenticeship Program will be able to:

1. Demonstrate preparedness for successful transition to the Journeyman level designation and professional certification by the California Division of Apprenticeship Standards.
2. Illustrate procedures utilized for Solar Turbine industry specific practices in use of tools techniques and hands-on skills and competencies for Journeyman-level practices in Solar Turbine.
3. Identify and utilize equipment and related components of the Solar Turbine profession to meet standards for measurement, calibration and Solar Turbine practices at Journeyman levels.
4. Read, comprehend and apply Solar Turbine instructions and design standards for construction or production outcomes as required by Solar Turbine practices and industry standards.

Apprenticeship Program

The apprenticeship training program provides an opportunity for a balanced approach of on-the-job training and related technical instruction to achieve the position of journeyperson in one of the state-approved programs. The length of the program depends on the trade selected and can range from two to five years. The program encourages the transfer of skills and knowledge from master journeyperson to apprentices to further employment potential in their trade. The California state system was established in 1939 with the passage of the Shelley-Maloney Apprenticeship Labor Standards Act. This act established the California Apprenticeship Council as the policy-making body; named the State Director of Industrial Relations as the administrator of apprenticeship; authorized the Division of Apprenticeship Standards (DAS) to approve training standards and provide assistance in the development of apprenticeship programs; and assigned responsibility for related and supplemental training to state and local boards responsible for vocational education.

Affirmative Action Statement

The Apprenticeship Committees for whom the District provides related and supplemental instruction have indicated they do not and will not discriminate against any employee or against any applicant for employment because of age, race, color, religion, handicap, ancestry, sex, or national origin.

Admission To The Program

Indenture in a state-approved apprenticeship program is a required prerequisite to enroll in the apprenticeship related and supplemental classes. Applicants for apprenticeship should contact the employer, program coordinator, or labor union listed before each program in the apprenticeship course description section of the catalog. Each of the individual programs listed in the apprenticeship course description section of this catalog is administered by an apprenticeship committee made up of member representatives from the respective trades or industries. This committee serves as the approval body for all apprenticeship matters relating to the particular trade. See our Apprenticeship Programs website for more information.

Completion Requirements

In addition to the academic requirements listed, each apprentice must complete the prescribed number of hours of training during the period of the apprenticeship program as approved by the apprenticeship committee to receive the certificate of achievement or degree.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 30.0

MFET 105	Print Reading and Symbology (Active)	3.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
MATH 98	Technical Intermediate Algebra and Geometry (Active)	4.0
MACT 150	Intro/Computer Numerical Control (CNC) (Active)	4.0
ENGL C1000	Academic Reading and Writing (Active)	3.0
ENGE 151	Computer-Aided Design (Active)	2.0
MFET 115	Properties of Materials (Active)	3.0

MFET 120	Manufacturing Processes (Active)	4.0
COMM C1000	Introduction to Public Speaking (Historical)	3.0

SPANISH - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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 preparedness for successful transition to the language program of four year institutions.
2. Demonstrate accurate language grammar including writing, speaking, and listening in the target language.
3. Discuss the social and cultural life of Language speakers in the target language.
4. Read and analyze writings in Language target areas.
5. Demonstrate through discussion and actions the acceptance and value of other peoples.

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 of 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

SPANISH - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The study of languages provides communication skills, provides exposure to the richness of cultural variety, increases transfer options to universities with language requirements, opens new career opportunities, enriches global travel, and provides personal enrichment. The program is designed to prepare students for transfer to a baccalaureate institution and for proficiency in a language in a variety of settings.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Spanish Program will be able to:

1. Demonstrate preparedness for successful transition to the language program of four year institutions.
2. Demonstrate accurate language grammar including writing, speaking, and listening in the target language.
3. Discuss the social and cultural life of Language speakers in the target language.
4. Read and analyze writings in Language target areas.
5. Demonstrate through discussion and actions the acceptance and value of other peoples.

Requirements

COURSES REQUIRED FOR THE MAJOR:		**Semester Units:** 22.0-26.0
		6.0-10.0
		10.0
SPAN 101	First Course in Spanish (Active)	5.0
AND		
SPAN 102	Second Course in Spanish (Active)	5.0
OR		
		6.0
CHIC 141A	United States History from a Chicano Perspective (Active)	3.0
AND		
CHIC 141B	United States History from a Chicano Perspective (Active)	3.0
		5.0
SPAN 201	Third Course in Spanish (Active)	5.0
OR		
SPAN 215	Spanish for Spanish Speakers I (Active)	5.0
		5.0
SPAN 202	Fourth Course in Spanish (Active)	5.0
OR		
SPAN 216	Spanish for Spanish Speakers II (Active)	5.0
SPAN 210	Conversation and Composition Spanish I (Active)	3.0
SPAN 211	Conversation and Composition Spanish II (Active)	3.0

STARTING AND MANAGING A SMALL BUSINESS* - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Starting and Managing a Small Business provides students with the skills and knowledge required to start and manage a small business of their own or as an employee of a start-up company.

Students who complete the certificate will be able to:

- Apply human resource management techniques, marketing for a small business, and knowledge of current legal issues to successfully own or operate a small business.

- Develop a business plan for a small business.
- Develop marketing strategies including product planning, development, pricing, distribution, and promotion necessary to operate a small business.

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 Starting and Managing a Small Business Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 9.0

BUSE 155	Small Business Management (Active)	3.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
MARK 100	Principles of Marketing (Active)	3.0

STUDIO ARTS - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

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 Program will be able to:

1. Solve basic problems of visual expression and describe its historical or contemporary context.
2. Demonstrate knowledge of specific historical and cultural art styles.
3. Produce visual works of art reflecting global awareness, cultural diversity.
4. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

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 150A	Two-Dimensional Design (Active)	3.0
ARTF 151	Three-Dimensional Design (Active)	3.0
ARTF 155A	Freehand Drawing I (Active)	3.0

Select three courses (nine semester units) from the following: (It is recommended that students select courses that meet lower division major preparation requirements for their transfer university.) **Semester Units:** 9.0

ARTF 155B	Freehand Drawing II (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 175A	Sculpture I (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0
ARTF 197A	Handbuilding Ceramics I (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0

STUDIO ARTS ENTREPRENEURSHIP - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Studio Arts Entrepreneurship provides students with the skills and knowledge to foster self-employment or a small business. The curriculum is designed to maximize students' art experience while providing basic skills required for self-employment and employment in art-related fields. This program expands student education in entrepreneurship and small business management. The primary aim is to prepare students to create advanced artwork and pursue a career in art-related fields.

Learning Outcome(s): Students who complete the Studio Arts Entrepreneurship Program will be able to:

1. Solve basic problems of visual expression and describe its historical or contemporary context.
2. Demonstrate knowledge of specific historical and cultural art styles.
3. Produce visual works of art reflecting global awareness, cultural diversity.
4. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 12.0

ARTF 206	Art Entrepreneurship (Active)	3.0
ARTF 260	Studio Art Studies (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
PHOT 143	Introduction to Digital Photography (Active)	3.0

Select 6 units from the following courses: **Semester Units:** 6.0

ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 165C	Composition in Painting III (Active)	3.0

ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 170C	Contemporary Crafts III (Active)	3.0
ARTF 175B	Sculpture II (Active)	3.0
ARTF 175C	Sculpture III (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 195C	Ceramics III (Active)	3.0
ARTF 196	Clay and Glaze Technology (Active)	3.0
ARTF 202A	Public Art I (Active)	3.0
ARTF 202B	Public Art II (Active)	3.0
ARTF 205A	Installation, Performance, and New Genres (Active)	3.0
ARTF 207A	Industrial and Architectural Ceramic Design I (Active)	3.0
ARTF 207B	Industrial and Architectural Ceramic Design II (Active)	3.0
ARTF 208A	Ceramic Production I (Active)	3.0
ARTF 208B	Ceramic Production II (Active)	3.0
ARTF 210B	Life Drawing II (Active)	3.0
ARTF 210C	Life Drawing III (Active)	3.0
ARTF 212	Sustainable Art and Design (Active)	3.0

SUSTAINABILITY - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate Degree of Arts in Sustainability focuses on the relationship between human and natural systems. Curriculum emphasizes critical analysis of complex, interconnected societal and environmental problems, and empowers students to create equitable solutions grounded in science.

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. Analyze, discuss and evaluate issues related to sustainability on all levels.
2. Apply theory in academic disciplines such as sociology, philosophy, economics, and environmental science to the field of sustainability.
3. Critically think about their role in the world and their possible contributions to a sustainable global society.
4. Understand the role of ethics in sustainability.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

BIOL 101	Issues in Environmental Science & Sustainability (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0
GEOG 101	Physical Geography (Active)	3.0
PHYN 114	Weather and Climate (Active)	3.0
SUST 101	Introduction to Sustainability (Active)	3.0

SELECT THREE UNITS FROM THE FOLLOWING: **Semester Units:** 3.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

SELECT THREE TO FOUR UNITS FROM THE FOLLOWING: **Semester Units:** 3.0-4.0

AGRI 102	Sustainable Urban Agricultural Practice (Active)	3.0
		4.0
CHEM 111	Chemistry in Society (Active)	3.0
AND		
CHEM 111L	Chemistry in Society Laboratory (Active)	1.0
GEOL 102	Environmental Geology (Active)	3.0
GISG 104	Geographic Information Science and Spatial Reasoning (Active)	3.0
PEAC 101	Introduction to Peace Studies (Active)	3.0
PHIL 131	Environmental Ethics (Active)	3.0
SOCO 223	Globalization and Social Change (Active)	3.0

SUSTAINABILITY - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Sustainability focuses on the relationship between human and natural systems. Curriculum emphasizes critical analysis of complex, interconnected societal and environmental problems, and empowers students to create equitable solutions grounded in science. The Certificate of Achievement focuses on the core courses needed for the Sustainability Associate Degree.

Learning Outcome(s): Students who complete the Sustainability Program will be able to:

1. Analyze, discuss and evaluate issues related to sustainability on all levels.
2. Apply theory in academic disciplines such as sociology, philosophy, economics, and environmental science to the field of sustainability.
3. Critically think about their role in the world and their possible contributions to a sustainable global society.
4. Understand the role of ethics in sustainability.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 16.0

BIOL 101	Issues in Environmental Science & Sustainability (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0
GEOG 101	Physical Geography (Active)	3.0
PHYN 114	Weather and Climate (Active)	3.0
SUST 101	Introduction to Sustainability (Active)	3.0

SELECT THREE UNITS FROM THE FOLLOWING: **Semester Units:** 3.0

BUSE 115	Statistics for Business (Active)	3.0
STAT C1000	Introduction to Statistics (Active)	3.0
PHIL 101	Symbolic Logic (Active)	3.0
POLI 201	Elementary Statistics for Political Science (Active)	3.0
PSYC 258	Behavioral Science Statistics (Active)	3.0

SUSTAINABILITY - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Sustainability focuses on the relationship between human and natural systems. Curriculum provides a foundation in critical analysis of complex, interconnected societal and environmental problems, and empowers students to create equitable solutions grounded in science.

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. Analyze, discuss and evaluate issues related to sustainability on all levels.
2. Apply theory in academic disciplines such as sociology, philosophy, economics, and environmental science to the field of sustainability.
3. Critically think about their role in the world and their possible contributions to a sustainable global society.
4. Understand the role of ethics in sustainability.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 13.0

BIOL 101	Issues in Environmental Science & Sustainability (Active)	4.0
ECON 121	Principles of Microeconomics (Active)	3.0
		3.0
GEOG 101	Physical Geography (Active)	3.0
OR		
PHYN 114	Weather and Climate (Active)	3.0
SUST 101	Introduction to Sustainability (Active)	3.0

SUSTAINABLE URBAN AGRICULTURE - ASSOCIATE OF SCIENCE DEGREE: CITY

Summary

The Sustainable Urban Agriculture program prepares students to transfer to a four-year college to continue their studies in agriculture and related fields.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Sustainable Urban Agriculture Program will be able to:

1. Understand and explain the three facets of sustainability (economic, environmental and social) both in general and as they apply specifically to landscaping practices.
2. Understand and explain the components of a food system.
3. Design an organic urban farm that supports natural ecosystems, human health, and water conservation.
4. Evaluate the soil food web.
5. Create a crop plan that is appropriate for the southwest region.
6. Identify plant disease and pests and incorporate integrated pest management and other organic strategies for a resilient food system.
7. Demonstrate basic propagation techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 23.0

AGRI 100	Principles of Sustainable Agriculture (Active)	3.0

AGRI 102	Sustainable Urban Agricultural Practice (Active)	3.0
AGRI 104	Sustainable Vegetable Production (Active)	3.0
AGRI 125	Introduction to Soil Science (Active)	3.0
AGRI 107	Introduction to Agricultural Plant Science (Active)	4.0
CHEM 100	Fundamentals of Chemistry (Active)	3.0
CHEM 100L	Fundamentals of Chemistry Laboratory (Active)	1.0
SUST 101	Introduction to Sustainability (Active)	3.0

TECHNICAL THEATRE - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

The Certificate of Achievement in Technical Theatre provides additional preparation for theatre majors to find entry-level work in all aspects of technical theatre. The award provides students with additional support when they transfer to four-year institutions where technical theatre is emphasized.

Students who successfully complete this award will be able to:

- Design and implement stage scenery, lighting, and sound equipment;
- Organize the technical operations of stage productions;
- Create original makeup designs and apply makeup for original characters; and
- Design and paint small- and large-scale scenery for the stage.

Learning Outcome(s): Students who complete the Technical Theatre Program will be able to:

1. Effectively practice the theatre arts through involvement in the creation and presentation of public performances in theatre.
2. Develop a structural approach to interpretation of language in dramatic text.
3. Explain and practice basic production processes such as acting, scenic, costume, and make-up design, and technical operation related to production.
4. Identify the historical and cultural dimension of theatre, including the works of leading playwrights, actors, directors, and designers.
5. Acquire intercultural and multicultural understanding, as well as perception of the universal and timeless human conflicts presented in dramatic works.
6. Augment the discipline, cooperation, accountability, and perseverance necessary for positive self-identification and success in life.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 18.0

DRAM 123	Beginning Stagecraft (Active)	3.0
DRAM 124	Makeup for the Stage (Active)	3.0
DRAM 126	Advanced Stagecraft (Active)	3.0
DRAM 143	Beginning Costuming (Active)	3.0
DRAM 129A	Beginning Scene Painting (Active)	3.0
		3.0
DRAM 129B	Intermediate Scene Painting (Active)	3.0
OR		
DRAM 153	Intermediate Costuming (Active)	3.0

THEATRE - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts in Theatre provides an opportunity for students to gain practical experience in professional and community theatre work and to prepare themselves for continued higher education. Theatre productions are offered each year, allowing students to develop practical skills while earning college credit for transfer to universities.

The Theatre Arts program offers transfer courses in preparation for university theatre majors as well as fundamental skills in acting and dramatic production useful for employment or for participation in theatre productions.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Theatre Program will be able to:

1. Effectively practice the theatre arts through involvement in the creation and presentation of public performances in theatre.
2. Develop a structural approach to interpretation of language in dramatic text.
3. Explain and practice basic production processes such as acting, scenic, costume, and make-up design, and technical operation related to production.
4. Identify the historical and cultural dimension of theatre, including the works of leading playwrights, actors, directors, and designers.
5. Acquire intercultural and multicultural understanding, as well as perception of the universal and timeless human conflicts presented in dramatic works.
6. Augment the discipline, cooperation, accountability, and perseverance necessary for positive self-identification and success in life.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 24.0

DRAM 105	Introduction to Dramatic Arts (Active)	3.0
DRAM 107	Study of Filmed Plays (Active)	3.0
		3.0
DRAM 123	Beginning Stagecraft (Active)	3.0
OR		
DRAM 143	Beginning Costuming (Active)	3.0
DRAM 124	Makeup for the Stage (Active)	3.0
DRAM 132	Beginning Acting (Active)	3.0
DRAM 133	Intermediate Acting (Active)	3.0
DRAM 134	Beginning Voice for Actors (Active)	3.0
DRAM 165	Introduction to Stage Movement (Active)	3.0

Select three units from the following: **Semester Units:** 3.0

DRAM 103	Acting for Non-majors (Active)	3.0
DRAM 108	Playwriting (Active)	3.0
DRAM 109	Theatre and Social Issues (Active)	3.0
DRAM 111	Chicana/o Theatre (Active)	3.0
DRAM 119	Film and Television Performance (Active)	3.0
DRAM 205	The American Musical on Stage and Screen (Active)	3.0

THEATRE ARTS - ASSOCIATE IN ARTS FOR TRANSFER DEGREE: CITY

Summary

The Associate in Arts in Theatre Arts for Transfer is intended for students who plan to complete a bachelor's degree in Theatre 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 Theatre Arts Program will be able to:

1. Effectively practice the theatre arts through involvement in the creation and presentation of public performances in theatre.
2. Develop a structural approach to interpretation of language in dramatic text.
3. Explain and practice basic production processes such as acting, scenic, costume, and make-up design, and technical operation related to production.
4. Identify the historical and cultural dimension of theatre, including the works of leading playwrights, actors, directors, and designers.
5. Acquire intercultural and multicultural understanding, as well as perception of the universal and timeless human conflicts presented in dramatic works.
6. Augment the discipline, cooperation, accountability, and perseverance necessary for positive self-identification and success in life.

Requirements

COURSES REQUIRED FOR MAJOR: **Semester Units:** 9.0

DRAM 132	Beginning Acting (Active)	3.0
DRAM 242A	Rehearsal and Performance I (Active)	3.0
Select one course from the following:		3.0
DRAM 105	Introduction to Dramatic Arts (Approved)	3.0
DRAM 136	Theatre History I: Ancient Greece to the Renaissance (Active)	3.0

SELECT THREE COURSES FROM THE FOLLOWING (9 UNITS): **Semester Units:** 9.0

DRAM 123	Beginning Stagecraft (Active)	3.0
DRAM 124	Makeup for the Stage (Active)	3.0
DRAM 133	Intermediate Acting (Active)	3.0
DRAM 143	Beginning Costuming (Active)	3.0

THREE-DIMENSIONAL ART - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts in Three-Dimensional Art focuses on the development of artistic practice through exploration, experimentation, studio work, and study of art history. As students develop ideas and express them in a variety of three-dimensional forms, they examine how their artwork reflects the time and culture within which they are creating it and how their work fits into the history of art and contemporary art practice.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Three-Dimensional Art Program will be able to:

1. Solve basic problems of visual expression and describe its historical or contemporary context.
2. Demonstrate knowledge of specific historical and cultural art styles.
3. Produce visual works of art reflecting global awareness, cultural diversity.
4. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

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
ARTF 170A	Contemporary Crafts I (Active)	3.0
ARTF 175A	Sculpture I (Active)	3.0
ARTF 195A	Ceramics I (Active)	3.0

Select six (6 units) from the following: **Semester Units:** 6.0

ARTF 104	Artists and Designers Today (Active)	3.0
ARTF 170B	Contemporary Crafts II (Active)	3.0
ARTF 170C	Contemporary Crafts III (Active)	3.0
ARTF 175B	Sculpture II (Active)	3.0
ARTF 175C	Sculpture III (Active)	3.0
ARTF 179A	Figurative Ceramic Sculpture I (Active)	3.0
ARTF 195B	Ceramics II (Active)	3.0
ARTF 195C	Ceramics III (Active)	3.0
ARTF 196	Clay and Glaze Technology (Active)	3.0
ARTF 197A	Handbuilding Ceramics I (Active)	3.0
ARTF 197B	Handbuilding Ceramics II (Active)	3.0
ARTF 206	Art Entrepreneurship (Active)	3.0
ARTF 207A	Industrial and Architectural Ceramic Design I (Active)	3.0
ARTF 207B	Industrial and Architectural Ceramic Design II (Active)	3.0
ARTF 212	Sustainable Art and Design (Active)	3.0
ARTF 260	Studio Art Studies (Active)	3.0

TWO-DIMENSIONAL ART - ASSOCIATE OF ARTS DEGREE: CITY

Summary

The Associate of Arts in Two-Dimensional Art focuses on the development of artistic practice through exploration, experimentation, studio work, and study of art history. As students develop ideas and express them in a variety of

two-dimensional forms, they examine how their artwork reflects the time and culture within which they are creating it and how their work fits into the history of art and contemporary art practice.

Award Note:
The Associate Degree requires a minimum of 60 degree applicable semester units.
Learning Outcome(s): Students who complete the Two-Dimensional Art Program will be able to:

1. Solve basic problems of visual expression and describe its historical or contemporary context.
2. Demonstrate knowledge of specific historical and cultural art styles.
3. Produce visual works of art reflecting global awareness, cultural diversity.
4. Produce visual works of art in a variety of mediums. Choose the most appropriate materials, tools and techniques to meet artist goals.
5. Interpret, evaluate and critiques orally and in writing visual works of art.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 21.0

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
ARTF 155B	Freehand Drawing II (Active)	3.0
ARTF 210A	Life Drawing I (Active)	3.0

Select six (6) units from the following: **Semester Units:** 6.0

ARTF 104	Artists and Designers Today (Active)	3.0
DSGN 102	Digital Media I (Active)	3.0
ARTF 156A	Drawing for Animation (Active)	3.0
ARTF 165A	Composition in Painting I (Active)	3.0
ARTF 165B	Composition in Painting II (Active)	3.0
ARTF 165C	Composition in Painting III (Active)	3.0
ARTF 165D	Composition in Painting IV (Active)	3.0
ARTF 198A	Introduction to Printmaking I (Active)	3.0
ARTF 205A	Installation, Performance, and New Genres (Active)	3.0
ARTF 206	Art Entrepreneurship (Active)	3.0
ARTF 210B	Life Drawing II (Active)	3.0
ARTF 210C	Life Drawing III (Active)	3.0
ARTF 260	Studio Art Studies (Active)	3.0

URBAN FARMING PROFESSIONAL - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This certificate prepares students and professionals to establish and operate an organic urban farm business.

Learning Outcome(s): Students who complete the Urban Farming Professional Program will be able to:

1. Understand and explain the three facets of sustainability (economic, environmental and social) both in general and as they apply specifically to landscaping practices.
2. Understand and explain the components of a food system.
3. Design an organic urban farm that supports natural ecosystems, human health, and water conservation.
4. Evaluate the soil food web.

5. Create a crop plan that is appropriate for the southwest region.
6. Identify plant disease and pests and incorporate integrated pest management and other organic strategies for a resilient food system.
7. Demonstrate basic propagation techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 27.0-30.0

AGRI 100	Principles of Sustainable Agriculture (Active)	3.0
AGRI 102	Sustainable Urban Agricultural Practice (Active)	3.0
AGRI 104	Sustainable Vegetable Production (Active)	3.0
AGRI 110	Introduction to Fruit Tree Management (Active)	3.0
AGRI 114	Plant Propagation (Active)	3.0
AGRI 116	Drip Irrigation Basics (Active)	2.0
AGRI 125	Introduction to Soil Science (Active)	3.0
AGRI 270[1]	Work Experience in Sustainable Urban Agriculture (Active)	1.0-4.0
BUSE 157	Developing a Plan for the Small Business (Active)	3.0
BUSE 119	Business Communications (Active)	3.0

[1]AGRI 270 is only offered as a 3 unit course.

URBAN GARDENING - CERTIFICATE OF ACHIEVEMENT: CITY

Summary

This certificate prepares students for careers at an organic farm, nursery, commercial greenhouse or to manage a community garden.

Award Note:
This program is not eligible for federal financial aid in accordance with Federal regulations.
Learning Outcome(s): Students who complete the Urban Gardening Program will be able to:

1. Understand and explain the three facets of sustainability (economic, environmental and social) both in general and as they apply specifically to landscaping practices.
2. Understand and explain the components of a food system.
3. Design an organic urban farm that supports natural ecosystems, human health, and water conservation.
4. Evaluate the soil food web.
5. Create a crop plan that is appropriate for the southwest region.
6. Identify plant disease and pests and incorporate integrated pest management and other organic strategies for a resilient food system.
7. Demonstrate basic propagation techniques.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

AGRI 102	Sustainable Urban Agricultural Practice (Active)	3.0
AGRI 104	Sustainable Vegetable Production (Active)	3.0

Choose 6 units from the following electives: **Semester Units:** 6.0

AGRI 100	Principles of Sustainable Agriculture (Active)	3.0
AGRI 107	Introduction to Agricultural Plant Science (Active)	4.0

AGRI 110	Introduction to Fruit Tree Management (Active)	3.0
AGRI 114	Plant Propagation (Active)	3.0
AGRI 116	Drip Irrigation Basics (Active)	2.0
AGRI 125	Introduction to Soil Science (Active)	3.0
AGRI 128	Food Preservation Skills (Active)	1.0

VITA TAX PREPARATION TRAINING - CERTIFICATE OF PERFORMANCE: CITY

Summary

This program provides an in-depth exploration of tax preparation and community outreach. Students are trained in tax preparation methods through the Volunteer Income Tax Assistance Program (VITA). VITA provides free tax preparation services to low income households in the community. Students are trained to prepare taxes for these households through the Internal Revenue Service (IRS) tax software. Students may be certified at a basic and advanced level of VITA and IRS tax preparation upon completion of this program.

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 VITA Tax Preparation Training Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 2.0-5.0

ACCT 132	Internal Revenue Service Tax Training (Active)	1.0
ACCT 270	Accounting Internship / Work Experience (Active)	1.0-4.0

WEB APPLICATION DEVELOPMENT - CERTIFICATE OF PERFORMANCE: CITY

Summary

Attention is placed on the theory and practice of computer programming emphasizing business and computer applications. Students receive hands-on experience in the fundamentals of designing and developing dynamic website using the Ruby on Rails programming language.

Students who successfully complete this award will be able to:

- Develop and maintain a dynamic website; and
- Work with server-side and client-side database applications.

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 Web Application Development Program will be able to:

1. Analyze a complex computing problem and to apply principles of computing and other relevant disciplines to identify solutions.
2. Design, implement, and evaluate a computing-based solution to meet a given set of computing requirements in the context of the program's discipline.
3. Communicate effectively in a variety of professional contexts.
4. Recognize professional responsibilities and make informed judgments in computing practice, taking into account legal, ethical, diversity, equity, inclusion, and accessibility principles consistent with the mission of the institution.
5. Function effectively as a member or leader of a team engaged in activities appropriate to the program's discipline.
6. Apply security principles and practices to maintain operations in the presence of risks and threats.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 4.0

CISC 183	Web Development with Ruby on Rails (Active)	4.0

Select one of the following courses: **Semester Units:** 4.0

CISC 179	Introduction to Python Programming (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

WRITING AND COMPUTATIONAL SKILLS FOR BUSINESS - CERTIFICATE OF PERFORMANCE: CITY

Summary

The Certificate of Performance in Writing and Computational Skills for Business is designed to provide students with the fundamental computational and writing skills required in an office environment.

Students who complete the certificate will be able to:

- Analyze, organize, and compose various types of written and oral business communications.
- Learn basic mathematics and the mathematics used in business.

The Business Department recommends that students planning to transfer select BUSE 119 instead of BUSE 92.

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 Writing and Computational Skills for Business Program will be able to:

1. Develop and apply appropriate communication skills across various business settings.
2. Analyze business scenarios to formulate and implement plans of action.
3. Leverage technology to manage and use information for decision making.

Requirements

COURSES REQUIRED FOR THE MAJOR: **Semester Units:** 6.0

		3.0

BUSE 92	Introduction to Business Communication (Active)	3.0
OR		
BUSE 119	Business Communications (Active)	3.0
BUSE 101	Business Mathematics (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 this 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 located under Academic Information and Regulations in the 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 119 Accounting Ethics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides an introduction to ethical reasoning, integrity, objectivity, independence, core values, and professional issues in accounting. Emphasis is placed on the importance of ethics in tax preparation, managerial accounting, and attest services. This course explores various models of accounting ethics through today's professional requirements of the American Institute of Certified Professional Accountant's (AICPA) Code of Professional Conduct, the State Board of Accountancy, Internal Revenue Service Circular No. 230, and other regulatory agencies. This course is intended for students majoring in Accounting, Certified Public Accountant (CPA) licensees, CPA exam applicants, Enrolled Agents, and other tax return preparers. Note: Students interested in earning Enrolled Agent, Enrolled Retirement Plan Agent, or Registered Tax Return Preparer continuing education credits with the Internal Revenue Service, must take Accounting 119 with San Diego City College.

FT; AA/AS; CSU.

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 125 Government & Not-for-Profit Accounting
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ACCT 116A with a Grade of "C" or better, or equivalent
The course provides instruction in the principles of fund accounting and budgeting including revenues, appropriations, encumbrances, internal controls for both governmental and not-for-profit entities. This course is intended for students majoring in Accounting and returning students preparing for their Certified Public Accountant (CPA) exam.

AA/AS; CSU.

ACCT 128A Recordkeeping
24-27 hours lecture; 1.5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ACCT 128
This course is an introductory study of basic accounting recordkeeping procedures required to manage a business. Emphasis is placed on the practical application of recording, summarizing, and reporting business transactions for internal purposes as well as for completing federal, state, and local reporting requirements. This course is for students majoring in accounting, business studies, small business owners, and anyone interested in entry-level employment in the field.

FT; AA/AS; CSU.

ACCT 128B Payroll
24-27 hours lecture; 1.5 units
Grading: Letter Grade Only
Advisory: ACCT 128A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ACCT 128
This course is an introductory study of the basic payroll requirements for businesses operating in California. Emphasis is placed on differentiating between employees and independent contractors, and the practical application of procedures related to payroll preparation, payroll deposits, and quarterly and annual payroll reports for the California and United States governments. This course is for students majoring in accounting, business studies, small business owners, and anyone interested in entry-level employment in the field.

FT; AA/AS; CSU.

ACCT 132 Internal Revenue Service Tax Training
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
This course trains students to prepare taxes through the Volunteer Income Tax Assistance Program (VITA). The VITA Program gives low-income families in the community the opportunity to receive complementary tax preparation. Emphasis for this course is placed on tax preparer VITA certification and proficiency with the Internal Revenue Service (IRS) tax software system. Topics include an overview of the tax preparation process, Form 1040 and support schedule preparation, income definition, adjustments to income, standard and itemized deductions, credit application, and VITA program requirements. This course is intended for students majoring in accounting or business, and those students interested in tax preparation.

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 220 Uniform CPA Examination Review Course
64-72 hours lecture; 4 units
Grading: Letter Grade Only
This is a review course preparing students to take the Uniform CPA Examination. Students explore a survey of each of the four sections of the exam: Auditing and Attestation (AUD), Business Environment and Concepts (BEC), Financial Accounting and Reporting (FAR), and Regulation (REG). Emphasis is placed on test-taking best practices and improving topic comprehension. This course is intended for students interested in preparing for the Uniform CPA Examination.

FT; AA/AS; CSU.

ACCT 270 Accounting 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 accounting-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. One unit of credit may be earned for every 54 hours of work experience. This course may be taken up to four times. 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 Accountancy or those interested in the accounting field.

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.

AGRI-Agriculture

AGRI 100 Principles of Sustainable Agriculture

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 overview of the historical, social and ecological foundations for a sustainable agriculture. Students gain an understanding of the origins of agriculture, the rise of industrial agriculture, the rise of sustainable agriculture, and the context in which we find ourselves today. This course is intended for students interested in agriculture, environmental science and sustainability.

FT; AA/AS; CSU; UC.

AGRI 102 Sustainable Urban Agricultural Practice

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 integrates theoretical and practical aspects of small-scale organic urban farming. It includes hands-on instruction and an introduction to a range of farm-related topics, including composting and vermicomposting, irrigation systems, propagation and greenhouse management, soil fertility, integrated pest management, plant pathology and disease management, permaculture techniques, and small fruit orchard management. Students explore personal agricultural interests through research projects, visit local farms and gardens and attend key sustainable garden and farm events throughout the semester. This course is intended for students interested in agriculture, environmental science and sustainability.

FT; AA/AS; CSU.

AGRI 104 Sustainable Vegetable Production

32 - 36 hours lecture/48 - 54 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: AGRI 102 with a Grade of "C" or better, or equivalent
This course covers environmental requirements and management strategies for the sustainable production of major vegetable crops in California. Topics includes crop maintenance, crop planning, direct marketing, harvesting, post-harvest handling, and food safety for vegetable crops. Organic methods suitable for small-scale urban farms are emphasized. This course is intended for students interested in agriculture, environmental science, agricultural education, and sustainability.

FT; AA/AS; CSU; UC.

AGRI 107 Introduction to Agricultural Plant Science

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
Limitation on Enrollment: This course is not open to students with previous credit for AGRI 120
This course is an introduction to agricultural plant science. Emphasis is placed on the anatomy, development, physiology, reproductive biology, and ecology and evolution of agricultural plant groups. This course is intended for students majoring in Agricultural Plant Science or Sustainable Urban Agriculture and all students interested in plant science.

FT; AA/AS; CSU; UC; C-ID: AG-PS 106L.

AGRI 110 Introduction to Fruit Tree Management
32-36 hours lecture/48-54 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 introduces students to fruit tree selection, planting and care for small-scale orchards or home gardens. Topics include site and variety selection, orchard design, pruning and training, basics of integrated pest management, fruit tree propagation and soil management. Major fruit trees grown in California are discussed, both deciduous and subtropical. Organic production methods are emphasized. This course is intended for students interested in agricultural production, agricultural education and sustainability.

FT; AA/AS; CSU.

AGRI 114 Plant Propagation
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and AGRI 107 with a Grade of "C" or better, or equivalent
This course is an introduction to plant propagation and greenhouse production practices. Emphasis is placed on greenhouse operations, propagation techniques, and management of seed germination and seedling development. Topics include sexual and asexual reproduction, planting and transplanting, fertilizing, pest and disease management, propagation media and soil mixes, greenhouse structure and site layout, use and maintenance of tools and equipment, and regulations pertaining to plant production. This course is intended for students majoring in Agricultural Plant Science or Sustainable Urban Agriculture and all students interested in agricultural production management.

FT; AA/AS; CSU; C-ID: AG-EH 116L.

AGRI 116 Drip Irrigation Basics
32-36 hours lecture; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course integrates theoretical and practical aspects of modern high efficiency, low volume irrigation design, installation and maintenance. Topics include water use in California's Southwestern desert climate, site analysis, soil/water relationships, and transformation of existing wasteful irrigation systems to efficient low volume systems. Students troubleshoot and solve irrigation system problems and prepare a cost estimate for an irrigation system. This course is intended for students interested in agriculture, water conservation, or landscape technology.

FT; AA/AS; CSU.

AGRI 125 Introduction to Soil Science
32-36 hours lecture/48-54 hours lab; 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 AGRI 108
This course demonstrates the vital connection between soil and the food chain that sustains life on this planet. Topics include the physical, chemical, and biological structure of soils, current trends in soil erosion and degradation control, the many roles that soil plays in our environment, and the symbiotic relationship between beneficial soil microorganisms, and plants. Students participate in creating and maintaining enhanced soil fertility through proper soil management practices. This course is intended for students majoring in Agricultural Plant Science or Sustainable Urban Agriculture and all students interested in the theory and practice of sustainable urban agriculture, soil conservation, and management.

FT; AA/AS; CSU; UC; C-ID: AG-PS 128L.

AGRI 128 Food Preservation Skills
16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course introduces students to the practice of Food Preservation in a time of energy descent. Topics include canning, dehydrating, fermenting, food preservation history and philosophical approaches associated with insuring food security. This course is intended for students interested in agricultural production, culinary arts and food science.

FT; AA/AS; CSU.

AGRI 270 Work Experience in Sustainable Urban Agriculture
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 an occupationally oriented major for which no work experience course is offered. 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.

AIRE-Air Conditioning, Heating, and Solar Energy

AIRE 60 Construction Safety and Health
32-36 hours lecture; 2 units
Grading: Letter Grade Only
This course is designed to prepare students to perform as what Occupational Safety and Health Administration (OSHA) defines as a competent person - able to recognize hazards associated with a particular task and mitigate associated hazards. Emphasis is placed on identifying and addressing safety and health problems on construction worksites. Topics include a broad spectrum of health and safety workplace concerns regarding OSHA construction standards. This course is designed for students interested in construction technology, job-site safety, hazard identification, avoidance control, and injury and illness prevention.

FT; AA/AS.

AIRE 94 HVAC/R Certification Training
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is designed to prepare students for various industry recognized certifications pertaining to the Heating, Ventilation, Air Conditioning, and Refrigeration (HVAC/R) industry. Emphasis is placed on industry specific certification readiness. Topics include Environmental Protection Agency (EPA) Section 608 Technician Certification, Environmentally Safe R-410A Service Techniques, Preventive Maintenance Techniques, GREEN HVAC/R Technician Certification, and Techniques and Regulations for the Safe Handling of Flammable Hydrocarbon and Hydrofluoroolefin Refrigerants. This course is designed for students interested in gaining competitive advantage through certification while fulfilling entry level requirements to enter the HVAC/R industry.

FT; AA/AS.

AIRE 100 Basic Refrigeration & AC Theory
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Corequisite: AIRE 103
This course is a study of elementary thermodynamics as applied to Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) systems, including molecular theory of temperature, pressure and heat. Emphasis is placed on the vapor-compression refrigeration cycle, HVACR system components, their thermal performance and applications. Discussions include historical to modern systems, with emphasis placed on new energy-saving technologies and methods being employed in this dynamic industry. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 103 Basic Refrigeration & AC Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 100
This course is a hands-on, project-oriented study of the tools, materials, methods and equipment used in Heating, Ventilation, Air Conditioning and Refrigeration (HVACR). Emphasis is placed on projects related to heat transfer and the refrigeration cycle, system evacuation, charging, and refrigerant recovery and leak testing as they apply to normal HVACR industry activities. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 122 Construction Drawings and Estimating
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: AIRE 123
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent
This course is a study of the generation, reading and interpretation of construction drawings from initial concepts to actual building construction. Emphasis is placed on how the Heating, Ventilation, Air Conditioning and Refrigeration (HVACR) systems are integrated into the structure by architects, engineers and ultimately the construction contractors and subcontractors. Course content includes architectural, mechanical, electrical and plumbing drawings, and also covers job planning, sources and use of pricing guidelines, municipal, county, state and federal codes, energy codes and standards, specifications and computer software programs used in the development of construction drawings and used for construction estimating. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 123 Construction Drawings and Estimating Lab

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: AIRE 122
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ENVT 123
This laboratory course provides practice in the reading of construction drawings and plans for structures and building components. Students use pricing guides for Heating, Ventilation, Air Conditioning and Refrigeration (HVACR), computer-aided drafting software, engineering and architectural scales, and elementary sketching and drawing techniques to complete laboratory projects. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

AA/AS; CSU.

AIRE 124 Power & Control Systems Theory

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: AIRE 125
Advisory: Completion of or concurrent enrollment in: AIRE 100 with a Grade of "C" or better, or equivalent
This course is a study of electrical power and control systems for Heating, Ventilation, Air Conditioning and Refrigeration (HVACR). Subjects include Ohm's Law and Kirchoff's Law for direct current (DC) and alternating current (AC) circuits, series and parallel power and control circuits, electrical schematic and wiring diagrams, and motor theory. Emphasis is placed on the operational theory and application of components commonly encountered in modern HVACR systems, electrical controls, and circuits for compressors, pumps and fans. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 125 Power & Control Systems Lab

96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 124
Advisory: Completion of or concurrent enrollment in: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 103 with a Grade of "C" or better, or equivalent
This course utilizes a series of laboratory projects that provide hands-on student training with test and measuring tools, benchtop trainers and actual heating, ventilation, air conditioning and refrigeration (HVACR) systems. Projects include the use of digital-volt-ohm-meters (DVOM), in-circuit and clamp-on ammeters, meggers, and other modern tools in analyzing HVACR power and control circuits. Logical troubleshooting and diagnosis methods are demonstrated and utilized with computer simulation software and in laboratory projects. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 126 Fluid Flow Dynamics

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: AIRE 127 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ENVT 126
This course is a study of the fundamental laws governing airflow in ducting systems. Emphasis is placed on the fundamentals of fans, fan and system curves, common methods of air distribution, air psychrometrics, and friction losses in ducts as well as on the laws of hydronics, pipe and pump sizing, pressure losses in hydronic systems, and water treatment and air filtration systems.

FT; AA/AS; CSU.

AIRE 127 Fluid Flow Dynamics Lab

96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 126
Limitation on Enrollment: This course is not open to students with previous credit for ENVT 127
This laboratory course provides practice in fluid measuring methods and instrumentation. Emphasis is placed on working with instruments such as pitot tube devices and velometers to illustrate the interaction of fluid systems curves. Course content also includes air psychometries, air and hydronic system balancing and measurement of sound.

FT; AA/AS; CSU.

AIRE 128 Comfort Heating Systems Theory
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Corequisite: AIRE 129
Limitation on Enrollment: This course is not open to students with previous credit for AIRE 112
This course engages in the study, identification, and understanding of the safe operation of comfort heating equipment and systems. Instruction includes the use of combustion analyzers to evaluate the combustion process of various fuels, their heat output, analysis of bi-products, equipment capacity and combustion efficiency. The course includes discussions on equipment design, installation and maintenance in common types of comfort heating systems, including forced-air fuel-fired furnaces, boilers, heatpumps and airhandlers, hydronic heating and integrated conventional and alternative energy systems. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology.

FT; AA/AS; CSU.

AIRE 129 Comfort Heating Systems Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 128
Limitation on Enrollment: This course is not open to students with previous credit for AIRE 113
This course involves a series of demonstrations and lab projects to provide identification, knowledge and understanding of the safe operation of comfort heating equipment and systems. Readings from combustion analyzers are used to evaluate the combustion process of various fuels, their heat output, analysis of bi-products, equipment capacity and combustion efficiency. The course includes design, maintenance training and practice on common types of comfort heating systems, including forced-air gas-fired and oil-fired furnaces, boilers, furnaces, heatpump fancoils, hydronic heating and integrated conventional and alternative energy systems. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Refrigeration and Environmental Control Technology.

FT; AA/AS; CSU.

AIRE 132 Advanced Refrigeration & AC Theory
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: AIRE 133
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 103 with a Grade of "C" or better, or equivalent
This course is a comprehensive thermodynamic analysis of air conditioning and refrigeration systems using Mollier diagrams and mathematical system process calculations. Topics include heat exchanger design, condensers, evaporators, cooling towers, evaporative condensers, metering devices, compressor design and performance, system piping and lubrication. Studies include multi-evaporator vapor-compression, cascade, cryogenic, and absorption systems. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 133 Advanced Refrigeration & AC Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 132
This course is a rigorous series of projects encompassing the operation and servicing of heating, ventilation, air conditioning and refrigeration (HVACR) systems. Projects include taking pressure, temperature and airflow readings on normal and malfunctioning systems, thermodynamic analyses using Mollier diagrams, troubleshooting, diagnosis and repair. Tasks involve the use of various refrigerants and secondary control devices such as pressure regulators and head pressure controls and the use of modern industry-standard tools and test equipment. This course is intended for students interested in heating, refrigeration and air conditioning technology, and solar energy.

FT; AA/AS; CSU.

AIRE 138 HVAC System Design
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: AIRE 139
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 126 with a Grade of "C" or better, or equivalent and AIRE 128 with a Grade of "C" or better, or equivalent and AIRE 132 with a Grade of "C" or better, or equivalent
This course is a rigorous study in the design of Heating, Ventilation and Air Conditioning (HVAC) systems for buildings. Course topics include, building envelope, heating and cooling load calculations, vapor-compression system selection and optimization, hydronic system design applications, and conservation techniques. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Heating and Solar Energy.

FT; AA/AS; CSU.

AIRE 139 HVAC System Design Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 138
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 127 with a Grade of "C" or better, or equivalent and AIRE 129 with a Grade of "C" or better, or equivalent and AIRE 133 with a Grade of "C" or better, or equivalent
This course employs design techniques for the development of commercial Heating, Ventilation, and Air Conditioning (HVAC) systems. Projects include a series of applied building heating and cooling load calculations, applied psychrometrics; system and equipment selection with the use of design manuals, tables, and manufacturers catalogs. Applied energy conservation techniques are included. This course is intended for students pursuing certificates or an associate degree in Air Conditioning, Heating and Solar Energy.

FT; AA/AS; CSU.

AIRE 144 Direct Digital Controls Theory
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Corequisite: AIRE 145
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 124 with a Grade of "C" or better, or equivalent and AIRE 132 with a Grade of "C" or better, or equivalent
This course is a study of Direct Digital Control (DDC) theory: rationale, DDC system design, DDC system sensors, DDC controllers and advanced heating, ventilation and air conditioning (HVAC) controls, network architecture, Internet protocol (IP) addressing and interoperation, open and non-proprietary systems, American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) BACnet, and the LonWorks platform. The course examines BACnet DDC hybrid control strategies using various analog and binary system actuators. Specific emphasis is placed on developing student skills using networks that are built into the AIRE Program DDC lab equipment and utilized throughout the world. This course is intended for students in the air conditioning, heating and refrigeration technology program and professionals who want to update their skills.

FT; AA/AS; CSU.

AIRE 145 Direct Digital Controls Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 144
Advisory: AIRE 125 with a Grade of "C" or better, or equivalent
This course applies Direct Digital Control (DDC) theory to laboratory projects: system design, American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) BACnet DDC controller selection and integration with heating, ventilation and air conditioning (HVAC) system components, BACnet network architecture, development of graphical views and hierarchical database tree, logical BACnet program development, and construction of DDC system operator machine interface graphics. Course projects include the development of a facility graphical view and control hierarchy tree, setup of a control logic diagram using blocks, symbols and wires, and construction of an operator graphical interface. Laboratory training simulations are compared to actual DDC HVAC control strategies used throughout the world. This course is intended for students in the air conditioning, heating and refrigeration technology program and professionals who want to update their skills.

FT; AA/AS; CSU.

AIRE 160 Solar Energy Utilization Theory
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: AIRE 161
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 124 with a Grade of "C" or better, or equivalent
This course studies solar-thermal and photovoltaic (PV) systems, siting considerations, types of collectors and systems, operating efficiencies, building codes and solar rights. Topics include: passive and active solar thermal systems; residential and commercial systems for water heating, space heating, space cooling, process heating, swimming pool heating, and hybrid systems. Study of photovoltaic technologies includes the solar cell, independent, grid-connected, hybrid systems and electric bill reduction strategies. This course is intended for students interested in solar energy.

FT; AA/AS; CSU.

AIRE 161 Solar Energy Utilization Lab
96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: AIRE 160
Advisory: AIRE 100 with a Grade of "C" or better, or equivalent and AIRE 125 with a Grade of "C" or better, or equivalent
This course includes a series of solar thermal and photovoltaic (PV) laboratory projects. Solar collector and system performance data are recorded and analyzed and efficiencies calculated. Topics include collector/module azimuth and tilt, thermal open and closed loop systems, freeze protection, stagnation; stand-alone, grid-connected and hybrid photovoltaic systems are studied. This course is intended for students interested in solar technology.

FT; AA/AS; CSU.

AIRE 270 Work Experience in Air Conditioning, Refrigeration, Environmental Control Technology
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 ENVT 270
Obtain Permission Number-Work Exp. Coordinator
A program of on-the-job learning experience 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; CSU.

AIRE 290 Independent Study in Air Conditioning, Refrigeration, Environmental Control Technology
48-162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for ENVT 290
Obtain Permission Number from Instructor
For students who wish to study special problems.

AA/AS; CSU.

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.

AMSL 150 Introduction to Deaf Culture

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 104

This course is an introduction to the unique aspects of Deaf Culture and Deaf community. Emphasis is place on in-depth discussion of the beliefs and customs of this sociolinguistic/cultural minority in relation to language use and history of Deaf people in the United States of America. This course is intended for students who are interested in learning about Deaf Culture and the Deaf community.

FT; AA/AS; CSU; UC.

AMSL 155 Implications of Deafness

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 105

This course is a study of the audiological, educational, social, and communicative aspects of people who are deaf and hearing impaired. Emphasis is placed on historical perspectives and current trends, philosophies, and ideologies related to deafness. This course is intended for students who are interested in learning about the pathological aspects of deaf and hearing impaired people.

FT; AA/AS; CSU; UC.

AMSL 214 American Sign Language Fingerspelled Signs

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AMSL 121 with a Grade of "C" or better, or equivalent

This course is an intermediate-advanced study of American Sign Language Fingerspelled Signs and Numbering systems. Emphasis is placed on Native Fingerspelled Signs. Students participate in extensive drills expressively and receptively. This course is intended for American Sign Language (ASL) Studies and ASL-English Interpretation majors pursuing employment or a career in ASL and/or Deaf related fields.

FT; AA/AS; CSU.

AMSL 220 American Sign Language Level III

80-90 hours lecture; 5 units

Grading: Letter Grade Only

Prerequisite: AMSL 121 with a Grade of "C" or better, or equivalent

Advisory: AMSL 214 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 200 or AMSL 215.

This third course in American Sign Language (ASL) is designed to enhance students' receptive and expressive skills at an advanced intermediate level. Emphasis is placed on the ASL syntax, facial grammar, vocabulary, and fingerspelling skills that enable students to participate in increasingly more complex conversations with Deaf community members. Instruction utilizes a natural approach to teaching a second language by engaging students in authentic conversations within the classroom environment. Conversational content seeks to develop student knowledge and understanding of the Deaf community and its art and history. Active learning provides students with the opportunity to apply their ASL skills through an individualized program. Students utilize interactive media to express their comprehension of intermediate to advanced ASL sentences and narratives as well as to hone their signing skills. Activities are designed to provide students the opportunity to practice vocabulary and syntax at the intermediate to advanced level. This course is designed for students and/or professionals interested in working and interacting with Deaf people.

FT; AA/AS; CSU; UC.

AMSL 221 American Sign Language Level IV

80-90 hours lecture; 5 units

Grading: Letter Grade Only

Prerequisite: AMSL 214 with a Grade of "C" or better, or equivalent and AMSL 220 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for AMSL 216

This fourth course in the study of American Sign Language (ASL) continues to build upon students' receptive and expressive skills at the advanced level while expanding their knowledge of Deaf Culture and the influences of other sign language systems. Emphasis is placed on advanced ASL Fingerspelled Signs, ASL structure and vocabulary. Instruction utilizes a natural approach to teaching a second language by engaging students in authentic conversations within the classroom environment. Active learning provides students with the opportunity to apply their American Sign Language (ASL) skills through an individualized program. Students utilize interactive media to express their comprehension of advanced ASL sentences and narratives as well as to hone their signing skills. Activities are designed to provide students the opportunity to practice vocabulary and syntax at the advanced level. This course is designed for students and/or professionals interested in working and/or interacting with Deaf people.

FT; AA/AS; CSU; UC.

AMSL 225 Introduction to Linguistics of American Sign Language

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: AMSL 221 with a Grade of "C" or better, or equivalent

This course is designed to provide students with an analysis of the symbolic and linguistic structure of American Sign Language (ASL) and English including other spoken languages, other sign languages, and other related sign systems. Topics include phonology, morphology, syntax, semantics, pragmatics, grammar and discourse. This course examines the bilingual and bicultural practices, language acquisition, sociolinguistics and related research. This course is intended for students who plan to transfer and/or are interested in learning about the linguistic aspects of American Sign Language.

FT; AA/AS; CSU.

AMSL 290 Independent Study in American Sign Language

48-162 hours other; 1-3 units

Grading: Letter Grade or Pass/No Pass

This course is for students who wish to conduct additional research, a special project, or learning activities in the field of American Sign Language. 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 analysis, engaging in primary research, preparing reports, and meeting with the instructor at specific intervals.

FT; AA/AS; CSU.

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 106 World Prehistory

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This course covers the development of human society from the earliest evidence of culture to the beginnings of recorded history. Prehistoric archaeological concepts, methods, and data are used to examine the major transitions in human prehistory, including the origins of culture, agriculture, and early civilization. This course is intended for anthropology majors or anyone interested in world prehistory.

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 110 Anthropology of Magic, Witchcraft, and Religion
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of magic and religion as expressed through rituals, myths, and symbols in cross-cultural perspective. Emphasis is placed on the theoretical and methodological approaches to the study of magic, witchcraft, and religion. This course is intended for students majoring in anthropology and all other interested students.

FT; AA/AS; CSU; UC.

ANTH 115 Introduction to Archaeological Field Work
32-36 hours lecture/96-108 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 ANTH 265: Introduction to Archaeological Field Work
This course is an introduction to the basic techniques of archaeological field work. Emphasis is placed on site survey, site layout, excavation, artifact identification, laboratory analysis and report writing. Topics also include use of compass and transit, Global Positioning Systems (GPS) and Geographic Information Systems (GIS). This course is designed for Anthropology and Archaeology majors as well as students interested in prehistoric and/or historic research.

FT; AA/AS; CSU.

ANTH 120 Archaeological Artifact Analysis
32-36 hours lecture/48-54 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 a practical study of archaeological artifact analysis. Emphasis is placed on artifact typology and seriation methods used in the preparation of archaeological reports. Students learn the most current techniques for describing, classifying, cataloging and documenting archaeological materials. This course is designed for students majoring in anthropology with an emphasis in archaeology and for anyone interested in a career in the field of archaeology or employment in Cultural Resource Management (CRM).

FT; AA/AS; CSU.

ANTH 130 Bones: Human Osteology
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 focuses on the study of the human skeleton. Emphasis is placed on two main aspects: identification of recently deceased individuals in a legal context, and historic or prehistoric skeletal remains as a contribution to human history. This hands-on course includes information on bone biology, growth and development, variation, and reconstruction. Students identify all parts of the skeletal system, measure bones, and identify non-metric features and stress markers. This course is designed for Anthropology majors or students interested in biology or physical anthropology.

AA/AS; CSU; UC.

ANTH 140 Primatology
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 study of non-human primates: prosimians; monkeys of the Americas; monkeys and apes of Africa, Asia and Europe. The course focuses on primate behavior and how it relates to the study of human biocultural evolution. Of special concern are the relationships and adaptations of primates to varied environments. The primates at the San Diego Zoo are an integral part of the course. Various observational and data collecting techniques are employed in zoo projects. This course is designed for anthropology majors and/or students interested in anthropology, biology, or zoology.

FT; AA/AS; CSU; UC.

ANTH 210 Introduction to the Indigenous People of California

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 comparative study of Indigenous Peoples who lived within the culture area known as California. Emphasis is placed on precontact cultures, the influence of European contact, and contemporary issues. This course is intended for anthropology students and anyone interested in the Indigenous Peoples of California.

FT; AA/AS; CSU; UC.

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.

AODS-Alcohol and Other Drug Studies

AODS 150 Introduction to Chemical Dependency

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the basic concepts of chemical dependency. Emphasis is placed on an analyzing of chemical dependency from an interdisciplinary level and on examining the socio-cultural patterns of dependency. Individual student's potential as a chemical dependency counselor is addressed. Students beginning the Alcohol and Other Drug Studies program should start with this course. This course is also appropriate for all students interested in learning more about alcohol and other drug use, abuse and dependency.

FT; AA/AS; CSU.

AODS 153 Chemical Dependency Family Counseling Techniques

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AODS 150 with a Grade of "C" or better, or equivalent and AODS 154 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for AODS 158
This course is a study of the theories and practices related to the family dynamics involved when a member has a substance use problem. Emphasis is placed on therapeutic techniques designed to facilitate effective intervention strategies for the family as a system and for individuals within that system. Topics include assessment, family role delineation, family rules, co-dependency, open and closed family systems, intervention techniques and treatment modalities. This course is intended for students in the Alcohol and Other Drug Studies program and all students interested in the family dynamics in chemical dependency.

FT; AA/AS; CSU; C-ID: ADS 180X.

AODS 154 Law, Ethics, and Skills in Alcohol and Other Drug Counseling

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: AODS 150 with a Grade of "C" or better, or equivalent
This course is a study of ethical and legal components of substance use treatment. Emphasis is placed on professional responsibility and patients' rights as they relate to various models of primary prevention and intervention. Topics include community needs and resources and the influence of the media on prevention and intervention. This course is intended for students in the Alcohol and Other Drug Studies program.

FT; AA/AS; CSU; C-ID: ADS 160X.

AODS 155 Culturally Informed Practices

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: AODS 150 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 exploration of historical, cultural, social, political, economic, health, and environmental issues involved in intercultural interactions between client and provider during the counseling process. Emphasis is placed on special problems, issues, and concerns of modern living within specific population groups, specifically those populations traditionally marginalized by society. Topics include: social-psychological dynamics of diverse populations and characteristics – ethnicity/race, gender, age, economic, sexual orientation, and disability status – of these populations with respect to the incidence of substance use disorders, intervention needs, and responses to treatment. Ethnic and cultural differences are examined to begin development of intercultural awareness, cultural competency, and culturally relevant practices in order to effectively interact and communicate with these populations. This course is designed for students interested in the social sciences, those considering careers in counseling, teaching, social work, psychology, or nursing, or students majoring in alcohol and other drug studies.

FT; AA/AS; CSU.

AODS 156 Case Management in Alcohol and Other Drug Counseling

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: AODS 150 with a Grade of "C" or better, or equivalent and AODS 154 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the theory and practical application of case management skills and techniques in alcohol and other drug counseling. Emphasis is placed on preparing students to work effectively in substance use treatment. Topics include clinical evaluation, treatment planning, referral, service coordination, counseling, client and community education, documentation, and professional and ethical responsibilities for alcohol and other drug counselors. This course is intended for students in the Alcohol and Other Drug Studies program. The material presented in this course is clinical in nature and may not be suitable for the general population of students.

FT; AA/AS; CSU; C-ID: ADS 170X.

AODS 157 Pharmacology of Psychoactive Drugs

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and AODS 150 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: AODS 152
This course is a study of the neurochemical, physical and mental effects of commonly used addictive psychoactive substances on the human biological system. Emphasis is placed on the basic pharmacology of psychoactive drugs, the medical consequences of substance use disorders, and therapeutic approaches for managing chemical dependency. This course is intended for students majoring in Alcohol and Other Drug Studies and all students interested in the physiology and pharmacology of psychoactive drugs.

FT; AA/AS; CSU; C-ID: ADS 140X.

AODS 159 Co-Occurring Disorders in Alcohol and Other Drug Counseling

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: AODS 150 with a Grade of "C" or better, or equivalent and AODS 154 with a Grade of "C" or better, or equivalent and PSYC C1000 with a Grade of "C" or better, or equivalent and ENGL C1000 with a Grade of "C" or better, or equivalent

This course is a study of co-occurring disorders, a condition which occurs when a person has a substance use disorder and a separate psychiatric diagnosis or other mental health-related symptoms or problems. Students learn the definitions and terms related to co-occurring disorders and the principles that guide systems of care for persons with co-occurring disorders. Emphasis is placed on identifying the most current, evidence-based practices for treating co-occurring disorders and applying screening, assessment, referral, and treatment protocols for persons with co-occurring disorders who enter substance use treatment facilities. Students demonstrate the skills necessary to apply for California state certification as an alcohol and drug counselor as they relate to treating co-occurring disorders and familiarity with the terminology, diagnoses, and treatment conditions of the mental health field. This course is intended for students in the Alcohol and Other Drug Studies program. Note that material presented in this course is clinical in nature and may not be suitable for the general population of students.

FT; AA/AS; CSU; C-ID: ADS 190X.

AODS 160 Group Dynamics in Alcohol and Other Drug Counseling

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AODS 150 with a Grade of "C" or better, or equivalent and AODS 154 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: AODS 159 with a Grade of "C" or better, or equivalent and PSYC 161 with a Grade of "C" or better, or equivalent

This course is a study of the theory and application of group counseling approaches, methods and techniques related to substance use treatment. Emphasis is placed on the dynamics of small, interpersonal process group interaction. Students develop effective interpersonal communication skills and leadership skills from an interdisciplinary perspective. This course is intended for students in the Alcohol and Other Drug Studies program. Note that material presented in this course is clinical in nature and may not be suitable for the general population of students.

FT; AA/AS; CSU; C-ID: ADS 130X.

AODS 162 Internship Seminar: Alcohol and Other Drug Counseling

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: AODS 150 with a Grade of "C" or better, or equivalent and AODS 153 with a Grade of "C" or better, or equivalent and AODS 154 with a Grade of "C" or better, or equivalent and AODS 156 with a Grade of "C" or better, or equivalent and AODS 160 with a Grade of "C" or better, or equivalent and PSYC 161 with a Grade of "C" or better, or equivalent

Corequisite: AODS 164 or AODS 270

Advisory: Completion of or concurrent enrollment in: AODS 157 with a Grade of "C" or better, or equivalent and AODS 159 with a Grade of "C" or better, or equivalent

This course is a study of substance use treatment with an emphasis on developing the skills and abilities of the student-as-intern alcohol and drug counselor. Emphasis is placed on supporting students enrolled in the Alcohol and Other Drug Counseling internship or work experience in substance use treatment. Throughout this course, students engage in critical analysis of their strengths and weaknesses as interns and as potential professionals in the field. Students must be accepted for an internship at an approved substance abuse treatment facility in order to participate in this course. This course is intended only for students in their final semester of the Alcohol and Other Drug Studies Program.

FT; AA/AS; CSU; C-ID: ADS 210X.

AODS 164 Internship: Alcohol and Other Drug Counseling

255 hours other; 5 units

Grading: Letter Grade Only

Prerequisite: AODS 150 with a Grade of "C" or better, or equivalent and AODS 153 with a Grade of "C" or better, or equivalent and AODS 154 with a Grade of "C" or better, or equivalent and AODS 156 with a Grade of "C" or better, or equivalent and AODS 160 with a Grade of "C" or better, or equivalent and PSYC 161 with a Grade of "C" or better, or equivalent and **Advisory: Completion of or concurrent enrollment in:** AODS 157 with a Grade of "C" or better, or equivalent and AODS 159 with a Grade of "C" or better, or equivalent and **Limitation on Enrollment:** This course is not open to students with previous credit for AODS 163

Corequisite: AODS 162

This course provides students with a hands-on learning experience via a directed field study resulting from the cooperative effort of a provider agency, the instructor, and the student. Emphasis is placed on enabling the student intern to learn and experience the work of an alcohol and other drug counseling professional while receiving college credit. Students must be accepted for an internship at an approved substance use treatment facility. This course is intended only for students in their final semester of the Alcohol and Other Drug Studies Program.

FT; AA/AS; CSU; C-ID: ADS 200.

AODS 270 Work Experience in Chemical Dependency

216 hours other; 4 units

Grading: Letter Grade Only

Prerequisite: AODS 156 with a Grade of "C" or better, or equivalent and AODS 160 with a Grade of "C" or better, or equivalent and PSYC 161 with a Grade of "C" or better, or equivalent

Corequisite: AODS 162

Advisory: AODS 153 with a Grade of "C" or better, or equivalent and AODS 157 with a Grade of "C" or better, or equivalent and PSYC 245 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator

This course provides students with a hands-on learning experience via the cooperative effort of the employer, the instructor and the student. Emphasis is placed on enabling the student who is employed or volunteering in chemical dependency work to receive college credit for achieving new, meaningful and measurable learning objectives related to as many interdisciplinary aspects of chemical dependency as possible. This course is intended for students only in their final semester of the Alcohol and Other Drug Studies Program. 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.

ARAB-Arabic

ARAB 101 First Course in Arabic

80-90 hours lecture; 5 units

Grading: Letter Grade or Pass/No Pass

This course is an introduction to the sound and writing system of the Arabic language. The course also provides students with the basic structural and lexical knowledge to enable them to communicate orally and in writing in Arabic at a beginning level. Emphasis is placed on developing the students' ability to perform language functions in real-life situations through structured activities and grammatical exercises and on providing students with an overview of Arabic culture. This course is for all students interested in learning Arabic.

FT; AA/AS; CSU; UC.

ARAB 102 Second Course in Arabic

80-90 hours lecture; 5 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: ARAB 101 with a Grade of "C" or better, or equivalent

This interactive course builds upon the structural and lexical base of the Arabic language to move students from a beginning to a beginning-intermediate communication level through the introduction of a variety of noun and verb forms including the present and past tenses. Emphasis is placed on developing the student's ability to perform language functions in real-life situations through structured activities and grammatical exercises and on providing students with an overview of Arabic history, customs and culture. This course is for students in their second semester of Arabic.

FT; AA/AS; CSU; UC.

ARAB 201A Third Course in Arabic
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Prerequisite: ARAB 102 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARAB 201
This course is an interactive study of Arabic at the intermediate level. Students use increasingly complex Arabic language structures and vocabulary to listen, speak, read and write at the intermediate level. This course is designed for all students interested in the Arabic language.

FT; AA/AS; CSU; UC.

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 104 Artists and Designers Today
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 overview of current artist and designer practices. Students gain insight into art, design, and craft fields such as painting, sculpture, graphic design, interior design, industrial design, furniture, fibers, ceramics, metalwork, and multimedia. This course is designed for students beginning the study of art and/or related disciplines.

FT; AA/AS; CSU.

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 115 African 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 is a survey of the history of African art. Emphasis is placed on the distinct history, cultural aesthetics, styles and iconography of various African cultures from prehistoric times to present day. This course is designed for all students interested in art, art history and the humanities.

FT; AA/AS; CSU; UC.

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 156A Drawing for Animation
32 - 36 hours lecture/64 - 72 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 drawing and design for animation. Emphasis is placed on the principles of motion, storytelling and conceptual development. This course is designed for students beginning the study of art and/or related disciplines.

FT; AA/AS; CSU.

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 174A Book Arts I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent or DSGN 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARTG 174A
This is an introductory level book arts course. Emphasis is placed on the fundamental techniques and principles of constructing hand-made books. Topics include book arts terminology, materials, techniques, basic book structures, and worldwide books. Students develop content in the form of image and text for a hand-crafted book. This course is intended for graphic design students, fine art students, interaction design students, and anyone interested in the art and design of hand-crafted books.

FT; AA/AS; CSU; UC.

ARTF 175A Sculpture I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent
This course is an introduction to sculptural materials, processes, forms, contexts and content. Emphasis is placed on the basic forms and cultural functions of sculpture (past and present). Students produce sculptural artworks under direct guidance of the instructor. This course is intended for students majoring in art and for all students interested in producing three-dimensional art.

FT; AA/AS; CSU; UC.

ARTF 175B Sculpture II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 175A with a Grade of "C" or better, or equivalent
This course is an intermediate level course in sculptural materials, processes, forms, context and content. Emphasis is placed on articulation of sculptural goals and experimentation with materials and methods. Students plan and produce sculptural artworks based on original concepts. This course is intended for art majors and for all students interested in working in three-dimensional art.

FT; AA/AS; CSU; UC.

ARTF 175C Sculpture III
24 - 27 hours lecture/72 - 81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 175B with a Grade of "C" or better, or equivalent
This course is an advanced study in sculptural materials, processes, context and content. Emphasis is placed on the refinement of conceptual skills in their selection and pursuit of sculptural goals. Students experiment with advanced-level concepts and materials to create original sculptural artworks, including large scale pieces. This course is intended for art majors and for all students interested in working in three-dimensional art.

FT; AA/AS; CSU; UC.

ARTF 179A Figurative Ceramic Sculpture I
32 - 36 hours lecture/64 - 72 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 ceramic figurative sculpture. Emphasis is placed on representational and expressive forms and learning various techniques of building with clay. This course is designed for students beginning the study of art and/or related disciplines.

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 196 Clay and Glaze Technology
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: ARTF 195B with a Grade of "C" or better, or equivalent
This course is a study of advanced techniques in clay and glaze formulation, mixing, and testing. Emphasis is placed on the physical and chemical nature of ceramic materials and how they affect glaze fired surface results. This course is intended for students majoring in art and anyone interested in ceramics.

FT; AA/AS; CSU; UC.

ARTF 197A Handbuilding Ceramics I
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 provides instruction in the design and construction of handbuilt ceramic forms. Students create ceramic objects emphasizing form and surface enrichment, while gaining experience applying glazes and loading kilns. This course is designed for art majors and for students interested in developing ceramic skills.

FT; AA/AS; CSU; UC.

ARTF 197B Handbuilding Ceramics II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 197A with a Grade of "C" or better, or equivalent
This is an advanced level ceramics course in which students design and construct hand-built ceramic forms. Emphasis is placed on form and surface enrichment, weighing, mixing and use of glazes, and loading and firing electric kilns. This course is designed for art majors and for students interested in developing ceramic skills.

FT; AA/AS; CSU; UC.

ARTF 198A Introduction to Printmaking I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent and ARTF 155A 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 the basic printmaking media of intaglio, relief, and monoprinting. Emphasis is placed on the techniques for creating and printing plates. Students investigate papers, select for properties, analyze aesthetic strategies for image making, and practice the principles of editioning and print conservation. This course is designed for art majors and all students interested in printmaking.

FT; AA/AS; CSU; UC.

ARTF 202A Public Art I

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 150A with a Grade of "C" or better, or equivalent and ARTF 151 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: ENGL C1000 with a Grade of "C" or better, or equivalent
This is the first in a series of courses in public art. This course explores the study and practice of art for public spaces. Topics include historical and contemporary examples of public art as well as constructing a series of maquettes. Emphasis is placed on identifying projects, planning a piece, and creating proposals for submission. This course is intended for art majors and those interested in the study and creation of art in the public sphere.

FT; AA/AS; CSU.

ARTF 202B Public Art II

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 202A with a Grade of "C" or better, or equivalent
This is the second in a series of courses in public art. This course explores the study and practice of art for public spaces. Topics include a deeper analysis of public art in a historical and contemporary context as well as the multi-layered processes of constructing a public art piece. Emphasis is placed on appropriate business procedures, the submission process, and the construction of a public art piece. This course is intended for art majors and those interested in the study and creation of art in the public sphere.

FT; AA/AS; CSU.

ARTF 205A Installation, Performance, and New Genres

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 175A with a Grade of "C" or better, or equivalent
This course is an introduction to concept-based New Genres art practices. Emphasis is placed on the intersection of form/medium and concept as well as on the role of art in contemporary culture. Students develop concepts based on issues related to social commentary, political action, institutional critique, community involvement, and personal identity and experiment with forms, such as installation, performance, technological, hybrid, and emerging art forms. This course is designed for art majors and anyone interested in contemporary art practices.

FT; AA/AS; CSU; UC.

ARTF 206 Art Entrepreneurship

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 overview of current business and marketing practices related to being an artist. Students gain promotional and presentation skills and develop a business plan. This course is intended for students interested in art and creating a small art business.

FT; AA/AS; CSU.

ARTF 207A Industrial and Architectural Ceramic Design 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 and ARTF 195A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARTF 207
This course is the first course in a sequence of contemporary industrial and architectural ceramic design. Emphasis is placed on creating beginning-level multiples in production and architectural ceramics. Student produce designs suitable for basic mold making and casting to produce multiples. This course is designed for students interested in industrial design, public arts, and creating a small business.

FT; AA/AS; CSU.

ARTF 207B Industrial and Architectural Ceramic Design II

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 207A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is the second course in a sequence of contemporary industrial and architectural ceramic design. Students produce designs suitable for more complex mold making and casting to produce multiples. Students also create architectural designs for installation, connect multiple parts from molds, and design using multi-piece molds. This course is designed for students interested in industrial design, public arts, and creating a small business.

FT; AA/AS; CSU.

ARTF 208A Ceramic Production I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 195A with a Grade of "C" or better, or equivalent or ARTF 195B with a Grade of "C" or better, or equivalent or ARTF 195C with a Grade of "C" or better, or equivalent
This is the first in a series of courses in the art of ceramic production. This course explores the study and practice of art for ceramic production. Topics include historical, contemporary, and utilitarian examples of ceramic production as well as constructing a sense of material use and business practices. Emphasis is placed on planning bodies of work, the creation of multiples, and marketing practices. This course is intended for art majors and those interested in the study and creation of utilitarian ceramic art and design.

FT; AA/AS; CSU.

ARTF 208B Ceramic Production II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 208A with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This is the second in a series of courses in the art of ceramic production. This course explores the study and practice of art for ceramic production. Topics include a deeper analysis of historical, contemporary, and utilitarian examples of ceramic production as well as additional practice with materials, business management, industrial methods, and technical skills. Emphasis is placed on planning bodies of work, the creation of multiples, and understanding the business of material use and electrical energy. This course is intended for art majors and those interested in the study and creation of ceramic art in the production sphere.

FT; AA/AS; CSU.

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 210C Life Drawing III
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ARTF 210B with a Grade of "C" or better, or equivalent
This is an advanced course in drawing the human form as a sequence of studies from live models. Students work closely with the instructor to develop, create and present original artwork. This course is designed for students who are majoring in fine art.

FT; AA/AS; CSU; UC.

ARTF 212 Sustainable Art and Design
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 sustainable art and design examining its effects on policies, culture, and practices from the late 20th century to the present. Topics include social justice and engagement, ecological and environmental health restoration, regenerative practices, material ecology, and economic shifts. Emphasis is placed on compassionate awareness, climate optimism, cultural perspectives, and historical and contemporary practices. This course is intended for art, design, architecture, and engineering majors.

FT; AA/AS; CSU; UC.

ARTF 260 Studio Art Studies
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ARTF 155B with a Grade of "C" or better, or equivalent or ARTF 165D with a Grade of "C" or better, or equivalent or ARTF 175C with a Grade of "C" or better, or equivalent or ARTF 197B with a Grade of "C" or better, or equivalent or ARTF 198C with a Grade of "C" or better, or equivalent or ARTF 200 with a Grade of "C" or better, or equivalent or ARTF 232 with a Grade of "C" or better, or equivalent
This course is intended for advanced art students. Students enrolled in this course work closely with the instructor to develop a transfer portfolio, artist statement, curatorial concept and/or resume exhibition list.

FT; AA/AS; CSU.

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.

ARTF 280A 2-Dimensional Art Studio Lab
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Corequisite: ARTF 150A or ARTF 152 or ARTF 155A or ARTF 155B or ARTF 165A or ARTF 165B or ARTF 165C or ARTF 165D or ARTF 174A or ARTF 198A or ARTF 198B or ARTF 198C or ARTF 210A or ARTF 210B or ARTF 210C
This course is a supervised studio laboratory in 2-dimensional media. Emphasis is placed on technical refinement of personal drawing and painting skills. This course is designed for fine art majors.

FT; AA/AS; CSU.

ARTF 280B 3-Dimensional Art Studio Lab
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Corequisite: ARTF 151 or ARTF 175A or ARTF 205A or ARTF 220A or ARTF 220B or ARTF 220C
This course is a supervised studio laboratory in 3-dimensional media. Emphasis is placed on technical refinement of fabrication skills specific to the various media explorations presented in the accompanying courses. This course is designed for fine art majors.

AA/AS; CSU.

ARTF 280C Ceramics Studio Lab
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Corequisite: ARTF 195A or ARTF 195B or ARTF 197A or ARTF 197B
This course is a supervised studio laboratory in ceramics. Emphasis is placed on technical refinement of personal ceramic skills. This course is designed for fine arts majors. Students must demonstrate increased proficiency with each repetition.

AA/AS; CSU.

ARTF 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 art/fine art. 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.

FT; AA/AS; CSU; UC.

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.

BCAS-Black Contractor's Association Studies

BCAS 80 Construction Safety
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 300
This course reviews procedures and applications of general construction safety. Emphasis is placed on identifying basic project procedures, and applying procedural knowledge and performance standards to construction safety regulations. This course is intended for students interested in the construction trade.

FT; AA/AS.

BCAS 81 Construction Mathematics I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 302
The course provides students with a basic comprehension of mathematical functions, as they relate to the construction trade. Emphasis is placed on performing addition, subtraction, multiplication and division calculations involving whole numbers, fractions, decimals, percentages, and conversion of fractions and decimals from one type of unit to the other. This course is intended for students interested in the construction trade.

FT; AA/AS.

BCAS 82 Construction Mathematics II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 81 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 303
The course provides students with application of advanced mathematical functions. Emphasis is placed on applying advanced construction mathematical computations including standard units of measure, conversion of measurement from one type of unit to another (US Standard/Metric), and calculations of squares and square roots used in layouts, as they relate to building construction. This course is intended for students interested in the construction trade.

FT; AA/AS.

BCAS 83 Construction Blueprint Reading I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 307
The course provides students with basic project procedure, and applications on different types of basic blueprints. Emphasis is placed on developing a working knowledge of construction principles, basic blueprint reading, and related trade mathematics. This course is intended for students interested in the construction trade.

FT; AA/AS.

BCAS 84 Construction Blueprint Reading II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 83 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 308
The course provides students with advanced reading of construction blueprints and specifications for commercial and industrial construction. Emphasis is placed on analyzing measurements, blueprint symbolism and building material specifications relating to construction. This course is intended for students interested in the construction trade.

FT; AA/AS.

BCAS 85 Carpenter Apprentice I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 310
This course is an introduction to the carpentry trade. Emphasis is placed on identifying and selecting lumber, and engineered lumber products and panels, choosing appropriate fasteners, and safely using all hand tools, portable power tools, and stationary power tools on the job site. This course is intended for students interested in the carpentry trade.

FT; AA/AS.

BCAS 86 Carpenter Apprentice II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 85 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 312
This is an intermediate carpentry course covering blueprints and building codes, building layout, and concrete form construction. Emphasis is placed on reading and interpreting blueprints and floor plans, understanding building codes, choosing appropriate layout tools, and building concrete forms. This course is intended for students interested in the carpentry trade.

FT; AA/AS.

BCAS 87 Carpenter Apprentice III
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 86 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 314
This is a high-intermediate level carpentry course covering roof and stairway framing, insulation, windows, and exterior doors. Emphasis is placed on layout and framing common roof structures, interior stairs, correctly selecting and installing insulation and vapor barriers, and selecting and properly installing windows, exterior doors, and hardware. This course is intended for students interested in the carpentry trade.

FT; AA/AS.

BCAS 88 Carpenter Apprentice IV
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 87 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for BCAS 316
This is an advanced carpentry course covering exterior and interior finish work. Emphasis is placed on the description, layout, and installation of interior and exterior wall coverings, decks, doors, stairs, and flooring material. This course is intended for students interested in the carpentry trade.

FT; AA/AS.

BCAS 300 Construction Safety
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 080
This course reviews procedures and applications of general construction safety. Emphasis is placed on identifying basic project procedures, and applying procedural knowledge and performance standards to construction safety regulations. This course is intended for students enrolled in the construction apprentice program.

FT; AA/AS; CSU.

BCAS 302 Construction Mathematics I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 081
The course provides apprentices with a basic comprehension of mathematical functions, as they relate to the construction trade. Emphasis is placed on performing addition, subtraction, multiplication and division calculations involving whole numbers, fractions, decimals, percentages, and conversion of fractions and decimals from one type of unit to the other. This course is intended for students enrolled in the construction apprentice program.

FT; AA/AS; CSU.

BCAS 303 Construction Mathematics II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 302 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 082
The course provides apprentices with application of advanced mathematical functions. Emphasis is placed on applying advanced construction mathematical computations including standard units of measure, conversion of measurement from one type of unit to another (US Standard/Metric), and calculations of squares and square roots used in layouts, as they relate to building construction. This course is intended for students enrolled in the construction apprentice program.

FT; AA/AS; CSU.

BCAS 307 Construction Blueprint Reading I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 083
The course provides apprentices with basic project procedure, and applications on different types of basic blueprints. Emphasis is placed on demonstrating a working knowledge of construction principles, basic blueprint reading, and related trade mathematics. This course is intended for students enrolled in the construction apprentice program.

FT; AA/AS; CSU.

BCAS 308 Construction Blueprint Reading II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 307 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 084
The course provides apprentices with advanced reading of construction blueprints and specifications for commercial and industrial construction. Emphasis is placed on analyzing measurements, blueprint symbolism and building material specifications relating to construction. This course is intended for students enrolled in the construction apprentice program.

FT; AA/AS.

BCAS 310 Carpenter Apprentice I
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 085
This course is an introduction to the carpentry trade. Emphasis is placed on identifying and selecting lumber, and engineered lumber products and panels, choosing appropriate fasteners, and safely using all hand tools, portable power tools, and stationary power tools on the job site. This course is intended for students enrolled in the carpenter apprentice program.

FT; AA/AS; CSU.

BCAS 312 Carpenter Apprentice II
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 310 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 086
This is an intermediate carpentry course covering blueprints and building codes, building layout, and concrete form construction. Emphasis is placed on reading and interpreting blueprints and floor plans, understanding building codes, choosing appropriate layout tools, and building concrete forms. This course is intended for students enrolled in the carpenter apprentice program.

FT; AA/AS; CSU.

BCAS 314 Carpenter Apprentice III
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 312 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 87
This is a high-intermediate level carpentry course covering roof and stairway framing, insulation, windows, and exterior doors. Emphasis is placed on layout and framing common roof structures, interior stairs, correctly selecting and installing insulation and vapor barriers, and selecting and properly installing windows, exterior doors, and hardware. This course is intended for students enrolled in the carpenter apprentice program.

FT; AA/AS; CSU.

BCAS 316 Carpenter Apprentice IV
56 - 63 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: BCAS 314 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
Obtain Permission Number from Instructor
This course is not open to students with previous credit for BCAS 088
This is an advanced carpentry course covering exterior and interior finish work. Emphasis is placed on the description, layout, and installation of interior and exterior wall coverings, decks, doors, stairs, and flooring material. This course is intended for students enrolled in the carpenter apprentice program.

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 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 111 Cancer Biology

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 BIOL 123.

This is an introductory course that examines the basic biology of cancer and the approaches currently taken in cancer treatment. Basic principles of cell biology and genetics are explored to unravel the mechanisms of cancer development and the development of effective cancer therapeutics and preventative measures. The course emphasizes the process of scientific inquiry to illustrate how cancer biologists gather and analyze data in order to better understand and treat this disease, estimated to be the number two killer in the US. The course is intended for all that want to learn about the types of cancer, causes of cancer, treatments of cancer, and the social impact of this disease on patients, families, and society.

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 161 Introduction to Research

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is designed for Science, Technology, Engineering, and Math (STEM) students participating in the STEM Pathways program. Emphasis is placed on selecting a research project, formulating questions and hypotheses, and designing appropriate experimental approaches. Topics include an introduction to experimental design, data analysis, and scientific communication.

FT; 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 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 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 110 African American Art
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a historical survey of African American art from 1650 to present, including the influence of African, European and Native American art styles and traditions. This course is intended for students majoring in Black Studies, Ethnic Studies and Art; and all students interested in history, humanities, teaching, travel, and cultural enrichment from the Black experience.

FT; AA/AS; CSU; UC.

BLAS 115 Sociology from a Black Perspective
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a study of African American society and culture. Emphasis is placed on analyzing the origins, nature, structure and dynamics of African American life from a systemic perspective.

FT; AA/AS; CSU; UC.

BLAS 116 Contemporary Social Problems from a Black Perspective
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a sociological analysis of institutional racism, the process of social change and how it affects African Americans. Emphasis is placed on broad contemporary issues as they relate to African Americans, such as the prison industrial complex, gender and health care. This course is intended for Black Studies majors and anyone interested in Ethnic Studies, history, teaching and current events.

FT; AA/AS; CSU; UC.

BLAS 120 Black Music
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a study of African American musical forms and styles in historical perspective. Emphasis is placed on providing students with an appreciation for the African roots of a variety of African American music genres. This course is intended for students majoring in Black Studies and Ethnic Studies; and all students interested in the history of African American music.

FT; AA/AS; CSU; UC.

BLAS 130 The Black Family
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a study of the African American family. Emphasis is placed on the socio-cultural and psychological issues surrounding the history of the Black family in America. Topics include contemporary African American dating, marriage and divorce patterns, gender roles and extended family, kin and community networks. This course is intended for students majoring in Black Studies and Ethnic Studies; and all students interested in the historical and contemporary perspective of the Black family.

FT; AA/AS; CSU; UC.

BLAS 135 Introduction to Black Politics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a survey of African American experiences with the United States political system from the Colonial era to the present. Emphasis is placed on the role of race in American political culture, practices and institutions as well as the ideas, tactics and organizations developed and employed by African Americans in their struggle for political power. This course is intended for students who wish to major in Black Studies and/or who wish to gain general knowledge of the Black experience.

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 145A Introduction to African History

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 African History from the Stone Age through the beginnings of European colonization in the 1870s. Emphasis is placed on providing students with a broad presentation of the geographical features of the continent and its connections to the rest of the world, local and regional cultural, political, economic and social institutions, slavery, European conquest and colonization, and African resistance to colonization. This course is intended for students majoring in black studies or history and for all students interested in African history.

FT; AA/AS; CSU; UC.

BLAS 145B Introduction to African History

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 African History from the late nineteenth century to the present. Emphasis is placed on providing students with a broad presentation of European colonization and colonial rule, African independence movements, nation-building, economic development and the continuing quest for African unity. This course is intended for students majoring in black studies or history and for all students interested in African history.

FT; 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.

BLAS 165 Sexuality and Black Culture
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 BLAS 265: Psychology and Social Aspects of Black Sexuality
This course is an in-depth study and analysis of the social and psychological factors that determine the nature of human sexuality in the African-American community. This course is intended for students majoring in Black Studies and Ethnic Studies; and all students interested in sexuality and the African-American community.

FT; AA/AS; CSU; UC.

BLAS 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 African American Studies. 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; UC.

BUSE-Business

BUSE 92 Introduction to Business Communication
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for BUSE 119 or OFCE 115
This course is a review of the principles and mechanics of English grammar and syntax for written and oral business communications. Topics include business vocabulary, dictionary usage, spelling, sentence structure, and punctuation for business writing. Students write business letters, resumes, memos, and informal business reports. This course is intended for students majoring in business who need a review of English for business communications.

AA/AS.

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 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 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 440 Cyber Law and Ethics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a study of various technical and administrative aspects of cybersecurity as it relates to law, computing, and ethics. Emphasis is placed on ethical theory and professional ethics in cybersecurity. Topics include relativism, utilitarianism, and deontological theories; methods and tools for analysis in ethical arguments; legal bases for the right to privacy and freedom of expression; and various legislation and regulations that impact the Internet and cyber technology. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CBTE-Computer Business Technology

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 164 Introduction to Microsoft Outlook
12-13.5 hours lecture/12-13.5 hours lab; 1 unit
Grading: Letter Grade Only
This course is an introduction to the features of Microsoft Outlook. Students learn how to manage messages, schedule appointments, organize and manage tasks and contact lists, and customize Outlook. This course is designed for students intending to use Microsoft Outlook for academic, professional, and/or personal purposes.

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.

CHEM-Chemistry

CHEM 16 Workshop for Introduction to General Chemistry
24-27 hours lab; 0.5 units
Grading: Pass/No Pass Only
Corequisite: CHEM 152
This is a guided problem solving course designed to supplement lecture material in Introduction to General Chemistry. Focus is placed on nomenclature, dimensional analysis, chemical equations, stoichiometry, and solutions chemistry. This course is recommended for students concurrently enrolled in Introduction to General Chemistry lecture who wish to supplement their instruction.

FT.

CHEM 20 Introduction to General Chemistry Refresher
24-27 hours lab; 0.5 units
Grading: Pass/No Pass Only
This course is designed for students that have successfully completed Introduction to General Chemistry but need a review course before beginning the General Chemistry. Also, students who have completed high school chemistry and wish to prepare for the challenge exam for General Chemistry may also benefit. Focus is on chemical calculations, density, molar mass, molarity, stoichiometry, and nomenclature. This course will not replace a failing grade in Introduction to General Chemistry. It does not satisfy the prerequisite for General Chemistry I.

FT.

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 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 111L Chemistry in Society Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: CHEM 111 with a Grade of "C" or better, or equivalent
This course illustrates the principles of chemistry in order for the student to understand how chemistry is used in our society. Experiments explore not only basic concepts in chemistry such as matter, energy, and the atom, but also explore real world applications of chemistry. This includes performing experiments related to the chemistry of the environment, household products, and biochemistry. Students learn how to work safely within the laboratory. This laboratory 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 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 255 Inside the Chemical, Biochemical, and Pharmaceutical Industries
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
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the chemical, biochemical, and pharmaceutical industries. Topics include drug discovery, development and approval processes, the Food and Drug Administration (FDA), good lab practice (GLP), good manufacturing practice (GMP), hazardous materials management, quality control and assurance, and common problems/calculations encountered in a laboratory environment. This course is intended for students interested in becoming a chemical and/or biochemical laboratory technician.

FT; AA/AS; CSU.

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 110B Introduction to Chicana and Chicano Studies

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a survey of the field of Chicano Studies and the historical and contemporary factors that influence Chicano society. Emphasis is placed on the Chicana/o experience in the United States through an analysis of the social, political, and economic factors that impact and shape the Chicana/o community. This course is designed for all students interested in Chicana/o Studies, Social Studies and Ethnic Studies.

FT; AA/AS; CSU; UC.

CHIC 130 Mexican Literature in Translation

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a survey of Mexican literature in translation. Students are introduced to authors of the novel, short story, poem, essay, and folklore within the context of Mexican history, politics and society. This course is designed for Chicano Studies majors and anyone interested in literature.

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 138 Literature of La Raza in Latin America in Translation

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a survey of the novels, short stories, poetry and films produced in Latin America since the early civilizations to the present. Emphasis is placed on major cultural works reflecting and questioning the historical legacies and material realities of the project of colonialism in the Americas and its peoples. This course is for all students with an interest in the study of Latin American literature and culture.

FT; AA/AS; CSU; UC.

CHIC 140 Chicana/o Sociology

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course examines the institutional and structural conditions as well as social dynamics that have and continue to shape the Chicana/o experience in U.S society. This course makes use of Sociological perspectives that incorporate various paradigms/theories/concepts including but not limited to: Stratification, Colonialism/Imperialism, Chicana Feminism, Queer Theory, Conflict Theory, Critical Race Theory, Intersectionality, and Assimilation/ Acculturation. The application to Chicana/os and Latinos of traditional sociological theories and empirical research are examined and evaluated. This course is intended for all students interested in Chicana/o Studies, ethnic studies, or the social sciences.

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 150 History of Mexico

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a survey of Mexican history from the ancient times to the present. Special emphasis is given to major historical developments from the time of the Spanish Conquest to the Revolution of 1910 and its aftermath. Special consideration is given to the economic, political, social, and cultural factors which have shaped modern Mexico. This course is designed for students majoring in Chicano Studies or History and prepares students for careers dealing with Mexico and/or Mexican culture and the relationships between Mexico and the United States.

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.

CHIC 190 Chicano Images in Film

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a critical approach to cinematic images of Chicanos as depicted in selected films. Focus is placed on stereotypical and negative portrayals during early cinema with an examination of the more realistic and complex portraits of more recent times. Film genres, such as early Hollywood features, documentaries and the emerging "Chicano film" are examined. This course is designed for students interested in film studies and Ethnic Studies with a special focus on the Chicano experience in film.

FT; AA/AS; CSU; UC.

CHIC 201 The Indigenous Tradition of Mexico and Ancient Mesoamerica

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course examines the Indigenous traditions of Mexico and Ancient Mesoamerica. The course explores the culture and history of the Mesoamerican civilizations and their relationship with the societies of Aridamerica and Oasisamerica, and the experiences of the Indigenous communities from the colonial times to the present. This course is intended for students who are pursuing a major in Chicana and Chicano Studies, History, Ethnic Studies, or other Social Sciences, and all students interested in the Mexican culture.

FT; AA/AS; CSU; UC.

CHIC 210 Chicano Culture

48-54 hours lecture; 3 units

Grading: Letter Grade or Pass/No Pass

This course is a study of Chicana/o culture in the United States. Emphasis is placed on historical and contemporary representations of Chicana/os through their cultural products, such as music, dance, theatre, literature and film. Students apply Cultural Studies theories to analyze and interpret Chicana/o cultural products. This course is designed for all students interested in Chicana/o culture and Ethnic Studies.

FT; AA/AS; CSU; UC.

CHIC 230 Chicano Art
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a comprehensive overview of the major influences, themes and styles in Chicano art from its emergence in the 1960s to the beginning of the 21st century. Emphasis is placed on the historical, social and cultural context of the Chicana/o art movement and the major forces that shape artistic creation within this field. Topics include Chicano paintings, murals, prints, sculpture, installation, performance and video. This course is designed for all students interested in Chicana/o studies, Ethnic Studies and for art majors who want to explore a revolutionary contemporary art movement.

FT; AA/AS; CSU; UC.

CHIC 250 Introduction to Chicana/o Dramatic Art
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a survey of Chicano and Latino theater, its historical roots, techniques, styles and literature. Students explore and analyze the origins and development of various related forms in the context of the Chicana/o culture of the U.S. Southwest and Mexico. This course is designed for Chicana/o Studies majors and for students interested in the Dramatic Arts, Ethnic Studies and literature.

FT; AA/AS; CSU; UC.

CHIC 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
For students with advanced background in Chicano Studies who wish to study special problems or work on specialized projects.

FT; AA/AS; CSU.

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 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 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 133 Curriculum: Language, Literacy, and Art

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course introduces the function of language, literacy, and artistic expression in early childhood educational programs. Emphasis is placed on the development of language, literacy, and art curriculum activities, and selection of appropriate materials. Students utilize the California Foundations and Frameworks to design and implement appropriate activities 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 135 Curriculum: Science, Math, and Music and Movement

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 131

This course introduces the function of science, math, music, and movement in early childhood educational programs. Emphasis is placed on the development of science, math, and music and movement concepts, and curriculum activities. Students utilize the California Foundations and Frameworks to design and implement appropriate activities 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 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 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 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 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, a special project or learning activities in the field of child development. 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.

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 150 Introduction to Computer and Information Sciences
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a survey of computers, computer systems and information sciences. Emphasis is placed on the use of computers in business and technical fields. Topics include computer equipment and programming systems, systems study, design, development, and implementation. The course also explores careers in the computer science field. This course is intended for all students interested in computers and how to use them.

FT; AA/AS; CSU.

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 183 Web Development with Ruby on Rails
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: CISC 179 with a Grade of "C" or better, or equivalent or CISC 186 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
This course is an introduction to creating dynamic web applications that interact with databases using Ruby on Rails. Topics include development of both static and dynamic web pages, user interaction, as well as database connectivity. This course is designed for students who are interested in web application development.

FT; AA/AS; CSU.

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 193 Microsoft C# Software Engineering 1
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
This course applies industry-standard software engineering principles to the study of the object-oriented, general purpose programming language Microsoft C#, a member of the Microsoft Visual Studio.NET software development toolset. Coverage includes the typical topics of an introductory programming course. Extensive hands-on training is included in the laboratory sessions. This course is designed for students pursuing a degree in Computer Science or Information Systems and for vocational/ professional students who are updating their programming skills set.

FT; AA/AS; CSU; UC.

CISC 201 Advanced C++ Programming

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 and CISC 205 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for CISC 196

This course is an advanced hands-on study of the C++ language programming best practices currently used in the industry. Emphasis is placed on generic programming through the use of templates and object-oriented programming. Robust and reliable coding practices are promoted through the disciplined use of exception handling and unit testing. This course is designed for computer science students and anyone interested in advancing their C++ programming skills.

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 220 Fundamentals of Computer Game Programming

48-54 hours lecture/48-54 hours lab; 4 units

Grading: Letter Grade Only

Advisory: 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

This course introduces software programmers to the design and development of simple graphical computer-based games. The course may use Java or C# as the programming language of choice. Emphasis is placed on developing games in a team environment, designing logical games that satisfy player needs, and ensuring that games are of high quality through use of software engineering best practices and proper testing. This course is for students with some previous software programming experience.

FT; AA/AS; CSU; UC.

CISC 221 Intermediate Computer Game Programming

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: CISC 220 with a Grade of "C" or better, or equivalent
This course covers the field of software game program development. Students work as a team to design and build a complex software game. Students learn more complex elements of game construction, constituent technologies that facilitate their development, and collaborative software development and integration methodologies. This course is designed for students interested in furthering their knowledge in software game development.

FT; AA/AS; CSU.

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 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 a job or internship related to an occupational major. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral 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 majoring or interested in an occupational field of study.

AA/AS; CSU.

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.

CISC 450 Security Analytics and Visualization

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CISC 179 with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: STAT C1000 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 process of using data collection, aggregation, and analysis tools for security monitoring and threat detection. Emphasis is placed on essential technical knowledge used for predictive analytics and the visualization of information to detect behaviors that indicate malicious activity. Topics include predictive modeling, data analytics, machine learning, automation, and understanding data through graphical representation. This course is designed for students in the Cyber Defense and Analysis program.

AA/AS; CSU.

COMM-Communication Studies

For additional Communication Studies classes 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 see COMM C1000 Introduction to Public Speaking

COMS 101 Voice and Articulation

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 101
This course is designed to improve vocal production and the articulation, enunciation, and pronunciation of words. Emphasis is placed on sound production, voice quality, volume, pitch and expressiveness. This course is intended for communications studies majors and anyone involved in theatre, sales, public services or other professions.

FT; AA/AS; CSU; UC.

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 111 Oral Interpretation
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SPEE 111
This course is a practical study of the art of oral interpretation. Emphasis is placed on developing a foundation for critical analyses of literature in order to enhance spoken interpretation of prose, poetry, dramatic monologue and duo. This course is designed for communication studies and drama majors as well as anyone interested in improving their oratory skills.

AA/AS; CSU.

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.

CONS-Construction Systems

CONS 60A Construction Systems - Introduction to HVAC I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 301
In this course, trade mathematics and drawings, the tools of the trade, blueprint terminology and basic rigging equipment and procedures as applicable to HVAC are covered. This course is designed to give the construction HVAC student an understanding of copper and plastic piping practices.

FT; AA/AS.

CONS 60B Construction Systems - Introduction to HVAC II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 60A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 302
This course introduces the construction HVAC trainee to the basic concepts and environmental concerns related to heating, ventilation and air conditioning, including: soldering, brazing, ferrous metal piping practices, basic electricity, heating and cooling. This course also describes the HVAC program and the career opportunities available in the HVAC trade.

FT; AA/AS.

CONS 61A Construction Systems - Intermediate HVAC I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 60B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 303
This course instructs the HVAC trainee in the properties of air, and covers chimneys, flues and vents. Students are introduced to basic mechanical procedures commonly performed in HVAC service work, such as the operation, installation and servicing of electric furnaces. This course also introduces the student to alternating current and electronic components and circuits used in HVAC systems.

FT; AA/AS.

CONS 61B Construction Systems - Intermediate HVAC II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 61A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 304
This course instructs the HVAC trainee in HVAC controls and metering devices and introduces the trainee to control circuit analysis. This course also covers compressors and heat pumps and instructs the student in leak detection, evacuation, recovery and charging service procedures used to troubleshoot, repair and/ or maintain proper operation of the mechanical refrigeration system.

FT; AA/AS.

CONS 62A Construction Systems - Advanced HVAC I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 61B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 305
This course instructs the HVAC trainee in preventive maintenance and provides an introduction to troubleshooting applying to all types of HVAC equipment. This course also covers troubleshooting electronic controls, gas heating, electric heating and oil heating.

FT; AA/AS.

CONS 62B Construction Systems - Advanced HVAC II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 62A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 306
This course instructs the HVAC trainee in troubleshooting cooling, accessories, heat pumps and commercial heating and cooling systems. This course also covers water and air balance, steam systems and customer relations.

FT; AA/AS.

CONS 63A Construction Systems - HVAC Specialties I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 62B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 307
This course covers advanced blueprint reading and specifications as they relate to HVAC, indoor air quality and energy conservation equipment commonly used in HVAC systems. This course also covers energy management systems and the methods of water treatment and water treatment equipment used with HVAC systems.

FT; AA/AS.

CONS 63B Construction Systems - HVAC Specialties II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 63A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HVAC 308
This course covers commercial heating and cooling systems, maintenance of these systems and system start-up and shut down. This course also covers commercial and industrial refrigeration systems, equipment, refrigerated warehouses, walk-in coolers display cases, etc.

FT; AA/AS.

CONS 70A Construction Systems - Introduction to Low Voltage Building Systems I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for CEST 301A
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in general construction site safety, measurements and formulas, use of hand and power tools, interpretation of blueprints, basic rigging techniques and methods used to move equipment and materials.

FT; AA/AS.

CONS 70B Construction Systems - Introduction to Low Voltage Building Systems II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 70A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CEST 301B
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in industry standards and building codes, residential and commercial construction methods, basic electrical theory, electrical meters, OSHA safety standards, and ladders and rigging.

FT; AA/AS.

CONS 71A Construction Systems - Intermediate Low Voltage Building Systems I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 70B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CEST 302A
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in mathematics related to the trade, electronic theory, electronic measurement tools and techniques, AC and DC electrical systems and grounding, and blueprint reading related to the trade.

FT; AA/AS.

CONS 71B Construction Systems - Intermediate Low Voltage Building Systems II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 71A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CEST 302B
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in types of cabling, switches and relays, terminating conductors, low-voltage codes and standards, and computer cabling applications.

FT; AA/AS.

CONS 72A Construction Systems - Advanced Low Voltage Building Systems I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 71B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CEST 303A
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in wire and cable selection, advanced buses and networks, fiber optic installation, cable and satellite television systems, and wireless communications.

FT; AA/AS.

CONS 72B Construction Systems - Advanced Low Voltage Building Systems II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CONS 72A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for CEST 303B
This course provides the Construction Systems - Low Voltage Building Systems student with instruction in site survey, job planning and documentation, maintenance and repair, supervision, and fire and security alarm systems.

FT; AA/AS.

COSM-Cosmetology

COSM 50L Fundamentals of Cosmetology

16-18 hours lecture/240-270 hours lab; 6 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for COSM 110, COSM 110A and COSM 110B, COSM 50LA and COSM 50LB, or COSM 040
Special Admission - must be admitted to program.
Obtain Permission Number from Instructor
This lecture-lab course provides an integration of theoretical and practical principles and procedures at the fundamental level. Emphasis is placed on bacteriology, safety, sanitation, sterilization, preparing the work area and kit, and rules and regulations as required for the licensor in the state of California. Topics include draping, shampooing, conditioning, haircutting, wet hairstyling, manicuring, pedicuring, and facials. This course is for students interested in becoming a cosmetologist and is intended to prepare them for the California State Board of Barbering and Cosmetology licensure.

FT; AA/AS.

COSM 55 Esthetician I

40-45 hours lecture; 2.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: COSM 55L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an introduction to the theoretical knowledge required to enter the field of esthetics as a licensed esthetician. Emphasis is placed on the basic sciences of physiology, chemistry, and electricity as they apply to skin science, skin care, and professional esthetics. Topics include career and licensure planning and the fundamentals of the salon business, skin care products, and esthetic services. This course is designed for students interested in esthetics or a career as a licensed professional in the industry.

FT; AA/AS.

COSM 55L Esthetician I Lab

312-351 hours lab; 6.5 units

Grading: Letter Grade Only

Corequisite: Completion of or concurrent enrollment in: COSM 55 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Special Admission - must be admitted to program.

This laboratory course is an introduction to the practical knowledge, skills, and techniques required to enter the field of esthetics as a licensed esthetician. Emphasis is placed on applying basic principles of physiology, chemistry, electricity, and skin science to practice in client consultations, skin analyses, product assessments, facial treatments, and other basic professional esthetic services. Topics include establishing basic esthetic professionalism and performing fundamental esthetic services. This course is designed for students interested in esthetics or a career as a licensed professional in the industry.

FT; AA/AS.

COSM 60L Intermediate Cosmetology

16-18 hours lecture/240-270 hours lab; 6 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for COSM 120, COSM 120A and COSM 120B, COSM 60LA and COSM 60LB or COSM 42A

Obtain Permission Number from Instructor

Special Admission - must be admitted to program.

This lecture-lab course provides an integration of theoretical and practical principles and procedures at the intermediate level. Emphasis is placed on sanitation, safety, client protection, and demonstrations and hands-on work with models. Topics include razor cutting, basic hair coloring techniques, chemical texture services, manicure tips, and thermal styling as well as hair removal, including eyebrow waxing and arching. This course is for students interested in becoming a cosmetologist and is intended to prepare them for the California State Board of Barbering and Cosmetology licensure.

FT; AA/AS.

COSM 65 Esthetician II

40-45 hours lecture; 2.5 units

Grading: Letter Grade Only

Prerequisite: COSM 55 with a Grade of "C" or better, or equivalent

Corequisite: Completion of or concurrent enrollment in: COSM 65L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Special Admission - must be admitted to program.

This course is a continuation of the theoretical knowledge required to enter the field of esthetics as a licensed esthetician. Emphasis is placed on an in-depth examination of the body and its systems as they relate to skin health, intermediate esthetic techniques, specialty facials and devices, spa and alternative therapies, and medical esthetics. Topics include analyses of skin care products, botanicals and aromatherapy, Ayurveda theory and treatments, and business and marketing skills required in the esthetician field. This course is designed for students interested in esthetics or a career as a licensed professional in the industry.

FT; AA/AS.

COSM 65L Esthetician II Lab

312-351 hours lab; 6.5 units

Grading: Letter Grade Only

Prerequisite: COSM 55L with a Grade of "C" or better, or equivalent

Corequisite: Completion of or concurrent enrollment in: COSM 65 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Special Admission - must be admitted to program.

This laboratory course is a continuation of the fundamental knowledge, skills, tools, and techniques required to enter the field of esthetics as a licensed esthetician. Emphasis is placed on applying the in-depth knowledge of the body and its systems as they relate to skin health to practice intermediate esthetic techniques, specialty facials and devices, spa and alternative therapies, and medical esthetics. Topics include practice with skin care products, botanicals and aromatherapy, Ayurveda theory and treatments, and business and marketing skills required in the esthetician field. This course is designed for students interested in esthetics or a career as a licensed professional in the industry.

FT; AA/AS.

COSM 70L Intermediate-Advanced Cosmetology
16-18 hours lecture/240-270 hours lab; 6 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for Cosmetology 42B, Cosmetology 130, Cosmetology 130A and Cosmetology 130B, Cosmetology 70LA and 70LB or Cosmetology 42B.
Obtain Permission Number from Instructor
Special Admission - must be admitted to program.
This lecture-lab course provides an integration of theoretical and practical principles and procedures at the intermediate-advanced level. Emphasis is placed on sanitation, safety, client protection, and chemical services on clients. Topics include clipper cutting, advanced long hair dressing, hair extensions, permanent wave, soft curl permanent waving, chemical straightening, thermal pressing and curling, advanced chemical hair coloring techniques, including weaving, low-lighting, and balayage, acrylic and gel nail techniques, as well as makeup application, including lash application techniques and eyebrow and lash tinting. This course is for students interested in becoming a cosmetologist and is intended to prepare them for the California State Board of Barbering and Cosmetology licensure.

FT; AA/AS.

COSM 75 Advanced Makeup
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is a study in advanced makeup application techniques. Emphasis is placed on makeup history and the use of makeup for different occasions. Topics include advanced makeup application, eyelash enhancement, and airbrushing. This course is intended for students majoring in cosmetology, esthetics, dramatic arts, and anyone interested in advanced makeup techniques.

FT; AA/AS.

COSM 80L Advanced Cosmetology
16-18 hours lecture/240-270 hours lab; 6 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for COSM 140, COSM 140A and COSM 140B, COSM 80LA and COSM 80LB or 42C
Obtain Permission Number from Instructor
Special Admission - must be admitted to program.
This lecture-lab course provides an integration of theoretical and practical principles and procedures at the advanced level. Emphasis is placed on sanitation, safety, client protection, advanced services on clients, and marketing strategies to support professional and employment goals. Topics include total looks, preparing for state board licensing, and compiling a portfolio of personal work. This course is for students interested in becoming a cosmetologist and is intended to prepare them for the California State Board of Barbering and Cosmetology licensure.

FT; AA/AS.

COSM 83 Barbering Conversion
32-36 hours lecture/192-216 hours lab; 6 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course focuses on technical instruction and practical training in barbering. Emphasis is placed on hair dressing, health and safety, and shaving. This course is intended for students majoring in cosmetology and barbering. Students who complete this course are eligible to apply for the California State Board of Barbering and Cosmetology Barber licensing exam.

FT; AA/AS.

COSM 85 Nail Technician I
24-27 hours lecture/192-216 hours lab; 5.5 units
Grading: Letter Grade Only
This lecture-lab course provides an integration of theoretical and practical principles and procedures at the fundamental level. Emphasis is placed on bacteriology, infection control, safety practices, preparing the work area and kit, and rules and regulations as required for the licensor in the state of California. Topics include basic anatomy of the hand, foot, and nails, reflexology, and manicuring and pedicuring fundamentals to include client consultation, massage, and the use of nail equipment and implements. This course is designed for students interested in nail technology or a career as a licensed professional in the industry.

FT; AA/AS.

COSM 86 Nail Technician II

24-27 hours lecture/192-216 hours lab; 5.5 units

Grading: Letter Grade Only

Prerequisite: COSM 85 with a Grade of "C" or better, or equivalent

This lecture-lab course provides an integration of theoretical and practical principles and procedures at the intermediate level. Emphasis is placed on the in-depth examination of the chemistry of skin and nails and its systems as they relate to skin and nail health, infection control, safety protocols, and manicuring and pedicuring services to include nail enhancements and nail art and trends. Topics include analysis of chemicals, ingredients, and solutions used in the industry as well as business and marketing skills required to be a self-employed or employed nail technician. This course is designed for students interested in nail technology or a career as a licensed professional in the industry.

FT.

COSM 92 Extended Laboratory Practice

48-162 hours lab; 1-3 units

Grading: Pass/No Pass Only

Prerequisite: COSM 80L with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Obtain Permission Number from Instructor

This course is continued laboratory practice for advanced cosmetology students who need to complete the number of hours mandated for examination and for licensure by the California State Board of Cosmetology. Emphasis is placed on client services (including chemical and non-chemical services) and an exploration of all types of hair texture. Topics include communication skills, professionalism and support in student employment goals. This course is designed for students planning a career as a licensed, professional Cosmetologist.

AA/AS.

COSM 93 Esthetician Extended Lab

48-54 hours lab; 1 unit

Grading: Letter Grade Only

Prerequisite: COSM 65 with a Grade of "C" or better, or equivalent and COSM 65L with a Grade of "C" or better, or equivalent

This is a laboratory course for intermediate esthetician students who need to complete the number of hours mandated for examination and licensure by the California State Board of Cosmetology. Emphasis is placed on applying intermediate esthetic techniques on salon and spa clients. Topics include practice in client consultations, skin care products assessments, facial treatments, hair removal, makeup application, and business and marketing skills required in the esthetician field. This course is designed for students interested in esthetics or a career as a licensed professional in the industry.

FT; AA/AS; CSU.

COSM 94A Cosmetology Teacher Training Program I

56-63 hours lecture/48-54 hours lab; 4.5 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: Student must have a valid California Cosmetology License.

This course is not open to students with previous credit for COSM 152A or COSM 91A

This course is offered for the experienced/licensed cosmetologist to become a qualified cosmetology instructor. Training for the course consists of practical and theoretical principles of effective teaching methods, which include lesson planning, oral presentations, evaluations, test construction, and procedures to ensure environmental health and safety. Emphasis is focused on preparation for prospective employment in private and public cosmetology schools.

FT; AA/AS.

COSM 94B Cosmetology Teacher Training Program II

56-63 hours lecture/48-54 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: COSM 94A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Student must have a valid California Cosmetology License.
This course is not open to students with previous credit for COSM 152B or COSM 91B
This course is offered for the experienced/licensed cosmetologist to become a qualified cosmetology instructor. Phase II of the Cosmetology Teacher Training program provides the trainee with an opportunity to acquire additional skills, expand career options, workplace skill competencies, and subject mastery skills necessary for teaching the practical aspects of cosmetology science. Emphasis is focused on preparation for prospective employment in private and public cosmetology schools.

AA/AS.

COSM 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 designed to deal with current problems and topics of special interest in cosmetology.

AA/AS.

CRES-Conflict Resolution

CRES 101 Conflict Resolution and Mediation

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course explores conflict resolution and mediation in an interdisciplinary manner by an analysis of how conflict is generated, escalated, resolved and transformed in various settings. Students explore theories of conflict resolution and mediation and apply these fundamental concepts in interpersonal and intergroup conflicts. Emphasis is placed upon allowing the students to assess and improve their own ways of responding to conflict by the study and practice of various processes of conflict intervention. This course is intended for students interested in Conflict Resolution and Mediation, Communication Studies, Anthropology, Social Services, Counseling, Human Services, Peace Studies, Psychology, Business, Sociology and other related fields.

FT; AA/AS; CSU; UC.

CRES 102 Mediation Skills

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: CRES 101 with a Grade of "C" or better, or equivalent
This introductory course is designed to provide students with the framework and analytical skills needed to conduct mediation. Mediation is a process by which parties submit their dispute to a neutral third party who works with them to reach a mutually agreeable settlement. Emphasis is placed on the mediation process, the role of the mediator, communication and listening skills, and the human dynamics of conflict. The role of the mediator is to assist disputing parties in reaching a peaceful, just and equitable resolution to a conflict. This course is intended for students interested in Conflict Resolution and Mediation, Communication Studies, Anthropology, Counseling, Peace Studies, Psychology, Business, Sociology and other related fields.

FT; AA/AS; CSU.

CRES 276 Field Work in Conflict Resolution and Mediation

32 - 36 hours lecture/48 - 54 hours other; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: CRES 101 with a Grade of "C" or better, or equivalent and CRES 102 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This supervised field work course enables students to gain first hand experience in Conflict Resolution and Mediation. Students develop professional skills while contributing their time and talents to a local organization thus enhancing the students' resume and work experience. Emphasis is placed on providing students with the chance to explore the various career choices through placement in a professional setting working in the field of Conflict Resolution and Mediation. Students meet regularly with faculty and peers to receive feedback, support and guidance in their community projects. This course is intended for students interested in Conflict Resolution and Mediation.

FT; AA/AS; CSU.

CYDA: Cyber Defense and Analysis

CYDA 400 Emerging Technology and Cybersecurity

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an exploratory study of new, emerging, and developing technologies in cyber defense operations. Emphasis is placed on both operational theory and designing and deploying technological solutions to combat evolving cyber threats. Topics include Zero Trust and Secure Access Service Edge (SASE) architectures, Artificial Intelligence (AI) and Machine Learning (ML), Automation, 5G networks, and Internet of Things (IoT). This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 410 Modern Cryptography

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a study of the theoretical foundations of cryptosystems used in the real world. Emphasis is placed on common cryptographic objects to get a better understanding of various cryptographic primitives, algorithms, attacks, and protocols. Topics include an introduction to classic cryptography, properties of private key (symmetric) and public key (asymmetric) cryptography, hashing, and digital signature schemes. This course is designed for students in the Cyber Defense and Analysis program.

AA/AS; CSU.

CYDA 420 Applied Network Security Monitoring (NSM)

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a study of the process of ingesting, storing, and interpreting data collected and generated by computer network systems. Emphasis is placed on the analysis of data and practices associated with management of system information and event logs from a security perspective. Topics include network security monitoring (NSM), security information and event management (SIEM) technology, logging implementation, management, and retention, continuous monitoring (CM) and threat modeling as well as data analysis for identifying, responding to, and preventing attacks. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 430 Applied Intrusion Detection and Analysis

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a hands-on study of methodologies used to analyze network traffic in order to identify intrusions. Emphasis is placed on the theoretical and practical analysis of network activity to deem if it is noteworthy or a false indication of breach. Topics include common application protocols, analyzing network behavior to detect breaches, strengths and limitations of intrusion detection systems (IDS) and other monitoring tools as well as visualizing data traffic to identify patterns and anomalies. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 440 Deconstructing Malware

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a hands-on study of methodologies used to reverse-engineer malicious software (malware). Emphasis is placed on the analytical ability to examine inner workings of malware in the context of forensic investigations, incident response, and systems administration. Topics include data files and browser scripts analysis, fundamental behavioral analysis of memory forensics and malware code, and concepts for reverse engineering common malware. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 450 Network Forensics

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a hands-on study of methodologies used in network forensics examinations. Emphasis is placed on building practical experience through virtual lab exercises simulating real-world scenarios covering investigation and data recovery in networks. Topics include physical interception, traffic acquisition and analysis, and wireless attacks. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 460 Digital Forensics

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a theoretical and practical study of methodologies used to conduct forensics examinations of digital and mobile devices. Emphasis is placed on comprehensive knowledge of digital forensics and adherence to the law. Topics include techniques used in digital investigations, root cause analysis, collection and documentation of relevant information, and legal compliance. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 500 Cyber Incident Response

36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: CYDA 450 with a Grade of "C" or better, or equivalent and CYDA 460 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a hands-on study of methodologies used in responding to cyber incidents. Emphasis is placed on the analytical ability to identify assets and resolve network and host cybersecurity issues by applying knowledge and skills required of a cybersecurity first responder. Topics include asset identification, security control implementation, event detection and response execution, and incident and disaster recovery. This course is designed for students in the Cyber Defense and Analysis program. (Prep for CFR - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

CYDA 510 Disaster Response and Recovery
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a project-based study of methodologies used to ensure business continuity and protect vital operations, facilities, and assets. Emphasis is placed on the skills needed to identify mission-critical continuity needs and develop a disaster recovery plan (DRP) to protect an organization from constant risk of disruption from cyber threats. Topics include evaluating risks and conducting business impact analysis (BIA), developing and implementing a DRP, crisis management and emergency operations as well as critical infrastructure and vital records recovery. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 520 Cyber Threat Intelligence (CTI)
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an interactive study of data an organization uses to understand the previous, current, and future threats targeting an organization. Emphasis is placed on theoretical and practical skills to conduct a threat intelligence program. Topics include organizational strategy and planning; data collection, analysis, and threat extractions; and informational sharing and situational awareness. This course is designed for students in the Cyber Defense and Analysis program.

AA/AS; CSU.

CYDA 530 Advanced Security Implementation and Management
36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a hands-on study of methodologies used in the assessment and management of risk to data and information systems. Emphasis is placed on deep technical and managerial knowledge and skills to design, develop, and manage an organization's overall security posture. Topics include security and risk management, asset security, security architecture and engineering, communication and network security, identity and access management (IAM), Security Assessment and Testing, and Security Operations as well as software development security. This course is designed for students in the Cyber Defense and Analysis program. (Prep for CISSP - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

CYDA 540 Critical Infrastructure and Supply Chain Protection
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is a study of theories and foundations used to achieve and assess the protection of critical infrastructure and supply chain operations. Emphasis is placed on the optimization of resources to protect key infrastructure components of a nation. Topics include network science, complexity theory, risk analysis, modeling and simulation, and individual sectors. This course is designed for students in the Cyber Defense and Analysis program.

FT; AA/AS; CSU.

CYDA 550 Systems and Network Auditing
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an interactive study of the application of a risk-based approach to planning, executing, and reporting on audit engagements. Emphasis is placed on the skills needed to audit, control, monitor, and assess an organization's information technology (IT) and business systems. Topics include information systems (IS) auditing process; IT governance; IS acquisition, development, and implementation; operations and business resilience; and protection of information assets. This course is designed for students in the Cyber Defense and Analysis program. (Prep for CISA - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

CYDA 560 Operational Security Architecture
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an in-depth study of methodologies used to design advanced security solutions using risk-based analytics. Emphasis is placed on the alignment of security architectures within the organizational context. Topics include governance, compliance, and risk management; security architecture modeling; infrastructure security; identity and access management; application security; and security operations. This course is designed for students in the Cyber Defense and Analysis program. (Prep for CISSP-ISSAP - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

CYDA 570 Cyber Defense and Analysis Capstone
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This project-oriented capstone course allows students to demonstrate their capability to detect, respond, and recover from a cyber incident. The instructor-approved project challenges students to integrate skills and knowledge from all program domains into one project that deals with a significant real-world cybersecurity incident. Students present their projects to a panel. This course is designed for students in the Cyber Defense and Analysis program.

AA/AS; CSU.

DANC-Dance

DANC 111 Global Dance Traditions
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to multiple cultures and global dance traditions. Each tradition is examined in terms of its particular set of techniques, styles, and rhythms. Special emphasis is placed on the exploration of movement characteristics of each cultural dance form. This course is intended for dance majors and minors as well as anyone interested in dance.

FT; AA/AS; CSU; UC.

DANC 112A Ballet I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 110 or DANC 110A.

Ballet I is a course in fundamental ballet technique focusing on correct body alignment and placement through warm-up, alignment, barre and center exercises in preparation for ballet movements. Students analyze, discuss, and critique the intent, movement, performance and theatrical elements of ballet movements at a fundamental level. This course is designed for dance majors and all students interested in Ballet.

FT; AA/AS; CSU; UC.

DANC 112B Ballet II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 110B.
Ballet II is a course in beginning ballet technique focusing on correct body alignment and placement through repetition at warm-up, alignment, barre and center exercises in preparation for ballet movements. Students analyze ballet dance in comparison to another dance genre, regarding thematic content or intent, music, and theatrical elements. This course is designed for dance majors and all students interested in Ballet.

FT; AA/AS; CSU; UC.

DANC 112C Ballet III
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 110C.
Ballet III is a course in intermediate ballet technique focusing on correct body alignment and placement through repetition at barre, en diagonale, and center work including movement initiation and weight change. Students analyze, discuss, and critique ballet in regards to the thematic content or intent, choreographic creativity and movement, dancer's performance abilities, and theatrical elements. This course is designed for dance majors and all students interested in Ballet.

FT; AA/AS; CSU; UC.

DANC 112D Ballet IV
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 110D.
Ballet IV is a course in Intermediate/Advanced ballet technique focusing on correct body alignment and placement through repetition at barre, en diagonale, and center work with an elevated level of various musical and movement textures, complex rhythms and emotional performance qualities. Students analyze, discuss, and critique ballet in regards to the thematic content or intent, choreographic creativity and movement, dancer's technical and performance abilities, choreographic structure, lighting design, music or sound design, mood conveyed and audience response. This course is designed for dance majors and all students interested in Ballet.

FT; AA/AS; CSU; UC.

DANC 117A Tap Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 115 or DANC 115A.

This course introduces tap dance technique at the fundamental level. Instructions focuses on vocabulary, rhythms, balance studies and improvisations through warm-up, center floor combinations, rhythmic pattern exercises, in preparation for fundamental tap dance. Students explore and analyze dance styles, thematic content or intent, and theatrical elements at a fundamental level. This course is designed for dance and theater majors and all students interested in tap dance.

FT; AA/AS; CSU; UC.

DANC 117B Tap Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 117A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 115B
This course introduces tap dance technique at the beginning level. Instructions focuses primarily on the rhythm tap style however, other tap styles are explored. Students practice beginning tap dance skills; rhythms, including swing and Latin; syncopation; time steps; short combinations; and stylings. The course includes an introduction to the history and performance of tap dance. This course is designed for dance and theater majors and all students interested in Tap.

FT; AA/AS; CSU; UC.

DANC 117C Tap Dance III
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 117B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 115C.
This Course is a course in intermediate tap technique and is designed for students who have mastered basic tap dance skills. Students focus on analyzing thematic content, and choreographic creativity in tap movement. Students explore group improvisation exercises, demonstrating active, well-timed participation and the use of interlocking rhythms. Students practice new and more complicated rhythms, movement coordination's and skills. The course presents a variety of musical forms related to tap dance. This course is designed for dance and theater majors and all students interested in Tap.

FT; AA/AS; CSU; UC.

DANC 117D Tap Dance IV
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 117C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 115D.
This is a course in advance tap dance technique. This course is designed for students who want to further their mastery of Tap dance. Focus will be on increasing the speed and accuracy of execution of master tap routines and developing improvisation techniques. This course is designed for dance and theater majors and all students interested in Tap.

FT; AA/AS; CSU; UC.

DANC 122A Hip Hop I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 120 or DANC 120A
This course is an introduction to Hip Hop dance. Emphasis is placed on fundamental Hip Hop technique and basic foundational party dances. This course is designed for dance majors and all students interested in Hip Hop dance.

FT; AA/AS; CSU; UC.

DANC 122B Hip Hop II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 122A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 120B
This course is the second in a series of Hip Hop dance courses. Emphasis is placed on beginning Hip Hop technique, rhythms, and styles. This course is designed for dance majors and all students interested in Hip Hop dance.

FT; AA/AS; CSU; UC.

DANC 122C Hip Hop III
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 122B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 120C
This is the third in a series of Hip Hop dance courses. Emphasis is placed on intermediate Hip Hop dance technique, choreography, and breakin' foundations. This course is designed for dance majors and all students interested in Hip Hop dance.

FT; AA/AS; CSU; UC.

DANC 122D Hip Hop IV
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 122C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 120D.
This course is the fourth in a series of Hip Hop dance courses. Emphasis is placed on intermediate/advanced Hip Hop dance technique, complex choreography, and cypher freestyling. This course is designed for dance majors and all students interested in Hip Hop dance.

FT; AA/AS; CSU; UC.

DANC 125A Latin American Dance I
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Latin American Dance I is a beginning level survey course in a variety of established and emerging partnered dances of Latin American origin with an emphasis on Salsa dance and introductory techniques, styles, rhythms, leading or following skills, movement patterns and history of selected Latin dances. This course is designed for students who wish to explore dances from other cultures and partnered dance.

FT; AA/AS; CSU; UC.

DANC 125B Latin American Dance II
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 125A with a Grade of "C" or better, or equivalent
Latin American Dance II is an advanced beginning to intermediate survey course in a variety of established and emerging partnered dances of Latin American origin with an emphasis on Salsa dance, including leading and following, intermediate Salsa styling, technique, variations, and history. When this course is offered for three hours a week, additional time is utilized in practice and perfection of movement variations and styling. This course is designed for students who wish to explore dance movements from other cultures and partnered dance.

AA/AS; CSU; UC.

DANC 127 Movement for Wellness
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
This course builds on basic concepts of anatomy, physiology, and kinesiology to introduce traditional and non-traditional approaches to movement and injury prevention. Emphasis is placed on the following modalities: Yoga, Pilates, breath support, mindfulness meditation, Tai Chi and Qi Gong, foam roller, and theraband. Students are also introduced to Feldenkrais, Alexander Technique, and Bartenieff fundamentals. Student skills and proficiencies are enhanced by supervised repetition of various body modalities techniques, alignment and core stabilization, and body connections. This course is intended for dance majors and all students interested in wellness through movement.

FT; AA/AS; CSU.

DANC 130A Dance Repertoire
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 130
This course is an introduction to the choreography of renowned choreographers. Emphasis is placed on performing selected choreography in ballet, modern, jazz, tap, and musical theater. This course is intended for dance majors and minors as well as all students interested in dance.

FT; AA/AS; CSU; UC.

DANC 137A Jazz Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 135 or DANC 135A.

This course is an introduction to jazz dance. Emphasis is placed on fundamental jazz dance technique, vocabulary, and performance concepts. This course is designed for dance majors and all students interested in jazz dance.

FT; AA/AS; CSU; UC.

DANC 137B Jazz Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 137A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 135B.
This course is the second in a series of Jazz dance courses. Emphasis is placed on beginning Jazz dance technique, turns, rhythms and styles. This course is designed for dance majors and all students interested in Jazz dance.

FT; AA/AS; CSU; UC.

DANC 137C Jazz Dance III
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 137B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 135C.
This course is the third in a series of Jazz dance courses. Emphasis is placed on intermediate Jazz dance technique, turns, rhythms and styles. This course is designed for dance majors and all students interested in Jazz dance.

FT; AA/AS; CSU; UC.

DANC 137D Jazz Dance IV
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 137C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 135D.
This course is the fourth in a series of Jazz dance courses. Emphasis is placed on advanced Jazz dance technique, turns, rhythms and styles. This course is designed for dance majors and all students interested in Jazz dance.

FT; AA/AS; CSU; UC.

DANC 142A Modern Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 140 or PHYE 140 or DANC 140A.
This course is an introduction to modern dance. Emphasis is placed on fundamental modern dance vocabulary, concepts, and techniques. Students are introduced to basic elements of choreography and history of early modern dance contributors. This course is designed for dance majors and all students interested in modern dance.

FT; AA/AS; CSU; UC.

DANC 142B Modern Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 140B
This course is the second in a series of modern dance courses. Emphasis is placed on beginning dance vocabulary, concepts, and techniques. Students manipulate elements of choreography and are introduced to basic anatomy. Topics include perspectives on modern dance history and techniques, with a focus on second generation dance artists and an introduction to African-American artists. This course is designed for dance majors and minors as well as students interested in modern dance.

FT; AA/AS; CSU; UC.

DANC 142C Modern Dance III
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 142B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 140C
This course is the third in a series of modern dance courses. Emphasis is placed on intermediate dance vocabulary, concepts, techniques, and anatomy. Students manipulate elements of choreography and rhythmic studies in movement. Topics include perspectives on modern dance history and techniques with a focus on third generation modern dance artists and an introduction to post-modern concepts. This course is designed for dance majors and minors as well as students interested in modern dance.

FT; AA/AS; CSU; UC.

DANC 142D Modern Dance IV
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 142C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 140D
This course is the fourth in a series of modern dance courses. Emphasis is placed on intermediate-advanced dance vocabulary, concepts, technique, and anatomy. Students manipulate and refine elements of choreography and rhythmic studies in movement. Topics include perspectives on modern dance history and techniques with a focus on contemporary modern dance artists. This course is designed for dance majors and minors as well as all students interested in modern dance.

FT; AA/AS; CSU; UC.

DANC 145A Ballroom Dance I
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 145
Ballroom Dance is an introductory course focusing on the fundamentals of partner dance and basic steps in a variety of social and ballroom dance genres. Emphasis is placed on basic kinesthetic concepts of connection to partner with correct body placement and physical compression as it pertains to either leading or following. Dance analysis will include exploration of dance style, thematic content or intent, and theatrical elements. This course is designed for dance and drama majors, as well as students who wish to explore historical dance.

FT; AA/AS; CSU; UC.

DANC 145B Ballroom Dance II
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 145A with a Grade of "C" or better, or equivalent
Ballroom Dance II is the second in a series of ballroom dance courses focusing on partner dance and steps. Emphasis is placed on frame, style, partnering technique and variations in a variety of ballroom genres at the beginning through intermediate level, including concepts of connection to partner with correct body placement and physical compression as it pertains both leading and following. Dance analysis will include exploration of dance style, thematic content or intent, music, mood conveyed and theatrical elements. This course is designed for dance and drama majors, as well as students who wish to explore historical dance.

FT; AA/AS; CSU; UC.

DANC 150A Dance Making: Ballet
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: DANC 253 with a Grade of "C" or better, or equivalent and DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 150
This course is a practical exploration of the processes and elements used in the art of dance making in the area of Ballet. Within a workshop format, students work under close faculty supervision to research the historical masterpieces of Ballet and reinterpret them in a contemporary light. Emphasis is placed on concept creation, use of story and movement, improvisation, dance patterns, revision and refinement to develop an original dance in a fixed, repeatable form. This course is designed for dance majors and all students interested in dance and choreography.

FT; AA/AS; CSU; UC.

DANC 151A Dance Making: Jazz
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: DANC 253 with a Grade of "C" or better, or equivalent and DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 151
This course is a practical exploration of the processes and elements used in the art of dance making in the area of Jazz. Within a workshop format, students work under close faculty supervision to research Jazz, including its African roots, its place in American musical theatre, and the influence of Funk, Hip-Hop and Latin rhythms, in order to create an original piece. Emphasis is placed on concept creation, use of story and movement, improvisation, dance patterns, revision and refinement to develop an original dance in a fixed, repeatable form. This course is designed for dance majors and all students interested in dance and choreography.

FT; AA/AS; CSU; UC.

DANC 152A Dance Making: Modern
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: DANC 253 with a Grade of "C" or better, or equivalent and DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 152
This course is a practical exploration of the processes and elements used in the art of dance making in the area of modern dance. Within a workshop format students work under close faculty supervision to research the 20th century pioneers of modern dance and 21st century trends to create an original, emotive modern dance. Emphasis is placed on concept creation, use of story, emotion and movement, improvisation, dance patterns, revision, and refinement to develop an original dance in a fixed, repeatable form. This course is designed for dance majors and all students interested in dance and choreography.

FT; AA/AS; CSU; UC.

DANC 153A Dance Making: Dance Theatre
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: DANC 253 with a Grade of "C" or better, or equivalent and DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 153
This course is a practical exploration of the processes and elements used in the art of dance making in the area of Dance Theatre. Within a workshop format, students work under close faculty supervision to integrate multimedia, text, spoken word, and/or film with dance to create an original piece of Dance Theatre. Emphasis is placed on concept creation, use of story and movement, improvisation, dance patterns, revision, and refinement to develop an original dance in a fixed, repeatable form. This course is designed for dance majors and all students interested in dance and choreography.

FT; AA/AS; CSU; UC.

DANC 160A Pilates - Stretch and Conditioning
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Pilates is a course in stretch and conditioning based on exercises and concepts developed by Joseph H. Pilates. This course includes beginning mat work exercises to improve strength and flexibility. This course is of interest to dancers, athletes, and anyone seeking an understanding of Pilates exercises and concepts.

FT; AA/AS; CSU; UC.

DANC 160B Pilates - Alignment and Correctives
8-9 hours lecture/24-54 hours lab; 1-1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 160A with a Grade of "C" or better, or equivalent
Pilates is a course in alignment and correctives based on exercises and concepts developed by Joseph H. Pilates. This course includes intermediate mat exercises to improve body alignment, strength, flexibility, control, coordination, and breathing. This course is of interest to anyone seeking an understanding of Pilates exercises and concepts as well as dancers and athletes.

FT; AA/AS; CSU; UC.

DANC 176A Dance Improvisation
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 177 or DANC 177A.

This course is an introduction to improvisational dance. Emphasis is placed on space, time and energy as means for creating improvisational dance at the beginning level. This course is intended for all students interested in the use of improvisational movement in dance and non-dance settings.

FT; AA/AS; CSU; UC.

DANC 176B Dance Improvisation II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 176A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 177B.
This course is an exploration of improvisational dance at the intermediate level. Emphasis is placed on space, time, and energy as a means of creating improvisational dance in structured and unstructured settings. Students utilize and refine improvisational dance skills in the creation of improvisational dance compositions. This course is intended for dance majors and all students interested in the use of improvisational movement in dance and non-dance settings.

FT; AA/AS; CSU; UC.

DANC 178A Advanced Commercial Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DANC 178
This course is a study and application of the ideas, styles, and works of commercial dance choreographers. Emphasis is placed on the techniques and choreographic methodologies of American dance masters Jack Cole, Hermes Pan, Eugene Loring, and Matt Mattox. Instruction includes student performance of historical commercial dance repertoire. This course is intended for students majoring in dance.

FT; AA/AS; CSU; UC.

DANC 178B Advanced Commercial Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
This course is a study and application of the ideas, styles, and works of commercial dance choreographers on Broadway and in film. Emphasis is placed on the techniques and choreographic methodologies of American dance masters Bob Fosse, Jerome Robbins, Michael Kidd, and Michael Bennett. Instruction includes student performance of historical commercial dance repertoire. This course is intended for students majoring in dance.

FT; AA/AS; CSU; UC.

DANC 179A Advanced Classical Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112D with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 179.
This class compares, discusses and analyzes the movement principles of the Royal and the French styles of classical dance. Advanced Classical dance focuses on movement design and artistic intent of the Royal and French methods. This course is designed for dance majors and all students interested in Advanced Classical dance.

FT; AA/AS; CSU; UC.

DANC 179B Advanced Classical Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112D with a Grade of "C" or better, or equivalent
This class compares, discusses and analyzes the movement principles of the Cecchetti and the Russian styles of Classical dance. Advanced Classical focus on movement design, artistic intent, and intellectual property of the Cecchetti and Russian methods. This course is designed for dance majors and all students interested in Advanced Classical dance.

FT; AA/AS; CSU; UC.

DANC 180A Advanced Contemporary Dance I
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 142D with a Grade of "C" or better, or equivalent
This course is a study and application of the ideas, styles, and significant works of influential Contemporary dance choreographers from the period 1900-1960. Emphasis is placed on the techniques and choreographic methodologies of Contemporary dance pioneers, such as Martha Graham, Doris Humphrey, Lester Horton, and Merce Cunningham. Student performances include reproduction of historical Contemporary dance repertoire as well as original choreography based on historical Contemporary dance choreography and techniques. This course is intended for students majoring in dance.

FT; AA/AS; CSU; UC.

DANC 180B Advanced Contemporary Dance II
8-9 hours lecture/48-54 hours lab; 1.5 units
Grading: Letter Grade Only
Advisory: DANC 180A with a Grade of "C" or better, or equivalent
This course is a study and application of the ideas, styles, and significant works of one or more influential choreographers from the period 1960-present. Emphasis is placed on the movement concepts and choreographic practices in various geographic regions around the world, such as contemporary dance in Western Europe, Dance Theater in Germany, Gaga in Israel, and sensory practices in America. Instruction includes investigation and application of contemporary dance styles. This course is intended for students majoring in dance.

FT; AA/AS; CSU; UC.

DANC 181 History of Dance
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 PHYE 260
This course is a study of the history of dance. Emphasis is placed on the cultural, social and political aspects of dance in historical perspective. Students are challenged to broaden their aesthetic perceptions as they analyze and compare the influence of diverse cultures on western dance forms. Topics include the language of dance, dance technique and choreography. This class is intended for all students interested in dance and the history of dance.

FT; AA/AS; CSU; UC.

DANC 183 Music for Dance
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Music for Dance introduces the fundamentals of music through the study of terminology, notation, elements and form as they relate to movement. This course explores the interrelationship of music and dance and provides students the opportunity to compose and perform rhythmic and movement projects. This course is of interest to anyone seeking an understanding of music and movement fundamentals as well as dance majors. This course is designed to fulfill lower division requirements for dance majors.

FT; AA/AS; CSU; UC.

DANC 253 Choreography
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: DANC 112A with a Grade of "C" or better, or equivalent or DANC 122A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 116
Choreography is a course that explores the theories and elements utilized in the creative process of dance composition. Emphasis is placed on student application of choreographic concepts through the development of movement compositions. This course is designed to fulfill lower division requirements for dance majors.

FT; AA/AS; CSU; UC.

DANC 261A Dance Performance I
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: DANC 112A with a Grade of "C" or better, or equivalent or DANC 117A with a Grade of "C" or better, or equivalent or DANC 122A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DANC 261
This is the first in a series of dance performance courses. This course provides the opportunity for students to apply fundamental skills in ballet, jazz, tap, Hip Hop, and modern dance in concerts and community performances. Emphasis is placed on student application of dance, staging, and performance techniques in faculty choreographed works for large ensembles. This course is designed for dance majors and students interested in dance performance.

FT; AA/AS; CSU; UC.

DANC 261B Dance Performance II
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: DANC 112A with a Grade of "C" or better, or equivalent or DANC 117A with a Grade of "C" or better, or equivalent or DANC 122A with a Grade of "C" or better, or equivalent or DANC 137A with a Grade of "C" or better, or equivalent or DANC 142A with a Grade of "C" or better, or equivalent
This is the second in a series of dance performance courses. This course provides the opportunity for students to apply beginning skills in ballet, jazz, Hip Hop, tap, and modern dance in concerts and community performances. Emphasis is placed on student application of dance, staging, and performance techniques in student choreographed works for large ensembles. This course is designed for dance majors and students interested in choreography and dance performance.

FT; AA/AS; CSU; UC.

DANC 261C Dance Performance III
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: DANC 112B with a Grade of "C" or better, or equivalent or DANC 117B with a Grade of "C" or better, or equivalent or DANC 122B with a Grade of "C" or better, or equivalent or DANC 137B with a Grade of "C" or better, or equivalent or DANC 142B with a Grade of "C" or better, or equivalent
This is the third in a series of dance performance courses. This course provides the opportunity for students to apply intermediate skills in ballet, jazz, tap, Hip Hop, and modern dance in concerts and community performances. Emphasis is placed on student application of dance, staging, and performance techniques in faculty choreographed works for solos and small groups. This course is designed for dance majors and students interested in dance performance.

FT; AA/AS; CSU; UC.

DANC 261D Dance Performance IV
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: DANC 112C with a Grade of "C" or better, or equivalent or DANC 117C with a Grade of "C" or better, or equivalent or DANC 122C with a Grade of "C" or better, or equivalent or DANC 137C with a Grade of "C" or better, or equivalent or DANC 142C with a Grade of "C" or better, or equivalent
This is the fourth in a series of dance performance courses. This course provides the opportunity for students to apply advanced skills in ballet, jazz, Hip Hop, tap, and modern dance in concerts and community performances. Emphasis is placed on student application of dance, staging, and performance techniques in student choreographed works for solos and small groups. Students choreograph and produce all elements of performances in preparation to transfer to a university. This course is designed for dance majors and students interested in choreography and dance performance.

FT; AA/AS; CSU; UC.

DANC 271A Stage Costuming for Dance
48-108 hours lab; 1-2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DANC 271
This production oriented course introduces students to the techniques of costume design and organization for a full dance production. Emphasis is placed on costume design, modification, and craft techniques, as well as on the organizational structure required for costume production for a staged dance performance. This course is intended for dance majors and all students interested in costume production for the stage.

FT; AA/AS; CSU; UC.

DANC 271B Makeup for Dance Productions
48-108 hours lab; 1-2 units
Grading: Letter Grade Only
This production oriented course introduces students to the materials and techniques used in stage makeup design and application for a full dance production. Emphasis is placed on vocabulary pertinent to the use of dance makeup and participation in the makeup crew for a full dance department production. This course is intended for dance majors and all students interested in makeup for the stage.

FT; AA/AS; CSU; UC.

DANC 271C Lighting Design for Dance Production
48-108 hours lab; 1-2 units
Grading: Letter Grade Only
This production oriented course introduces students to the principles and practice of stage lighting. Emphasis is placed on design and drafting of lighting plots and the operation of basic lighting and electrical stage equipment. Students participate in lighting design and execution for a full department dance production. This course is intended for dance majors and all students interested in lighting for the stage.

FT; AA/AS; CSU; UC.

DANC 271D Sound Design for Dance Production
48-108 hours lab; 1-2 units
Grading: Letter Grade Only
This production oriented course introduces students to the principles and practice of theater sound and its technical operation. Emphasis is placed on the basic aesthetic and technical aspects of sound design for the theater. Students participate in crew sound for a full department dance production. This course is intended for dance majors and all students interested sound for the stage.

FT; AA/AS; CSU; UC.

DANC 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Pass/No Pass Only
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 dance. It is not intended to replace an existing course in the discipline. Projects may include extended research on dance subjects addressed in scheduled dance classes as well as topics outside the dance curriculum. The culmination of the course may include a written paper, presentation, or performance. An Independent Study has to be arranged with, approved and monitored by a member of the dance faculty.

FT; AA/AS; CSU.

DRAM-Dramatic Arts

DRAM 103 Acting for Non-majors
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 DRAM 130
This course introduces students to improvisational acting, treating acting as process-centered. The instructor leads the students using a variety of exercises to imagine, enact and reflect upon human experiences, emphasizing problem-solving skills in group improvisational work. This course is designed for introductory drama students and anyone who is interested in studying acting.

FT; AA/AS; CSU.

DRAM 105 Introduction to Dramatic Arts
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 survey course introduces fundamental practices and creative processes in the dramatic arts. Through experimentation and examination, students gain greater insight and appreciation of the dramatic arts as an agent of change that is vital to the humanities. Aspects of theatre production and collaboration are covered through lecture, group discussion and participation. This course is designed for dramatic arts majors and all students interested in the dramatic arts.

FT; AA/AS; CSU; UC; C-ID: THTR 111.

DRAM 106 Voice-Over Performance
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 106, RTVF 106, DRAM 265 or RTVC 265.
This course is practical study of the voice-over industry. Emphasis is placed on voice-over performance techniques for radio and television commercials, multimedia, and other audio and video presentations. Students are expected to read aloud extensively as well as to record their voice for critique and self-evaluation. Topics include an overview of the voice-over business, marketing, current technology, and professional work and studio etiquette as well as legal and ethical issues in voice-over performance. Social and cultural constructs, economics, technology, and equity and social justice are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

DRAM 107 Study of Filmed Plays
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of cinematic adaptations of plays, comparing stage and screen versions in the areas of form and structure, writing, and production. Emphasis is placed on developing students' appreciation for dramatic art and providing practice in the art of theatre criticism. This course is designed for Drama majors and any student interested in the Humanities.

FT; AA/AS; CSU; UC.

DRAM 108 Playwriting
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: Eligible to enroll in a transferable English composition course.
This course gives students an opportunity to write dramatic material for the theatre. Topics and exercises include exploring dialogue, monologue, exposition, autobiography, writing for various voices, and other areas related to playwriting. Students are required to write scenes and monologues that explore issues of structure, in order to develop a technique to explore individual and traditional dramatic ideas and processes. This class is designed for students majoring in theatre and those students interested in the Humanities.

FT; AA/AS; CSU; UC.

DRAM 109 Theatre and Social Issues
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the role of theatre in society within its cultural, aesthetic, economic, and political manifestations. Emphasis is placed on increasing students' understanding of politics in theatrical representation and comprehension of theatre as a tool for social change. Topics include the nature and function of theatrical representation, moving to historical and contemporary issues in American and World cultures. This class is designed for students majoring in theatre and those students interested in the Humanities and/or social and theoretical issues.

FT; AA/AS; CSU; UC.

DRAM 111 Chicana/o Theatre
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of Chicana/o drama in the United States and Mexico from 1975 to the present. Emphasis is placed on the historical roots, techniques, styles, and dramatic literature. It explores new trends, influences, and developments in playwriting, directing, and performance styles. This course examines issues facing the Mexican-American community through dramatic forms, focusing on the advent of professionally-oriented Chicana/o theatre, examining significant plays, playwrights, and the theatre groups that produced those plays. This course is designed for Chicana/o Studies majors, Dramatic Arts majors, and anyone interested in literature or theatre.

FT; AA/AS; CSU; UC.

DRAM 118 Intermediate Playwriting
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: DRAM 108 with a Grade of "C" or better, or equivalent
This course examines themes, structures, and effective material that is written for the theatre at the intermediate level. Topics and exercises include the exploration of dialogue and monologue composition, exposition, autobiography, political and domestic social issues, writing for the opposite gender, and structure. Students are required to write scenes and plays that facilitate the development of a technique that is both individual and based on traditional dramaturgical ideas. Students present a folio of plays as well as critical analyses of plays and other works associated with theatre and playwriting. This course is designed for students majoring in theatre and those interested in creative writing and the humanities.

FT; AA/AS; CSU.

DRAM 119 Film and Television Performance
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: DRAM 132 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 119 or RTVF 119 or DRAM 265 or RTVC 265
This course introduces students to the skills required for on-camera performing techniques as used in the motion picture and television industry. Students participate in the selection, rehearsal, and on-camera performance of material from television and motion picture scripts including drama, sitcoms, daytime dramas, and commercials. Emphasis is placed on cold-reading taped audition skills, improvisational and interview techniques, and the fundamental acting techniques required for on-camera performance. Legal and ethical issues in film and television performance, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for theatre, television, and film majors.

FT; AA/AS; CSU.

DRAM 123 Beginning Stagecraft
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 125
This course is a hands-on introduction to technical theatre production. Emphasis is placed on construction, painting, rigging, placement, and manipulation of stage scenery, lighting equipment, sound, projections, properties, and the organization and management of stage activity and stagecraft technology. This course is designed for theatre majors and students interested in backstage production.

FT; AA/AS; CSU; UC; C-ID: THTR 171.

DRAM 124 Makeup for the Stage
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 122
This course is an introductory hands-on study of the materials and techniques used in stage and production makeup design and application. Emphasis is placed on the acquisition of a lexicon pertinent to the history and use of makeup in the theater as well as on the actual application of stage makeup in the classroom and as a member of the makeup crew for a theatrical and video production. This course is intended for students majoring in drama, theatre, film, radio and television and cosmetology as well as anyone interested in makeup for the stage.

FT; AA/AS; CSU; UC; C-ID: THTR 175.

DRAM 126 Advanced Stagecraft
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: DRAM 123 with a Grade of "C" or better, or equivalent
This course is an advanced study of technical stage production and scene technology. Emphasis is placed on the methods and practices of technical theory and on practical, hands-on experience. Topics include theater design, stage decor and lighting, and the synthesis of all elements of stagecraft within an environment of actual stage production. Students develop crew leadership skills as they create and construct set designs and operate stage equipment for all Dramatic Arts productions throughout the semester. This course is designed for Theatre majors and anyone interested in stagecraft.

FT; AA/AS; CSU; UC.

DRAM 127 Sound For Theatre
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to the basic principles of audio production and the craft of sound design. Topics include technique, theory and procedures necessary to develop sound, music and effects integrated into theatre productions. This course is intended for the transfer student planning a major in Dramatic Arts, desiring competency in technical theatre or those interested in developing a deeper understanding of sound design.

FT; AA/AS; CSU; UC.

DRAM 128 Stage Lighting Design
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an introduction to the principles and practice of stage and film lighting design. Emphasis is placed on the operation of basic lighting equipment, design, and digital drafting techniques. Technical preparation for other forms of production, such as outdoors, television, and movies is included. This course is intended for students majoring in Dramatic Arts or those interested in technical theatre.

FT; AA/AS; CSU; UC.

DRAM 129A Beginning Scene Painting
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 129
This course introduces students to basic techniques and materials used in the painting of scenery for the stage. Emphasis is placed on techniques in faux painting, murals, trompe l'oeil (trick the eye), and decorative motifs for theatre. Students experiment with color mixing, base, layout, ink, lay-in detail, and the use of brushes and tools for application in theatre settings. This course is designed for drama majors, art students, and anyone interested in painting on a large scale.

FT; AA/AS; CSU; UC.

DRAM 129B Intermediate Scene Painting
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: DRAM 129A with a Grade of "C" or better, or equivalent
This course is an intermediate study in the art and practice of theatrical scene painting. Emphasis is placed on the creation of large scale projects designed to allow students the opportunity to apply basic scene painting skills while experimenting with intermediate techniques and tools, including liner and aerial perspective and a variety of spray guns. Students take on leadership roles in scene painting for theatrical productions while developing communication and collaboration skills. The course is designed for students majoring in drama, art, or anyone interested in painting on a large scale.

FT; AA/AS; CSU; UC.

DRAM 132 Beginning Acting
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 131A
This course is a beginning level study, practice and execution of the fundamentals of acting designed to develop a foundation in basic acting technique. Emphasis is placed on the effective communication of ideas and emotions by a dramatic character to audience. Topics include staging techniques, improvisation, theater games, scenes, monologues, stage movement, and an introduction to the lexicon of acting for theater. This course is intended for students who are interested in developing basic acting techniques.

FT; AA/AS; CSU; UC; C-ID: THTR 151.

DRAM 133 Intermediate Acting
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: DRAM 132 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 131B
This course is an intermediate level study of the fundamentals of acting. Emphasis is placed on the use of scene work as a tool for sharpening the actor's skill. Students work on scenes by a variety of playwrights as they increase vocal, physical and emotional flexibility as well as their stage presence. This course is designed for students majoring in Drama and anyone interested in honing their acting skill.

FT; AA/AS; CSU; UC; C-ID: THTR 152.

DRAM 134 Beginning Voice for Actors
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a study of the foundations of vocal technique for actors. Emphasis is placed on breath, projection, resonators, and diction. Students apply voice technique through classical and modern monologues. This course is designed for drama majors, multilingual learners, and anyone interested in refining voice and articulation skills.

FT; AA/AS; CSU; UC.

DRAM 136 Theatre History I: Ancient Greece to the Renaissance
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the history of theatre from ancient Greece through the Renaissance. Emphasis is placed on the historical, political, cultural, and religious contexts within which plays were developed and performed. Topics include acting styles, theories and theorists, theatre architecture, representative plays and playwrights, production elements, and staging innovations. This course is intended for drama majors and students interested in history.

FT; AA/AS; CSU; UC; C-ID: THTR 113.

DRAM 137 Theatre History II: Restoration to the Present
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of theatre from the English Restoration to the present. Emphasis is placed on the historical, political, and cultural contexts within which plays were developed and performed. Topics include acting styles, theories and theorists, theatre architecture, representative plays and playwrights, production elements, and staging innovations. This course is intended for drama majors and students interested in history.

FT; AA/AS; CSU; UC.

DRAM 143 Beginning Costuming
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
This lecture and laboratory course emphasizes student involvement in the techniques and methodology of costume construction. Topics include practical experience in sewing, fabrics and their modification, costume craft techniques such as millinery, masks, footwear and accessories, and service on costume crews. Students explore costume production procedures with regards to time, budgets, and labor. This course is designed for students majoring in performance and technical theatre or anyone interested in clothing and fashion.

FT; AA/AS; CSU; UC; C-ID: THTR 174.

DRAM 153 Intermediate Costuming
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: DRAM 143 with a Grade of "C" or better, or equivalent or FASH 130 with a Grade of "C" or better, or equivalent
This lecture/laboratory course develops intermediate skills in theatrical costuming including costume design for various styles, historical research methods, costume construction, and fabric identification and modification. Emphasis is placed on the role of the costume designer from the pre-production/design phase to the execution of costume design for the stage. This course is designed for drama majors and anyone interested in costume design, cosplay, or fashion.

FT; AA/AS; CSU; UC.

DRAM 165 Introduction to Stage Movement
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 Drama 165A
This course is an introduction to basic techniques of movement for the stage. Emphasis is placed on the actor's body as an expressive instrument. Students acquire flexibility, strength, and physical repertoire of stage movement. This course is designed for drama and dance majors and anyone interested in honing stage movement skills.

FT; AA/AS; CSU; UC.

DRAM 205 The American Musical on Stage and Screen
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the American musical on stage and film with an emphasis on the evolution of this unique American art form. Students explore the role of social, political, and demographic changes on Musical Theatre from late-nineteenth century stage productions to recent live, filmed, and digital manifestations. This class is designed for Dramatic Arts majors, Film majors, and anyone with an interest in musical theatre.

FT; AA/AS; CSU; UC.

DRAM 240A Musical Theatre Repertoire I
192-216 hours lab; 4 units
Grading: Letter Grade Only
Limitation on Enrollment: Tryout or Audition.
This course is not open to students with previous credit for DRAM 251
This introductory class is designed for the rehearsal and performance of a play from the musical theatre repertoire. Emphasis is placed on rehearsal and performance as students are introduced to working in collaboration with directors, cast members, and production crew members on a musical theatre production. This course is intended for students majoring in drama, dance, music, and all students interested in participating in a musical theatre production.

FT; AA/AS; CSU; UC.

DRAM 240B Musical Theatre Repertoire II
192-216 hours lab; 4 units
Grading: Letter Grade Only
Advisory: DRAM 240A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition. This course is not open to students with previous credit for DRAM 251.

This course is designed for the intermediate level of rehearsal and performance of a play from the musical theatre repertoire. Emphasis is placed on rehearsal, performance, and the synthesis of singing, dancing and acting throughout the rehearsal and performance processes. This course is intended for students majoring in drama, dance, or music, and all students interested in participating in musical theatre production and performance.

FT; AA/AS; CSU; UC.

DRAM 240C Musical Theatre Repertoire III
192-216 hours lab; 4 units
Grading: Letter Grade Only
Advisory: DRAM 240B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition. This course is not open to students with previous credit for DRAM 251.

This course is designed for the intermediate-advanced level of rehearsal and performance of a play from the musical theatre repertoire. Emphasis is placed on refinement of the process through the development of one's work ethic. Students are expected to demonstrate professionalism and consistent practice throughout the rehearsal process. This course is intended for students majoring in drama, dance, or music, and all students interested in participating in musical theatre production.

FT; AA/AS; CSU; UC.

DRAM 240D Musical Theatre Repertoire IV
192-216 hours lab; 4 units
Grading: Letter Grade Only
Advisory: DRAM 240C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition. This course is not open to students with previous credit for DRAM 251.

This class is designed for the advanced level of rehearsal and performance of a play from the musical theatre repertoire. Emphasis is placed on professional decorum, adaptability, and leadership throughout the rehearsal and performance processes. This course is intended for students majoring in drama, dance, or music, and all students interested in participating in musical theatre production.

FT; AA/AS; CSU; UC.

DRAM 242A Rehearsal and Performance I
144-162 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DRAM 250
Tryout or Audition.
Obtain Permission Number from Instructor
This is the first in a series of courses in theatre production. Emphasis is placed on an introduction to the rehearsal and performance process of a departmental theatre production based on the unique aspects of the selected play. Topics include collaboration with directors, cast members, and production crew members. This course is intended for students majoring in drama and all students interested in participating in theatre production

FT; AA/AS; CSU; UC; C-ID: THTR 191.

DRAM 242B Rehearsal and Performance II
144-162 hours lab; 3 units
Grading: Letter Grade Only
Advisory: DRAM 242A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition.
Obtain Permission Number from Instructor
This is the second in a series of courses in theatre production. Emphasis is placed on an intermediate-level rehearsal and performance of a departmental theatre production based on the unique aspects of the selected play. Topics include a deeper analysis of the selected piece through researching the playwright, more thorough character development, and collaboration with directors, cast members, and production crew members. This course is intended for students majoring in drama and all students interested in participating in theatre production.

FT; AA/AS; CSU; UC.

DRAM 242C Rehearsal and Performance III
144-162 hours lab; 3 units
Grading: Letter Grade Only
Advisory: DRAM 242B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition.
Obtain Permission Number from Instructor
This is the third in a series of courses in theatre production. Emphasis is placed on an intermediate-advanced level of rehearsal and performance of a departmental theatre production based on the unique aspects of the selected play. Topics include a deeper analysis of the selected piece through more complex character arc explorations, receiving and incorporating feedback from the director/s, and role modeling effective collaboration with directors, cast members, and production crew members. This course is intended for students majoring in drama and all students interested in participating in theatre production.

FT; AA/AS; CSU; UC.

DRAM 242D Rehearsal and Performance IV
144-162 hours lab; 3 units
Grading: Letter Grade Only
Advisory: DRAM 242C with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Tryout or Audition.
Obtain Permission Number from Instructor
This is the fourth and final course in a series of courses in theatre production. This course prioritizes the advanced level of rehearsal and performance of a departmental theatre production based on the unique aspects of the selected play. Topics include a deeper analysis of the selected piece through research of its impact in historical and cultural contexts, creating more complex character creations and their relationships, effectively assisting the directors, taking on leadership roles in the production in collaboration with directors, cast members, and production crew members. This course is intended for students majoring in drama and all students interested in participating in theatre production.

FT; AA/AS; CSU; UC.

DRAM 243A Technical Theatre Practicum - Costume and Makeup
96-108 hours lab; 2 units
Grading: Letter Grade Only
This technical theatre practicum is designed to provide students with hands-on training in the intricacies of running a theatre production, with special emphasis on costume and makeup. Students work as part of the costume and makeup crew during the rehearsal and production processes for theatre or dance productions. This course is intended for students majoring in drama and all students interested in participating in the theatre production process.

FT; AA/AS; CSU; UC.

DRAM 243B Technical Theatre Practicum - Lighting and Sound
96-108 hours lab; 2 units
Grading: Letter Grade Only
This technical theatre practicum is designed to provide students with hands-on training in the intricacies of running a theatre production, with special emphasis on lighting and audio. Students work as part of the lighting and audio crew during the rehearsal and production processes for theatre or dance performances. This course is intended for students majoring in drama and all students interested in participating in the theatre production process.

FT; AA/AS; CSU; UC.

DRAM 243C Technical Theatre Practicum - Scenic
96-108 hours lab; 2 units
Grading: Letter Grade Only
This technical theatre practicum is designed to provide students with hands-on training in the intricacies of running a theatre production, with special emphasis on scenic elements. Students work as part of the scenic crew during the rehearsal and production processes for theatre or dance productions. This course is intended for students majoring in drama and all students interested in participating in the theatre production process.

FT; AA/AS; CSU; UC.

DRAM 243D Technical Theatre Practicum - Stage Management
96-108 hours lab; 2 units
Grading: Letter Grade Only
This technical theatre practicum is designed to provide students with hands-on training in the intricacies of running a theatre production, with special emphasis on stage management. Students work as part of the stage management crew during the rehearsal and production processes for theatre or dance productions. This course is intended for students majoring in drama and all students interested in participating in the theatre production process.

FT; AA/AS; CSU; UC.

DRAM 244A Theatre Workshop I
48-108 hours lab; 1-2 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This introductory class is designed for the rehearsal and performance of original, established, touring, or devised works. Aspects of theatre covered including acting, playwriting, and production support. This course is intended for introductory drama majors and all students interested in theatre arts.

FT; AA/AS; CSU.

DRAM 244B Theatre Workshop II
48-108 hours lab; 1-2 units
Grading: Letter Grade or Pass/No Pass
Advisory: DRAM 244A with a Grade of "C" or better, or equivalent
This class is designed for the intermediate level of rehearsal and performance of original, established, touring, or devised works. Various aspects of theatre are covered including acting, playwriting, directing, design, and production support. This course is intended for intermediate drama majors and all students interested in theatre arts.

FT; AA/AS; CSU.

DRAM 244C Theatre Workshop III
48-108 hours lab; 1-2 units
Grading: Letter Grade or Pass/No Pass
Advisory: DRAM 244B with a Grade of "C" or better, or equivalent
This class is designed for the intermediate-advanced level of rehearsal and performance of original, established, touring, or devised works. All aspects of theatre are covered including acting, directing, playwriting, design, and production support. This course is intended for intermediate-advanced drama majors and all students interested in theatre arts.

FT; AA/AS; CSU.

DRAM 244D Theatre Workshop IV
48-108 hours lab; 1-2 units
Grading: Letter Grade or Pass/No Pass
Advisory: DRAM 244C with a Grade of "C" or better, or equivalent
This class is designed for the advanced level of rehearsal and performance of original, established, touring, or devised works. All aspects of theatre are covered including acting, directing, playwriting, design, and production support. This course is intended for advanced drama majors and all students interested in theatre arts.

FT; AA/AS; CSU.

DRAM 270 Theatre Arts Internship / 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 a Theatre Arts-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 Dramatic and/or Theatre Arts.

FT; AA/AS; CSU.

DRAM 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
Advanced special work in dramatic arts: acting, design, lighting, film, business, makeup, costumes, direction or play production.

AA/AS; CSU.

DSGN: Design

DSGN 100 Introduction to Graphic Design
24-27 hours lecture/72-81 hours lab; 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 ARTG 100
This course explores the fundamentals of graphic design. Emphasis is placed on the principles and elements of design and their application to analog and digital media, including through the lens of diverse cultures. Topics include line, shape, color, texture, type, grid, pattern, graphic translation, and other foundational visual concepts. This course is intended for graphic design students, interaction design students, and anyone interested in graphic design.

FT; AA/AS; CSU.

DSGN 102 Digital Media I
24-27 hours lecture/72-81 hours lab; 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 ARTC 125 or ARTG 125
This course is the first in a series of digital media courses. Students explore the tools and principles used in the creation of digital media. Emphasis is placed on learning industry-standard software used in graphic design. Topics include vector imagery, raster imagery, layout tools, file formats, file management, typesetting, image manipulation, ethics, and other foundational digital media concepts. This course is intended for graphic design students, interaction design students, and anyone interested in graphic design.

FT; AA/AS; CSU; UC.

DSGN 104 Graphic Design History
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 ARTG 118
This course examines graphic design as an essential component of culture and history. Emphasis is placed on learning important design movements in the context of diverse cultural and historical perspectives. Topics include influential design figures and the impact of technology on design. This course is intended for graphic design students, interaction design students, and anyone interested in graphic design history.

FT; AA/AS; CSU; UC.

DSGN 106 Typography I
24-27 hours lecture/72-81 hours lab; 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 ARTG 106 or ARTG 265A
This course is the first in a series of courses about typography. Emphasis is placed on learning foundational type skills and applying them to solve typographic problems. Topics include type selection, styles, terminology, construction, classifications, typesetting, spacing, layout, hierarchy, accessibility, and history. Instruction incorporates both hand-rendering and computer tools. This course is intended for graphic design students, interaction design students, and anyone interested in typography.

FT; AA/AS; CSU; UC.

DSGN 120 Illustration
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
Advisory: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARTG 120
This course introduces students to illustration concepts in the context of graphic design. Topics include illustration techniques, tools, media, and workflows. Emphasis is placed on developing illustrations with conceptual thinking, cultural voice, and visual storytelling. This course is intended for graphic design students, interaction design students, and anyone interested in illustration.

FT; AA/AS; CSU.

DSGN 124 Page Layout

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTC 124 or ARTG 124

This course introduces students to the principles and strategies for creating effective design layouts. Emphasis is placed on concepts such as hierarchy, unity, and balance in two-dimensional space. Topics include layout software, grids, accessibility, and typographic systems in the context of design projects. This course is intended for graphic design students, interaction design students, and anyone interested in page layout.

FT; AA/AS; CSU; UC.

DSGN 143 Interaction Design I

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 143, ARTG 144, or ARTG 265B

This course is the first in a series of interaction design courses. Students explore the fundamentals of interaction design processes and methodologies in the context of website design. Emphasis is placed on using research and strategy to create strong information architecture and responsive website layouts. Topics include current industry software, research and strategy processes, accessibility, and prototyping. This course is intended for graphic design students, interaction design students, and anyone interested in interaction design.

FT; AA/AS; CSU.

DSGN 153 Interaction Design II

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Advisory: DSGN 143 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 153

This course is the second in a series of interaction design courses. Students explore the strategies and best practices that lead to successful mobile experiences. Emphasis is placed on creating design solutions that translate complex tasks and information into digital products that are user-friendly and elicit emotional responses. Topics include current user experience research and strategy, user interface design, prototyping, usability testing, and ethics. This course is intended for graphic design students, interaction design students, and anyone interested in interaction design.

FT; AA/AS; CSU.

DSGN 202 Digital Media II

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 126

This course is the second in a series of digital media courses. Students survey software and other tools used in the creation of still and time-based digital media. Emphasis is placed on building specialized design and software skills. Topics include product photography, photo editing and manipulation, compositing, motion graphics, and user interface animations. This course is intended for graphic design students, interaction design students, and anyone interested in digital media.

FT; AA/AS; CSU.

DSGN 203 Interaction Design III

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 143 with a Grade of "C" or better, or equivalent or DSGN 153 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 163

This course is the third in a series of interaction design courses. Students explore the design and development of websites through a series of design and technical workshops. Emphasis is placed on designing and developing responsive website layouts with engaging content. Topics include website planning and development, website frameworks, content management systems, accessibility, and website hosting. This course is intended for graphic design students, interaction design students, and anyone interested in interaction design.

FT; AA/AS; CSU.

DSGN 206 Typography II

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 206

This course is the second in a series of courses about typography. Emphasis is placed on using techniques and conceptual strategies to solve complex typographic problems. Topics include historical and contemporary letterforms, letterform construction, cultural typography, and the expressive potential of typography. This course is intended for graphic design students, interaction design students, and anyone interested in typography.

FT; AA/AS; CSU.

DSGN 210 Branding and Packaging

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 133

This course covers the application of design principles to branding and packaging systems. Students design a variety of logos, brand touchpoints, and packaging elements through a series of projects. Emphasis is placed on applying research and strategy to create compelling brand identity systems that have clear competitive differentiation. Topics include brand strategy, logo creation, packaging development, and the politics of design. This course is intended for graphic design students, interaction design students, and anyone interested in branding and packaging.

FT; AA/AS; CSU.

DSGN 213 Interaction Design IV

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 143 with a Grade of "C" or better, or equivalent or DSGN 153 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for ARTG 173

This course is the fourth in a series of interaction design courses. Emphasis is placed on discovering user needs through human-centered design processes. Topics include user experience research, user interface development, emerging and experimental media, inclusive design, and usability testing. Students identify valuable design opportunities and apply research and strategy techniques to document a range of potential solutions. This course is intended for graphic design students, interaction design students, and anyone interested in interaction design.

FT; AA/AS; CSU.

DSGN 216A Design Studio I

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent

This is the first in a series of courses that help design students build portfolio projects through professional experiences. Emphasis is placed on a strategic analysis of a specific target audience. Topics include custom typography, sustainable packaging systems, and design projects that follow real world constraints. This course is intended for graphic design and interaction design students.

FT; AA/AS; CSU.

DSGN 216B Design Studio II

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 216A with a Grade of "C" or better, or equivalent

This is the second in a series of courses that help design students build portfolio projects through professional experiences. Emphasis is placed on applying design skills to a collaborative and professional design project. Topics include performing a needs analysis, working in a diverse team, and client relations. This course is intended for graphic design and interaction design students.

FT; AA/AS; CSU.

DSGN 216C Design Studio III

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 216B with a Grade of "C" or better, or equivalent

This is the third in a series of courses that help design students build portfolio projects through professional experiences. Emphasis is placed on the individual execution of a complete client project. Topics include client relationships, design proposals, inclusive persona development, and the execution of a client project. This course is intended for graphic design and interaction design students.

FT; AA/AS; CSU.

DSGN 218 Internship

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: DSGN 143 with a Grade of "C" or better, or equivalent or DSGN 153 with a Grade of "C" or better, or equivalent or DSGN 206 with a Grade of "C" or better, or equivalent or DSGN 210 with a Grade of "C" or better, or equivalent

This course is a practical study of professional practices for graphic and interaction designers. Students gain real-world experience by applying for and completing an industry internship off site. Emphasis is placed on developing career skills for the graphic design and interaction design fields. Topics include self-promotion, contracts, professional networking, and ethics. This course is intended for graphic design students, interaction design students, and anyone interested in a design internship.

FT; AA/AS; CSU.

DSGN 222 Book Arts II

24-27 hours lecture/72-81 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: DSGN 100 with a Grade of "C" or better, or equivalent and DSGN 102 with a Grade of "C" or better, or equivalent and DSGN 104 with a Grade of "C" or better, or equivalent and DSGN 106 with a Grade of "C" or better, or equivalent and ARTF 174A with a Grade of "C" or better, or equivalent

This course is the second in a series of book arts courses. Emphasis is placed on contemporary and historical models that serve as departure points for innovative bindings. Topics include an exploration of both non adhesive and adhesive structures, incorporating various board attachments, sewing styles, and endbands. This course is intended for graphic design students, fine art students, interaction design students and anyone interested in book arts.

FT; AA/AS; CSU.

DSGN 248 Portfolio I
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: DSGN 143 with a Grade of "C" or better, or equivalent and DSGN 153 with a Grade of "C" or better, or equivalent and DSGN 124 with a Grade of "C" or better, or equivalent or DSGN 206 with a Grade of "C" or better, or equivalent and DSGN 210 with a Grade of "C" or better, or equivalent and DSGN 124 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARTG 155, ARTG 147, or ARTG 148A
This course is the first in a series of portfolio courses. Emphasis is placed on developing a body of work with an authentic style and cultural voice. Topics include design career preparation, personal identity systems, resumes, and portfolio websites. This course is intended for graphic design and interaction design students.

FT; AA/AS; CSU.

DSGN 258 Portfolio II
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: DSGN 248 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ARTG 147 or ARTG 148B
This course is the second in a series of portfolio courses. Emphasis is placed on revising, expanding, and showcasing existing projects to create a strategic body of work. Topics include advanced portfolio strategies, project development, portfolio website deployment, self promotion, job seeking, and industry ethics. This course is intended for graphic design and interaction design students.

FT; AA/AS; CSU.

DSGN 270 Work Experience in Design
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 experience for students employed in a design-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. 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 graphic design students, interaction design students, and anyone interested in the design industry.

FT; AA/AS; CSU.

DSGN 290 Independent Study in Design
48 - 162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is not open to students with previous credit for ARTG 290
This course is for students interested in individualized learning in the design field. It is not intended to replace an existing course in the discipline. Emphasis is placed on focused research, creating and completing projects, and/or exploring issues related to the design field. A written contract of specific activities and assignments to be completed are assessed and approved by the instructor. Regular meetings between the student and instructor are required to evaluate progress.

FT; AA/AS.

DSST: Disability Studies

DSST 101 Introduction to Disability 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 explores the field of disability studies. Topics include disability as a social, cultural, historical, and political phenomenon. Emphasis is placed on various and changing disability definitions, cultural meanings and representations, social justice and human rights issues, and current bioethical debates related to disability. This course is designed for students with or without disabilities who have an interest in social justice issues regarding disability.

FT; AA/AS; CSU; UC.

DSPS-Disability Support Programs and Services

DSPS 20 Introduction to Accessible Computers
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
This course introduces students with disabilities to accessible computer programs and equipment. The course provides an overview of software and hardware resources that allow disabled students to compete in educational and business settings.

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DSPS 21 Accessible Computing Lab
24-108 hours lab; 0.5-2 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for DSPS 076
This course teaches students how to use necessary adaptive hardware or software for computer access. Individualized training is provided for all instructional modules. This course is intended for students who would benefit from adaptive computer access.

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DSPS 27 Career Planning for Students with Disabilities
32-36 hours lecture; 2 units
Grading: Pass/No Pass Only
This course is designed to assist students with disabilities in acquiring an understanding of the world of work. Emphasis is placed on developing and pursuing goals for employment and on identifying community, state and national assistance resources. Throughout the course, students evaluate their individual career goals, analyze their job skills, research the job market and construct an effective resume and cover letter for prospective employers. Course material also emphasizes preparing students to meet the psychological, social and cognitive demands of employment.

FT.

DSPS 34 College Success Skills
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for Disabled Students Programs and Services (DSPS) 029
This course is designed to assist students with disabilities to achieve their educational goals by providing them with an orientation to the college campus, policies, procedures and support services such as financial aid, tutoring, counseling, computer labs, and career and transfer information. Emphasis is placed on time management, mental and physical health, study skills, self-advocacy, accommodations, and interpersonal relationships as they relate to individual disabilities and college success. Throughout the course, students clarify goals, develop an education plan and identify the courses, services and programs that will lead to their success.

FT.

DSPS 38 Math Strategies for the Learning Disabled
48-54 hours lecture; 3 units
Grading: Pass/No Pass Only
Limitation on Enrollment: Obtain Permission Number from Instructor DSPS 038 and DSPS 073 may be repeated three times for combined maximum credit.
This course is designed for students with verified disabilities related to math. It is taught as a lecture class that can be taken independently or in conjunction with Basic Math or Pre-Algebra. This class utilizes a strategies oriented approach for developing competency with fundamental mathematical operations and pre-algebra concepts.

FT.

DSPS 40 Individual Assessment and Educational Planning
8-9 hours lecture; 0.5 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for Disabled Students Programs and Services (DSPS) 050
This course teaches students about their individual learning aptitude as compared to measured academic achievement. Students use standardized achievement and aptitude assessment instruments in accordance with the California Community College Learning Disabilities Eligibility Model to create a learning profile related to community college academic demands. Other topics include individual cognitive processing strengths and weaknesses, compensatory learning strategies, study skills, and disability management. This course is intended for students who believe they may have a learning disability or those interested in exploring issues related to learning aptitudes.

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DSPS 43 Advanced Applied Study Strategies
24-54 hours lab; 0.5-1 units
Grading: Pass/No Pass Only
Limitation on Enrollment: Obtain Permission Number from Instructor DSPS 043 and DSPS 083 may be repeated three times for combined maximum credit.
This course is intended primarily for students needing advanced academic disability related support in addition to the campus wide academic support services currently available. The focus of this class is to provide individualized study assistance for students in mainstream degree applicable college classes. Emphasis is placed on the application of study strategies to a specific course. Both study strategies and assistive technology are utilized to meet the demands of a mainstream course content. Computer assisted instruction is used to review related basic skills instruction and to support research skill development.

DSPS 49 Writing Structured Paragraphs
32-36 hours lecture; 2 units
Grading: Pass/No Pass Only
This course is designed for students who demonstrate difficulty with written language. It is intended to prepare students who have a writing-related disability to more successfully meet the minimum college requirements for multi-paragraph essay writing. This course is unique for the highly structured and sequential strategies applied to essay writing. Additionally, the course emphasizes the application of assistive computer technology for facilitating organizational pre-writing strategies, document checking, and written language fluency.

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.

ECON 220 Economics of the Environment
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of major environmental issues from an economics perspective. Emphasis is placed on resource management. Market and government responses are evaluated and analyzed. International response to major environmental issues are explored. This course is designed for students interested in majoring in economics, sustainability, environmental science, political science, international studies, or related majors.

FT; AA/AS; CSU; UC.

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.

EDUC 150 Advanced Tutor Training
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Pass/No Pass Only
Advisory: EDUC 100 with a Grade of "C" or better, or equivalent
The course is designed to prepare college level persons for tutoring adult/college students in an online environment. Online tutoring methods, use of appropriate written and mediated instructional materials and equipment, and supervised practice tutoring are included in this course. Online tutoring techniques and methodology are emphasized. Laboratory hours are by arrangement with the tutorial center coordinators.

AA/AS; CSU.

EGEE-Energy and Geo-Environmental Engineering

EGEE 50 Building Science Principles
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is designed to prepare students for the Building Performance Institutes - Building Science Principles - Certificate of Knowledge. Emphasis is placed on how the physical properties of heat, moisture, and airflow affect our homes, and how we can measure their impact and apply scientific principles to the goal of healthier, more energy-efficient homes. Topics include Heating and Insulation, Air and Air Sealing, Moisture and Moisture Control, Mechanical Systems, Conservation Strategies, and United States Department of Energy Home Energy Scores. This course is designed for students interested in Green Building Professional certification, Energy and Geo-Environmental Engineering (EGEE), and the Air Conditioning, Refrigeration, and Environmental Control Technology (AIRE).

FT; AA/AS.

EGEE 55 Air Quality Management and Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a comprehensive study of air quality management and systems, their operations, and their impacts on the environment. Emphasis is placed on understanding the methods and devices used to improve air quality and comfort. Topics include the benefits of conditioned air and environments, and situations in which the improvement of air quality is essential. This course is designed for students interested in Green Building Professional certification, Air Conditioning, Refrigeration, and Environmental Control Technology (AIRE), and Energy and Geo-Environmental Engineering (EGEE)

FT; AA/AS.

EGEE 70 Energy Industry Principles
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of energy industry principles with an emphasis on new and emerging energy resource types. Topics include energy production and the environment, non-renewable and renewable power plant operations, and the impacts of governmental policy on energy systems. This course is intended for students interested in Green Building Professional certification, Environmental Resource Management, Energy and Power Technology, and Energy and Geo-Environmental Engineering (EGEE).

FT; AA/AS.

EGEE 72 Energy Conservation Strategies
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is designed for students interested in becoming more environmentally responsible. Emphasis is placed on exploring the relationship between energy and the environment, while exploring factors that must be considered when purchasing energy consuming products. Topics include energy supply and demand, energy efficiency, and environmental controls in residential settings. This course is designed for students interested in Green Building Professional certification and Energy and Geo-Environmental Engineering (EGEE).

FT; AA/AS.

EGEE 78 Solar Electric Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is designed for students interested in examining the theories and design practices of solar electric systems in the context of utility and commercial-scale applications. Emphasis is placed on solar photovoltaic (PV) electric systems feasibility, design, and commissioning. Topics include conceptual design of solar electric systems, solar electric technologies, inverter and power management technologies, design theory and economic analysis tools, system design processes for grid-tied and off-grid systems, integration of energy storage and demand response systems, construction project management, permitting, safety and commissioning, system monitoring, and maintenance. This course is designed for students interested in Green Building Energy Professional certification and Energy and Geo-Environmental Engineering (EGEE).

FT; AA/AS.

EGEE 80 Energy Storage
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides a broad overview of electric energy storage technologies, benefits, economics, California Policies, and a discussion of energy storage in microgrid systems. Emphasis is placed on electric energy storage versus other types of energy storage. Topics include energy storage technology, performance, benefits, and cost. This course is designed for students interested in Green Building Energy Professional certification, Environmental Resource Management, Energy and Power Technology, and Energy and Geo-Environmental Engineering (EGEE).

FT; AA/AS.

EGEE 85 Energy Standard Practice
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course prepares students for the Associate Energy Analyst (AEA) certification through the California Association of Building Energy Consultants (CABEC). Emphasis is placed on California Title 24, Part 6 Energy Standards and related building energy efficiency topics as well as helping energy consultants stay on the cutting edge of building energy efficiency. Topics include energy basics, code triggers, project assessment, modeling and troubleshooting results, and energy consulting. This course is designed for students interested in the AEA certification as well as those interested in energy efficiency.

FT; AA/AS.

EGEE 95 Interactive Climate Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of the essential principles of Earth's climate system. Emphasis is placed on assessing scientifically credible information about climate. Topics include economic, environmental, and socially responsible sustainability ethics. This course is intended for students interested in learning about the impacts of climate change, the threats they pose, and potential adaptation and mitigation strategies.

FT; AA/AS.

EGEE 98 Energy Service Entrepreneurship

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is designed for students interested in the principles of establishing and managing a small energy service business, including the preparation of an energy service business plan. Emphasis is placed on goal setting, types of business organizations, obtaining licenses and permits, financing options, accounting aspects, legal requirements, managing the enterprise, and other aspects in small energy business entrepreneurship. Topics include communication and technology, marketing and branding, and leadership and ethics. This course is designed for students interested in small energy business entrepreneurship.

FT; AA/AS.

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.

ELCT-Electricity

ELCT 20 Blueprint Reading for Electricians

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a practical survey of blueprint reading for electricians. Emphasis is placed on architectural considerations and electrical symbology for residential, commercial, and industrial blueprints. This course is intended for students in the Electricity program as well as for working electricians who want to further their skills and/or fulfill state certification and accreditation requirements.

FT.

ELCT 30 Modern Commercial Wiring

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of modern commercial wiring systems. Emphasis is placed on practical application of the material through in-class projects. This course is intended for students in the Electricity program as well as for working electricians who want to further their skills and/or fulfill state certification and accreditation requirements.

FT.

ELCT 40 Data, Voice, and Video Cabling for Electricians

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a study of current data, voice, and video cabling systems. Emphasis is placed on practical application of the material through in-class projects. This course is intended for students in the Electricity program as well as for working electricians who want to further their skills and/or fulfill state certification and accreditation requirements.

FT.

ELCT 111 Electrical Theory I

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: ELCT 111L
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the fundamentals of electrical theory, including basic safety practices and a history of industrial electricity and electronics. Emphasis is placed on theory and application of fundamental units of measurement, wire splicing, permanent magnets, electromagnets, and electrical/electronic symbols. Topics include a study of the theory of electricity sources (including batteries, mechanical generators, photocells, and thermocouples), basic Ohm's Law theory, as well as calculations of Direct Current (DC), DC voltage, DC current, resistance, DC power, inductance, and capacitance in DC circuits. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 111L Electrical Laboratory I

96-108 hours lab; 2 units
Grading: Letter Grade Only
Corequisite: ELCT 111
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course involves laboratory practice in basic electricity. Laboratory time includes instruction and laboratory assignments in the proper use and care of electrical tools, meters, instruments, and equipment with an emphasis on safe working habits. Laboratory assignments include the application of basic direct and alternating current (AC) circuitry and wattage of fabricated circuits. Students gain additional practice in the development of electrical diagrams using proper symbols and nomenclature. An introduction to inductance and capacitance in direct current (DC) circuits is included. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 121 Electrical Theory II

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ELCT 111 with a Grade of "C" or better, or equivalent and ELCT 111L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 121L
This course involves a detailed study of the theory of alternating current (AC) including the generation of AC; electrical degrees, effective and average values; addition and subtraction of phasors; resistance, inductance, and capacitance in AC circuits; reactance; and impedance. This course also includes an in-depth study of single-phase series and parallel circuits, three-phase power generation, current and voltage relationships in wye and delta connected power sources and loads. A study of three-phase transformers with various connections and under various load conditions is also included. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 121L Electrical Laboratory II

96-108 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: ELCT 111 with a Grade of "C" or better, or equivalent and ELCT 111L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 121
This course involves laboratory practice in direct current and alternating current circuits. Activities include practice with basic direct current (DC) or DC motor circuits, power transmission lines, and instruction in the safe use of three-phase power supplies. This course also includes practice using alternating circuits (AC) or AC voltmeters, AC ammeters, and AC wattmeters to measure phase angle, real power, apparent power, watts, vars, volt-amps, and power factor in single-phase and poly-phase circuits including three-phase circuits with wye and delta connections. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 131 Electrical Theory III
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ELCT 121 with a Grade of "C" or better, or equivalent and ELCT 121L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 131L
This course involves practice in planning the installation of electrical circuits on construction jobs according to the National Electrical Codes (NEC) and Blueprints. This course also includes practice in making detailed drawings of electrical wiring circuits using standard symbols and estimating the wiring material required to complete a single family dwelling. Planning the installation of communication circuits, heating systems, service entrance equipment, remote control systems, motor starting equipment, circuit protective devices, control components, and pilot devices is also included. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 131L Electrical Laboratory III
96-108 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: ELCT 121 with a Grade of "C" or better, or equivalent and ELCT 121L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 131
This course involves laboratory practice in the installation of construction wiring materials including installation and connection of lighting circuits, receptacle circuits, special purpose circuits, communication circuits, heating systems, service entrance equipment, remote control systems, electric motor circuits, and pilot devices. Safety is emphasized through practice in the installation electrical equipment according to blueprints and local and national codes. Instruction and practice in fire prevention and construction site safety habits are also included. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 141 Electrical Theory IV
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ELCT 131 with a Grade of "C" or better, or equivalent and ELCT 131L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 141L
This course involves the advanced theory of the characteristics and uses of direct current generators, direct current motors, direct current motor controls, alternating current generators, and three-phase motors. This course also includes the advanced theory of the characteristics and uses of three-phase motors and three-phase controllers, single-phase motors and single-phase controllers, electronic devices, and static controls. Digital and logic controls are also investigated. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 141L Electrical Laboratory IV
96-108 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: ELCT 131 with a Grade of "C" or better, or equivalent and ELCT 131L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 141
This course involves laboratory practice and experimentation with direct current (DC) generators, DC motors, three-phase alternators, squirrel-cage induction motors, and wound rotor induction motors. This course also includes laboratory practice and experimentation with induction motors, synchronous motors, and single-phase motors, including split phase, capacitor start, universal, and repulsion-start induction run motors. Additionally, experiments are conducted with phase sequence, frequency, selsyn systems, and silicon controlled rectifier (SCR) speed controls. This course is designed as preparation for the major in electricity.

FT; AA/AS; CSU.

ELCT 200 Electrical Control Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ELCT 121 with a Grade of "C" or better, or equivalent and ELCT 121L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 200L
This course is a study of electrical control system theory emphasizing standard motor controls, transducers, static control devices, programmed controllers, and remote electronic controls. This course is intended for students majoring in electricity as well as for working electricians who want to further their skills and/or fulfill state certification and accreditation requirements.

FT; AA/AS; CSU.

ELCT 200L Electrical Control Systems Laboratory
96-108 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: ELCT 121 with a Grade of "C" or better, or equivalent and ELCT 121L with a Grade of "C" or better, or equivalent
Corequisite: ELCT 200
This course is a hands-on laboratory in electrical control systems. Emphasis is placed on standard motor controls, transducers, static control devices, programmed controllers, and remote electronic controls. This course is intended for students majoring in electricity as well as for working electricians who want to further their skills and/or fulfill state certification and accreditation requirements.

FT; AA/AS; CSU.

ELDT-Electronic Systems

ELDT 123 Introduction to Digital Circuits
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 123L
Limitation on Enrollment: This course is not open to students with previous credit for ELDT 223 or ELRN 220
This course is designed for students majoring in electronics and for students generally interested in electronics. It is an introduction to digital technology with an emphasis on understanding, constructing and troubleshooting digital integrated circuits. Course content includes number systems and codes, truth tables, Boolean functions, combinational logic, flip-flops, shift registers, counters, device characteristics, and programmable logic devices.

FT; AA/AS; CSU.

ELDT 123L Digital Circuits Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: ELDT 123 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ELRN 222A, or ELDT 223L
This laboratory course is designed to demonstrate introductory concepts of digital technology. Topics include a variety of digital electronic components and circuits. Emphasis is placed on developing skills in designing, analyzing, and constructing simple logic circuits, including basic digital blocks, combinational networks, and sequential networks. This course is designed for students majoring in electronics and those interested in electronics.

FT; AA/AS; CSU.

ELDT 124 Basic DC Electronics
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 124L
Limitation on Enrollment: This course is not open to students with previous credit for ELRN 120 or ELRN 120A or ELCT 111 or AVIM 120.
This course is a study of basic electricity and electrical circuit concepts. Course content includes direct current (DC), series and parallel circuits, Ohm's and Kirchhoff's Laws, mesh and nodal analysis, the Superposition Theorem, and Thevenin's and Norton's Theorems. Throughout the course, students apply the concepts of basic electronics to solve problems commonly found in industrial settings. This course is designed for students interested in learning DC electronics.

FT; AA/AS; CSU.

ELDT 124L Basic DC Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 124
Limitation on Enrollment: This course is not open to students with previous credit for ELRN 121 or ELRN 121A or ELRN 123 or AVIM 121A or ELCT 111L.
This laboratory course demonstrates the basic concepts of electricity and electrical circuits and familiarizes students with various electronic components and circuits. Course content is designed to develop students skills in reading schematic diagrams, fabricating simple circuits and safely using basic test equipment for measuring and troubleshooting. Equipment used in this lab includes volt-ohm-amp meters, digital multimeters (DMMs), and power supplies. This course is designed for students interested in acquiring laboratory skills in DC electronics.

FT; AA/AS; CSU.

ELDT 125 AC Circuit Analysis
64-72 hours lecture; 4 units
Grading: Letter Grade Only
Advisory: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: ELDT 125L
This course is a study of alternating current (AC) electronic concepts. Course material includes the study of inductor and capacitor transients in direct current (DC) circuits, alternating current (AC) electronic basics, impedance, phasors, power and energy in series, parallel and combination circuits, network theorems, transformers, passive filters and response curves. This course is designed for students interested in learning AC electronics.

FT; AA/AS; CSU.

ELDT 125L DC/AC Circuit Analysis Laboratory with Pspice
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: ELDT 125
Limitation on Enrollment: This course is not open to students with previous credit for DIES 125L
This laboratory course demonstrates the basic concepts of hands-on and computer-assisted direct current and alternating current (DC/AC) circuit analysis. Equipment used in this course includes oscilloscopes, frequency counters, function generators, digital multimeters (DMM) and microcomputers utilizing industry standard software applications (PSpice). This course is designed for students interested in learning PSPICE and acquiring laboratory skills in AC electronics.

FT; AA/AS; CSU.

ELDT 126 Using C AND C++ for Technology
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 126L
This course is an introduction to the C and C++ programming languages as they apply to the analysis of the theoretical concepts of electronic technology. The course is structured around a variety of prepared programming assignments that emphasize problem-solving techniques and use of the computer as a problem-solving tool with applications in electronics. Students work with state of the art and industry standard microcomputers, hardware, software application programs, and compilers. This course is designed as preparation for majors in the field of Electronics.

FT; AA/AS; CSU.

ELDT 126L Using C and C++ for Technology Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 126
This course provides the laboratory component to the study of C and C++ programming languages as they apply to the analysis of the theoretical concepts of electronic technology. The course is structured around a variety of prepared programming assignments that emphasize problem-solving techniques and use of the computer as a problem-solving tool with applications in electronics. Students work with state of the art and industry standard microcomputers, hardware, software application programs and compilers. This course is designed as preparation for majors in the field of Electronics.

FT; AA/AS; CSU.

ELDT 143 Semiconductor Devices
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: ELDT 143L
This course is an introductory study of the characteristics and operation of semiconductor devices and their associated circuitry. Emphasis is placed on junction diodes, bipolar junction transistors, power supplies, feedback, linear integrates circuits (ICs), multistage amplifiers, push-pull amplifiers, junction field-effect transistors (JFETs), metal oxide semiconductor field-effect transistors (MOSFETs) and PSpice analysis.

FT; AA/AS; CSU.

ELDT 143L Semiconductor Devices Laboratory
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Advisory: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: ELDT 143
This laboratory course focuses on the theoretical concepts of electronic devices and circuits through practical experimentation, PSpice analysis and computer simulation. Course content and materials include circuit operation, testing, troubleshooting and measurement of diodes, transistors and field-effect transistors (FETs), the use of computer-aided engineering software, microcomputers, oscilloscopes, digital multimeters (DMMs), function generators and power supplies.

FT; AA/AS; CSU.

ELDT 144 OP-AMPS, Sensors and Computers
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 144L
Advisory: Completion of or concurrent enrollment in: ELDT 143 with a Grade of "C" or better, or equivalent and ELDT 143L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Digital Technology (ELDT) 144
This course is a study of operational amplifier theory and circuit applications. Course content emphasizes sensors, transducers, data conversions and the associated circuitry necessary to condition outputs for interface to a computer. Applications to analog-to-digital and digital-to-analog conversions, optical sensors, displacement transducers and instrumentation devices are included. This course is designed as preparation for majors in the field of Electronics.

FT; AA/AS; CSU.

ELDT 144L OP-AMPS and Sensors Laboratory
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 144
Advisory: Completion of or concurrent enrollment in: ELDT 143 with a Grade of "C" or better, or equivalent and ELDT 143L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Digital Technology (ELDT) 144L
This course provides the laboratory component to the study of operational amplifier theory and circuit applications. Course content emphasizes sensors, transducers, data conversions and the associated circuitry necessary to condition outputs for interface to a computer. Applications to analog-to-digital and digital-to-analog conversions, optical sensors, displacement transducers and instrumentation devices are included. This course is designed as preparation for majors in the field of Electronics.

FT; AA/AS; CSU.

ELDT 224 Microprocessor Design
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 224L
Advisory: Completion of or concurrent enrollment in: ELDT 123 with a Grade of "C" or better, or equivalent and ELDT 123L with a Grade of "C" or better, or equivalent
This course is an applied study of digital circuits in microcomputer systems. Throughout the course, students examine the overall architecture of microcomputer systems, the interfacing of memory and input/output (I/O) devices, and machine language programming for the Z-80 microprocessor

FT; AA/AS; CSU.

ELDT 224L Microprocessor Design Laboratory
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 224
Advisory: Completion of or concurrent enrollment in: ELDT 123 with a Grade of "C" or better, or equivalent and ELDT 123L with a Grade of "C" or better, or equivalent
This laboratory course demonstrates the application of digital circuits in microprocessor systems. Course content includes assembly of printed circuit boards, troubleshooting of microprocessor-based designs and software/firmware design and troubleshooting.

FT; AA/AS; CSU.

ELDT 225 Microcontrollers
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: ELDT 123 with a Grade of "C" or better, or equivalent and ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 225L with a Grade of "C" or better, or equivalent
Advisory: MATH 107 with a Grade of "C" or better, or equivalent
This course focuses on the fundamentals of both the hardware and software aspects of the microcontroller. Typical devices that are connected to the microcontroller are: switches, light emitting diodes, seven segment displays, stepper motors and a matrix keypad. An engineering evaluation board is used as the development system for the controller. Structured programming and flow charts are emphasized. Code is written in assembly language, compiled and then downloaded to the controller. This course is intended for students majoring in Engineering Technology.

FT; AA/AS; CSU.

ELDT 225L Microcontrollers Laboratory
72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: ELDT 123L with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent and ELDT 225 with a Grade of "C" or better, or equivalent
This laboratory demonstrates microcontroller applications. The course emphasizes microcontroller construction, design, programming and troubleshooting. Students conduct the laboratory with a software development kit (SDK) and microcontroller trainer equipment.

FT; AA/AS; CSU.

ELDT 227 Introduction to Lasers and Fiber Optics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 227L
Advisory: Completion of or concurrent enrollment in: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Digital Technology (ELDT) 144
This course is an introductory study of lasers, optical power meters and laser systems designed to familiarize students with various industry supported lasers/fiber optics families. Emphasis is placed on providing students with a working knowledge of lasers and the ability to troubleshoot in the field. Topics covered include the properties of light, emission and absorption of light, lasing action, the temporal and spatial characteristics of lasers, optical energy, optical fibers, light sources, light receivers, fiber optic geometry, alignment and splicing techniques, communication links, and fiber optic system design.

FT; AA/AS; CSU.

ELDT 227L Lasers and Fiber Optics Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 227
Advisory: Completion of or concurrent enrollment in: ELDT 124 with a Grade of "C" or better, or equivalent and ELDT 124L with a Grade of "C" or better, or equivalent
This laboratory course is designed to familiarize students with the elements and operation of lasers, optical power meters and laser and fiber optics systems through experiments and projects conducted individually and in groups. This course provides students with the opportunity to enhance and further investigate the concepts presented in Electronics Systems 227.

FT; AA/AS; CSU.

ELDT 228 Communication Circuits
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 228L
Advisory: Completion of or concurrent enrollment in: ELDT 143 with a Grade of "C" or better, or equivalent and ELDT 143L with a Grade of "C" or better, or equivalent and ELDT 144 with a Grade of "C" or better, or equivalent and ELDT 144L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Digital Technology 228
This course is a study of basic communication theory, circuitry, and troubleshooting including transmission and reception of Amplitude Modulated (AM), Frequency Modulated (FM), and digital signals. The course is intended for students seeking careers in radio, TV and digital data communication technology, and the telecommunication industry.

FT; AA/AS; CSU.

ELDT 228L Communication Circuits and Certification Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 228
Advisory: Completion of or concurrent enrollment in: ELDT 143 with a Grade of "C" or better, or equivalent and ELDT 143L with a Grade of "C" or better, or equivalent and ELDT 144 with a Grade of "C" or better, or equivalent and ELDT 144L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Digital Technology (ELDT) 228L
This laboratory course is a verification of the basic concepts of communication theory and mastery of the basic electronic instruments used in industry. This course is designed to prepare students to take the Associate Electronics Technician (CET) and the 3rd Class Radio Telecommunications Technician (NARTE) examinations.

FT; AA/AS; CSU.

ELDT 229 Advanced Telecommunications Networks

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 229L
Advisory: Completion of or concurrent enrollment in: ELDT 126 with a Grade of "C" or better, or equivalent and ELDT 126L with a Grade of "C" or better, or equivalent and ELDT 228 with a Grade of "C" or better, or equivalent and ELDT 228L with a Grade of "C" or better, or equivalent
This course is a project-oriented study of local, metropolitan and wide-area network hardware system design, installation, maintenance and troubleshooting. Hardware topics presented include topologies, transmission media, access and interfacing techniques, and hardware technologies utilized include Fiber Distributed Data Interface (FDDI), Asynchronous Transfer Mode (ATM), Fast Internet and Token Ring. This course prepares students to take the Network Plus exam.

FT; AA/AS; CSU.

ELDT 229L Advanced Telecommunications Networks Laboratory

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: ELDT 229
Advisory: Completion of or concurrent enrollment in: ELDT 126 with a Grade of "C" or better, or equivalent and ELDT 126L with a Grade of "C" or better, or equivalent and ELDT 228 with a Grade of "C" or better, or equivalent and ELDT 228L with a Grade of "C" or better, or equivalent
This is a team project-oriented course that familiarizes students with the hardware and software needed to establish, run and maintain advanced telecommunications networks at the local, metropolitan and wide-area levels.

FT; AA/AS; CSU.

ELDT 232 Advanced Computer Design and Interfacing

64-72 hours lecture; 4 units
Grading: Letter Grade Only
Prerequisite: ELDT 225 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ELDT 230 and ELDT 231
This course is an advanced, practical study of operating systems, microprocessor and microcontroller chips, system configurations, and bus architecture from a systems design perspective. This project-oriented course examines microprocessor machine language programming, hardware devices, hardware designs, system clock generation, bus characteristics, tri-state characteristics, buffers, input/output (I/O) techniques for interfacing to various peripherals, major microprocessor and microcontroller families, timing diagrams, memory, and chip-level troubleshooting. This course is intended for students wanting to gain detailed knowledge about design, interfacing, and programming of microprocessor and microcontroller systems.

FT; AA/AS; CSU.

ELDT 232L Advanced Computer Designs Laboratory

72-81 hours lab; 1.5 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: ELDT 225 with a Grade of "C" or better, or equivalent and ELDT 225L with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ELDT 230L
This is a practical course designed as a verification of the student's understanding of the theoretical concepts of computer and microcontroller based designs through construction and testing of a complete microcontroller system. Throughout the course, students work with several pieces of electronic test equipment currently used in the industry in order to build and troubleshoot their projects. Students are expected to locate and purchase necessary components and bread boarding materials. This course is intended for students wanting experience in designing, constructing, and testing advanced microprocessor and microcontroller systems.

FT; AA/AS; CSU.

ELDT 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
To receive credit a student must complete a minimum of seven units during the semester, including work experience.
This course is not open to students with previous credit for Digital Technology (ELDT) 270
A program of on-the-job learning experiences for students employed in a job related to their 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.

ELDT 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 not open to students with previous credit for Digital Technology (ELDT) 290
For advanced students in Electronic Systems or Electro-Optical Technology who wish to pursue special problems and projects relating to their particular subject area. The student meets with the instructor at specific intervals and is expected to do primary research, analyze problems and submit reports.

FT; AA/AS; CSU.

ENGE-Engineering

ENGE 50A Introduction to Robotics Team Project Design
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for ENGE 265A
This introductory course addresses the knowledge, skills and activities needed to understand and promote the design phase of a robotics competition team. Team building and collaborative learning are stressed. Students design an autonomous robot using state-of-the-art computer software that supports the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for students with an interest in robotics who need to gain experience as members of an engineering design team.

FT; AA/AS.

ENGE 50B Introduction to Robotics Team Project Construction
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for ENGE 265A
This introductory course addresses the knowledge, skills and activities needed to organize and promote the construction phase of a robotics competition team. Team building and collaborative learning are stressed. Students construct an autonomous robot using state-of-the-art computer software that supports the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for students with an interest in robotics who need to gain experience as members of an engineering team constructing a new design.

FT; AA/AS.

ENGE 50C Introduction to Robotics Team Project Testing and Deployment
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Limitation on Enrollment: This course is not open to students with previous credit for ENGE 265A
This introductory course addresses the knowledge, skills and activities needed to organize and promote the testing and competition phases of a robotics competition team. Team efficiency and collaborative learning are stressed. Students aid in the testing and deployment of an autonomous robot using state-of-the-art computer software that supports the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for students with an interest in robotics who need to gain experience as members of an engineering team testing and deploying a new design.

FT; AA/AS.

ENGE 50D Advanced Robotics Team Project Design
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Advisory: ENGE 50A with a Grade of "C" or better, or equivalent
This advanced course addresses the knowledge, skills and activities needed to organize, promote, and manage the design phase of a robotics competition team. Evaluation of research is used to develop an improved design using state-of-the-art computer software that supports the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for advanced students with an interest in robotics who need to gain experience as managers of an engineering design team.

FT; AA/AS.

ENGE 50E Advanced Robotics Team Project Construction

16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Advisory: ENGE 50B with a Grade of "C" or better, or equivalent
This advanced course addresses the knowledge, skills and activities needed to organize, promote, and manage the construction phase of a robotics competition team. Students supervise the construction of electrical, mechanical, and computer systems for an autonomous robot using state-of-the-art computer software that supports the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for advanced students with an interest in robotics who need to gain experience as supervisors of an engineering team constructing a new design.

FT; AA/AS.

ENGE 50F Advanced Robotics Team Project Testing and Deployment

16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Pass/No Pass Only
Advisory: ENGE 50C with a Grade of "C" or better, or equivalent
This advanced course addresses the knowledge, skills and activities needed to manage the testing and deployment phases of a robotics design for competition. Students manage the testing and deployment of an autonomous robot using state-of-the-art computer software supporting the engineering disciplines of mechanical, electrical, computer programming, web design, and technical writing. This course is intended for advanced students with an interest in robotics who need to gain experience as members of an engineering team testing and deploying a new design.

FT; AA/AS.

ENGE 101 Introduction to Engineering

24-27 hours lecture; 1.5 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for ENGE 265B: Introduction to Engineering
This course is an introduction to engineering in the work environment, including familiarization with the different occupations of engineering. Emphasis is placed on engineering requirements, analysis, design, implementation and testing of actual engineering problems. Students learn the proper use of engineering tools including computers, statistics and computer simulations. This course is designed to help students decide whether to embark on an engineering or technical career.

FT; AA/AS; CSU.

ENGE 108 Dimensioning and Tolerancing

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for MAFG 108 or MFET 105
This course is an introductory study of dimensioning and tolerancing. The course content emphasizes symbology, datum reference, tolerances of location and of form and runout, and includes a complete orientation to American National Standard Institute Standard Y14.5. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU.

ENGE 111 Introduction to Computer-Aided Design

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DRAF 111
This course is an introductory study of computer-aided design, engineering, and manufacturing. Emphasis is placed on providing the student with a hands-on overview of microcomputer systems and executable features of interactive software programs that are used in industry. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU.

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.

ENGE 151 Computer-Aided Design
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.
This course is an introduction to 3D computer-aided mechanical design using SolidWorks software. Emphasis is placed on the creation of basic to intermediate solid parts, the application of parametric 3D feature-based solid modeling, assignments of materials, building assemblies, developing exploded views and production drawings that include orthographic, pictorial, section, auxiliary, and detail views. Students apply software features, such as finite element analysis (FEA) and motion simulation. The course begins by covering basic features of all parts, continues with building simple assemblies with those parts, and culminates with creating both detail part and assembly output-product drawings. Students apply skills to group design projects, which include written reports and mechanical dimensioning using ANSI standards, Geometric Dimensioning and Tolerancing (GD&T), and thread notation per ASME Y14.5M-2009. Laboratory exercises that include industrial applications and practices are designed to strengthen these concepts. This course is intended for students majoring in Engineering or other disciplines including those in the physical sciences, and is designed for those with or without previous 3D CAD modeling application experience.

FT; AA/AS; CSU; UC.

ENGE 152 Engineering Design
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: ENGE 151 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DRAF 120
This course is a study of engineering design with an emphasis on the presentation and interpretation of engineering drawings. Course content includes tolerance studies, gear and Computer-Aided Manufacturing (CAM) design, as well as fit and function studies relating to manufacturing processes with Computer-Aided Drawing (CAD) as they influence design decisions. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU.

ENGE 200 Statics
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PHYS 195 with a Grade of "C" or better, or equivalent
Corequisite: 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 ENGN 150
This course is a study of applications of the principles of mechanics to rigid bodies in equilibrium. The course content emphasizes areas of friction, centroids, center of gravity, analysis of structures, moments of inertia and methods of virtual work. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU; UC.

ENGE 210 Properties of Materials
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: PHYS 195 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 and CHEM 200L with a Grade of "C" or better, or equivalent

This course is a study of the chemical, physical and mechanical properties of engineering materials including metals, ceramics, polymers and composites. Emphasis is placed on function and structure as they relate to specific design considerations. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU; UC.

ENGE 240 Digital Systems
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYN 265: Digital Systems

This course is an introduction to modeling, analysis, and design of digital systems primarily at the Logic Design Level. Students apply the basic theory of switching networks, use Boolean Algebra to analyze and synthesize switching networks, design logic gate networks, use simplification schemes to minimize part count and cost while providing optimum performance, and design and analyze sequential and combinational circuits using flip-flops and logic gate networks. This course is designed for students majoring in engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU; UC.

ENGE 250 Dynamics
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ENGE 200 with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: 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 ENGN 250
This course is a study of fundamental principles of bodies in motion with an emphasis on kinematics and kinetics of particles and rigid bodies, moving reference frames, work-energy, linear and angular momentum relationships and their application to engineering problems. Vector notation is used throughout the course. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU; UC.

ENGE 260 Electric Circuits
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: PHYS 196 with a Grade of "C" or better, or equivalent and MATH 151 with a Grade of "C" or better, or equivalent
This course is an introduction to the study of network analysis, basic network theorems, mesh and nodal analysis with independent and controlled sources. Emphasis is placed on steady state and transient responses of networks, complex frequency transformation, alternating current (AC), circuit analysis, power, reactive apparent power and power factor, and balanced three-phase electric systems. This course is intended for students majoring in Engineering or disciplines included in the physical sciences.

FT; AA/AS; CSU; UC.

ENGE 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
A program of on-the-job learning experiences for students employed in a job related to their major or their educational goal. The combined maximum credit for all work experience courses from all disciplines may not exceed 16 units.

AA/AS; CSU.

ENGE 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
For advanced students in engineering who wish to pursue special problems and projects relating to their particular subject area. The student meets with the instructor at specific intervals and is expected to do primary research, analyze problems and submit reports.

FT; AA/AS; CSU.

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 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 44 Supervised Tutoring in English
1 - 162 hours other; 0 units
Grading: Non-credit Course
This course is designed to prepare the student 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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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 202 Introduction to Linguistics
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 designed to introduce students to the field of linguistics. In this course, students develop an understanding of the nature of language through the study of core areas in linguistics, including phonetics, phonology, morphology, syntax, semantics, and pragmatics. Students also read, write, and think critically about related fields such as psycholinguistics, sociolinguistics, historical linguistics, and animal communication. This course is intended for students majoring in English or those with a general interest in linguistics.

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 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 238 Evaluating Children's 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 a survey of children's literature from folktales to current works. The course compares works from a variety of authors, cultures, and historical periods while emphasizing current American works. Principles of literary criticism are applied in evaluating the themes, language, and structure of works studied. This class is suitable for students interested in literature as well as for students who are preparing to teach.

FT; AA/AS; CSU.

ENGL 240 Shakespeare

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 William Shakespeare's work. Emphasis is placed on analyses of representative plays and poems from the perspectives of theme, character, structure, and language in historical and contemporary contexts. This course is designed for students majoring in English and those with a general interest in the author or the period.

FT; AA/AS; CSU; UC.

ENGL 245A Writing Creative Nonfiction

48-54 hours lecture; 3 units

Grading: Letter Grade Only

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 245

This is an intensive course in writing creative nonfiction. Emphasis is placed on the principles and methods of creative nonfiction and the critical analysis of student and master works addressing personal, social, political, and/or cultural issues. Students submit original creative nonfiction for class discussion and are introduced to the workshop format to further their work. This course is intended for students majoring in English and those preparing for writing-related careers in areas, such as publishing, journalism, communications, and education.

FT; AA/AS; CSU; UC.

ENGL 245B Advanced Creative Nonfiction
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: ENGL 245A with a Grade of "C" or better, or equivalent
This course is an intensive course advanced creative nonfiction. Emphasis is placed on advanced techniques in character, point of view, narrative, plot, language, style, and structure. The creative process includes meetings with the professor to set goals. Students use fictional techniques of character development, plotting, setting, language, verb tense, and theme to compose nonfiction at an advanced level. This course is intended for students majoring in English and those preparing for writing-related careers in areas, such as publishing, journalism, communications, and education, and those desiring to develop a writing portfolio.

FT; AA/AS; CSU; UC.

ENGL 247A Writing Seminar - Poetry
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 247
This course is an introduction to writing poems. Emphasis is placed on the basic elements, techniques and invention strategies for writing poems, with some instruction in basic forms and evaluative techniques. This course is intended for students majoring in English and all students interested in writing poems.

FT; AA/AS; CSU; UC.

ENGL 247B Advanced Writing Seminar - Poetry
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL 247A with a Grade of "C" or better, or equivalent
This course provides advanced instruction in writing poems. Emphasis is placed on sophisticated forms, techniques, and evaluation, as well as on preparing poems for submission and publication. This course is intended for students majoring in English and all students interested in writing poems.

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 249B Introduction to Creative Writing II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL 249A with a Grade of "C" or better, or equivalent
This course is an exploration and application of creative writing with a focus on fiction and poetry. Students use complex elements of poetry and fiction writing to analyze the works of professional writers, to create original pieces, and to critique the work of their peers as well as their own. This course is intended for students majoring in English and all students interested in fiction and fiction writing.

FT; AA/AS; CSU; UC.

ENGL 252A Fundamentals of Fiction Writing
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 253
This is an intensive course in fiction writing techniques at the beginning level. Students read and evaluate master works of fiction based on the basic elements of fiction writing introduced in class. Students write original fiction for submission to the class for discussion and integrate criticism offered by the instructor and peers through the editing process. This course is intended for students interested in a better understanding of literature and/or use of language as well as students interested in a writing-related career, such as publishing, journalism, communications, or education.

FT; AA/AS; CSU; UC.

ENGL 252B Intermediate Fiction Writing
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ENGL 252A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for ENGL 254
This is an intensive course in fiction writing techniques at the intermediate level. Students read and evaluate master works of fiction that address personal, social, political, and/ cultural issues and integrate such elements into their original pieces of fiction. Students are expected to articulate, accept, and incorporate criticism through an increasingly sophisticated editorial process. This course is intended for students interested improving their creative writing skills and/or developing a portfolio prior to transferring to a four-year institution.

FT; AA/AS; CSU; UC.

ENGL 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 English. 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.

FT; AA/AS; CSU.

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.

ENGN-Engineering Technology

ENGN 120 Principles of Engineering Technology
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is an introduction to the field of engineering technology. Emphasis is placed on providing students with a balance of theoretical and practical engineering principles through hands-on projects related to design, thermodynamics, hydraulics, electrical circuits, and materials. This class is designed for students interested in the pursuing an academic or vocational career in engineering technology or electronics.

FT; AA/AS; CSU.

ENGN 122 Digital Electronics
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is a project-based study of digital electronics for the field of engineering technology. Emphasis is placed on the application of digital electronics to product development for current and future market trends. Topics include Ohm's and Kirchhoff's laws as they apply to circuit analysis, capacitance, digital versus analog waveforms, digital circuit design, flip-flops, spec sheet analysis, and microprocessor programming. This class is designed for students interested in the pursuing an academic or vocational career in engineering or electronics.

FT; AA/AS; CSU.

ENGN 124 Engineering Design and Development
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is a hands-on, project-based study of the field of Engineering Design. Emphasis is placed on providing students with practical knowledge related to the field, including the fundamentals of design, portfolio development, sketching, modeling, dimensioning, presentation, production and marketing. This class is designed for advanced-level high school students interested in engineering or engineering technology.

FT; AA/AS; CSU.

ENGN 126 Engineering Computer Integrated Technology
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is a hands-on, project-based study of the integration of computers in the field of Engineering. Emphasis is placed on providing students with working knowledge of Computer Modeling, Computer Numerical Control (CNC), Computer-aided Manufacturing (CAM) software, robotics and automation, and Computer Integrated Manufacturing (CIM). This class is designed for advanced-level high school students interested in pursuing an academic or vocational career in engineering or engineering technology.

FT; AA/AS; CSU.

ENGN 128 Electronics for Technology
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This fast-paced course is a study of electronics for non-majors. Emphasis is placed on basic electronics, devices, and digital electronics. Topics include current use of electronics in industries and businesses. This course is intended for students not majoring in electronics who are interested in fundamental electronics knowledge and experience.

FT; AA/AS; CSU.

ENGN 130 Introduction to Engineering Design
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is an introductory study of Engineering Design. Emphasis is placed on providing students with an overall perspective on the design process as well as on the details of product development, including computer-aided design (CAD). Topics include the history of design, current career opportunities, portfolio development, geometric relationships, modeling, dimensioning, production and marketing. This class is designed for students interested in the pursuing an academic or vocational career in engineering technology or electronics.

FT; AA/AS; CSU.

ENGN 275 Engineering Technology Industrial Internship

16-18 hours lecture/144-162 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: MFET 101 with a Grade of "C" or better, or equivalent and MFET 105 with a Grade of "C" or better, or equivalent and MFET 115 with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: MFET 110 with a Grade of "C" or better, or equivalent and MFET 230 with a Grade of "C" or better, or equivalent
This is an industrial internship course for multiple programs under Engineering Technology field. Students apply technical knowledge learned in previous courses in the program to design and conduct experiments; analyze and interpret data; design manufacturing systems, processes and components; and identify, formulate and solve technical problems. Throughout the internship, students have opportunities to acquire new knowledge and sharpen their problem solving, communication and team work skills. The internship experience also helps students with personal growth, professional development and awareness of the impact of engineering solutions on the industry and society.

FT; AA/AS; CSU.

EXSC-Exercise Science

EXSC 122A Cardio Zumba I

48-54 hours lab; 1 unit
Grading: Letter Grade Only
This course is an introduction to Cardio Zumba that incorporates several latin styles of dance including but not limited to merengue, salsa, cumbia and reggaeton. Emphasis is placed on fundamental Zumba technique, vocabulary and fitness concepts. This course is designed for all students interested in Zumba as a cardiovascular, movement-oriented sport, as well as students majoring in kinesiology.

FT; AA/AS; CSU; UC.

EXSC 122B Cardio Zumba II

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: EXSC 122A with a Grade of "C" or better, or equivalent
This is the second course in Cardio Zumba. This level will ask students to increase the intensity of movement, including higher impact. Students will use additional arm and hip variations with new steps. Rhythm styles will expand to include Cha Cha, Mambo, Pop, Soca, Bollywood and Samba. This course is designed for students interested in Zumba as a cardiovascular, movement-oriented sport, as well as those majoring in kinesiology.

FT; AA/AS; CSU; UC.

EXSC 123 Adapted Physical Fitness

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 184
This course is designed for students with disabilities to provide opportunities for exercise and activities to improve cardiorespiratory endurance, flexibility, muscular endurance, strength, stress management, and coordination. Activities can include walking, dance, rhythm activities, wheelchair pushing, jogging, relaxation training, and exercises for joint mobility.

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 127A Cardio 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 133
This is the first in a series of cardio kickboxing courses. This course is an introduction to cardiorespiratory fitness combined with basic non-contact kickboxing techniques, practices, and principles. Instruction includes basic upper body punching functions, basic kick techniques, and basic combination series of both upper body and lower body kickboxing routines. This class is designed for those who want to increase cardiovascular fitness using cardio kickboxing and who are interested in understanding the importance of the fitness aspect of their life.

FT; AA/AS; CSU; UC.

EXSC 127B Cardio Kickboxing II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 127A with a Grade of "C" or better, or equivalent
This is the second in a series of cardio kickboxing courses. This course covers cardiorespiratory fitness combined with basic non-contact kickboxing techniques, practices, and principles. Instruction includes cardio kickboxing techniques, basic terminology, nutrition, and routine guidelines. This class is designed for those who want to increase cardiovascular fitness and who are interested in understanding the importance of the fitness aspect of their life.

FT; AA/AS; CSU; UC.

EXSC 127C Cardio Kickboxing III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 127B with a Grade of "C" or better, or equivalent Basic Cardio Kickboxing
This is the third in a series of cardio kickboxing courses. This course covers cardiorespiratory fitness combined with intermediate non-contact kickboxing techniques, practices, and principles. Instruction includes intermediate cardio kickboxing techniques, basic terminology, nutrition, and routine guidelines. This class is designed for those who want to increase cardiovascular fitness and who are interested in understanding the importance of the fitness aspect of their life and learn how to create a nutrition and intermediate fitness routine.

FT; AA/AS; CSU; UC.

EXSC 127D Cardio Kickboxing IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 127C with a Grade of "C" or better, or equivalent
This is the fourth in a series of cardio kickboxing courses. This course covers cardiorespiratory fitness combined with advanced kickboxing techniques, practices, and principles. Instruction includes advanced non-contact cardio kickboxing techniques, terminology, nutrition, and routine guidelines. This class is designed for those who want to increase cardiovascular fitness and who are interested in understanding the importance of the fitness aspect of their life and learn how to create a nutrition and fitness routine.

FT; AA/AS; CSU; UC.

EXSC 129A Step Aerobics 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 104
This is the first in a series of step aerobics courses. Step aerobics is a rigorous exercise course designed to increase both the fitness levels of participating students and their understanding of what constitutes a safe and effective exercise program. This course is an introduction to cardiorespiratory fitness combined with basic step aerobic techniques, practices, and principles. Instruction includes basic step aerobic techniques and combination series of 8 count step movement routines. Instruction includes a balanced exercise program of basic step aerobics, toning, stretching, and relaxation along with discussion of related health topics. This course is designed for students pursuing a kinesiology major and those interested in increasing their cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 129B Step Aerobics II
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 129A with a Grade of "C" or better, or equivalent
This is the second in a series of step aerobics courses. Step aerobics is a rigorous exercise course designed to increase both the fitness levels of participating students and their understanding of what constitutes a safe and effective exercise program. Instruction includes a balanced exercise program of basic step routines with power alternatives, toning, stretching, and relaxation along with discussion of related health topics. This course is designed for students pursuing a kinesiology major and those interested in increasing their cardiovascular fitness and for those who are interested in creating their own basic fitness programs.

FT; AA/AS; CSU; UC.

EXSC 129C Step Aerobics III
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 129B with a Grade of "C" or better, or equivalent
This is the third in a series of step aerobics courses. Step aerobics is a rigorous exercise course designed to increase both the fitness levels of participating students and their understanding of what constitutes a safe and effective exercise program. Instruction includes a balanced exercise program of power step aerobic movements with combinations, toning, stretching, and relaxation along with discussion of related health topics. This class will teach the students how to design their own fitness program. This course is designed for students pursuing a kinesiology major and those interested in increasing their cardiovascular fitness.

FT; AA/AS; CSU; UC.

EXSC 129D Step Aerobics IV
32 - 54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 129C with a Grade of "C" or better, or equivalent
This is the fourth in a series of step aerobics courses. Step aerobics is a rigorous exercise course designed to increase both the fitness levels of participating students and their understanding of what constitutes a safe and effective exercise program. Instruction includes a balanced exercise program of advanced step aerobic combinations, toning, stretching, and relaxation along with discussion of related health topics. This course is designed for students pursuing a kinesiology major and those interested in increasing their cardiovascular fitness and who are interested in creating fitness and choreographed routines.

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 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 142 Hiking for Fitness I- Fundamentals
24-108 hours lab; 0.5-2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 188.
This course provides instruction in the fundamental skills required for hiking. Emphasis is placed on proper warm-up and warm down, walking form and injury prevention and treatment. This course is intended for all students interested in fundamental hiking and personal fitness. When this course is offered for one or two units, the additional time is utilized for skill development in the group hiking leadership.

FT; AA/AS; CSU; UC.

EXSC 143A Outdoor Cycling Level I
24-108 hours lab; 0.5-2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 187
This course provides instruction in the skills required for outdoor cycling. Emphasis is placed on proper warm-up and warm-down, cycling form on flat terrain, and changing flat tires. Students design a personal fitness plan around outdoor cycling. This course is intended for all students interested in cycling and personal fitness.

FT; AA/AS; CSU; UC.

EXSC 143B Outdoor Cycling Level II
48-108 hours lab; 1-2 units
Grading: Letter Grade Only
Advisory: EXSC 143A with a Grade of "C" or better, or equivalent
This course provides instruction in the skills required for outdoor cycling. Emphasis is placed on proper warm-up and warm-down, cycling form, building endurance, ascending and descending hills, and bicycle maintenance. Students design a personal fitness plan around outdoor cycling. This course is intended for all students interested in cycling and personal 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 156A Baseball 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 111.
This course is designed to introduce the student to the game of baseball at the college level. Emphasis is placed on fielding ground balls, base running, outfield play, and the techniques and practice of bunting, including the sacrifice bunt, drag bunt, and push bunt. Topics also include the history of baseball, rules, terminology, safety procedures, values, and etiquette. This course is intended for novice level baseball players.

FT; AA/AS; CSU; UC.

EXSC 156B Baseball II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 156A with a Grade of "C" or better, or equivalent
This beginning level course in baseball is designed to continue the skill development in baseball and to introduce students to the concepts of wellness and a healthy lifestyle through baseball activities. Emphasis is placed on the batting stance and batters swing techniques, including balance, base, front side direction, contact position, and vision. Topics include ball flight, pitch selection, location recognition, count management, body weight transition, and contact point. Baseball fitness is included and encompasses cardio conditioning, plyometrics, and stretching as they pertain to the sport. This course is intended for intermediate level baseball players.

FT; AA/AS; CSU; UC.

EXSC 156C Baseball III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 156B with a Grade of "C" or better, or equivalent
This intermediate-advanced level course in baseball provides instruction and practice in specialty defense such as bunt coverages, cuts and relays, first and third situations, and pick-off plays. Students practice and analyze specialty defensive situations to improve overall defensive awareness on the baseball field and to become a more well-rounded defensive player. Topics include terminology, pre-pitch preparation, foot work, body position before and during game play, and the fundamentals of playing catch. Baseball fitness includes cardio conditioning, plyometrics, and stretching as they pertain to the sport. This course is intended for intermediate-advanced level baseball players.

FT; AA/AS; CSU; UC.

EXSC 156D Baseball IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 156C with a Grade of "C" or better, or equivalent
This advanced level course in baseball is designed for students to apply both offensive and defensive baseball skills in competition. Emphasis is placed on instruction and practice in game situations through inner squad games arranged between teams made up of class members. The mental aspect of the game is explored and applied throughout the course. This course is intended for advanced baseball players.

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 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 180A Track and Field 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 160 or EXSC 180
This course is designed as an introduction to the fundamentals of track and field. Emphasis is placed on safety, form and techniques related to throwing, jumping and running events. This course is intended for anyone interested in track and field or Kinesiology Majors.

FT; AA/AS; CSU; UC.

EXSC 180B Track and Field II
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 180A with a Grade of "C" or better, or equivalent
This course provides instruction and practice in advanced beginner skills and techniques of all track and field events. Emphasis is placed on creating a conditioning program involving event-specific running and event technique and drills. This course is intended for anyone interested in track and field or those majoring in kinesiology.

FT; AA/AS; CSU; UC.

EXSC 180C Track and Field III
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 180B with a Grade of "C" or better, or equivalent
This course provides instruction and practice in intermediate skills and techniques of all track and field events. Emphasis is placed on creating a conditioning program involving event-specific running and event technique and drills. This course is intended for anyone interested in track and field or those majoring in kinesiology.

FT; AA/AS; CSU; UC.

EXSC 180D Track and Field IV
24-54 hours lab; 0.5-1 units
Grading: Letter Grade Only
Advisory: EXSC 180C with a Grade of "C" or better, or equivalent
This course provides instruction and practice in advanced skills and techniques of all track and field events. Emphasis is placed on creating a conditioning program involving event-specific running and event technique and drills. This course is intended for anyone interested in track and field or those majoring in kinesiology.

FT; 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 200 Intercollegiate Badminton I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 154A with a Grade of "C" or better, or equivalent or previous competitive badminton experience
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 200
This is a course for students competing in their first intercollegiate badminton season. The course is offered in the 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 201 Intercollegiate Badminton II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 200 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 201
This is a course for students competing in their second intercollegiate badminton season. The course is offered in the 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 202 Intercollegiate Baseball I
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 230A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 202
This course is intended for the first season of intercollegiate competition. Baseball skills and game strategies are at a more advanced level of participation than those of an introductory course in baseball. This course may be taken two times for credit.

FT; AA/AS; CSU; UC.

EXSC 203 Intercollegiate Baseball II
96 - 175 hours lab; 2-3.5 units
Grading: Letter Grade Only
Advisory: EXSC 230B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 203
This course is intended for the second season of intercollegiate competition. Baseball 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 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 206 Intercollegiate Cross-Country 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 206
This course is for students participating in their first season of intercollegiate cross-country competition. This course may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 207 Intercollegiate Cross Country II
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 207
This course is for students participating in their second season of intercollegiate cross-country competition. This course may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

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 217 Intercollegiate Softball II
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 217
A physician's medical release form is required.
This course is designed for students competing in their second 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 222 Intercollegiate Track and Field 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 222
This course is for students competing in their first season of intercollegiate track and field. This course may be taken two times for credit. Students must demonstrate increased proficiency and skill attainment with each repetition.

FT; AA/AS; CSU; UC.

EXSC 223 Intercollegiate Track and Field II
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 223.
This course is for students competing in their second season of intercollegiate track and field. This course 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 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 229A Theories and Strategies of Badminton 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 249A.
This is the first in a series of two courses that explore the theories and strategies of badminton. Emphasis is placed on the theoretical concepts necessary for successful participation in intercollegiate badminton. Topics include mechanical analysis of fundamentals through advanced badminton skills, offensive/defensive strategies, statistics, rules, and officiating. This course is designed for first year intercollegiate badminton student athletes.

FT; AA/AS; CSU; UC.

EXSC 229B Theories and Strategies of Badminton II

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: EXSC 229A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 249B.
This is the second in a series of two courses that explores the theories and strategies of badminton. Emphasis is placed on advanced theoretical concepts for successful participation in intercollegiate badminton. Topics include mechanical analysis of advanced badminton strokes and placement of shots, advanced movement, performance factors, and options for continuing badminton participation post community college. This course is designed second year intercollegiate badminton student athletes.

FT; AA/AS; CSU; UC.

EXSC 230A Theories and Strategies of Baseball I

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 202 or EXSC 203
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 252A
This course provides instruction to develop the fundamental skills of throwing, catching, running, hitting, and the rules of NCAA baseball as well as strategies used during game competition. Sport specific speed and strength development is emphasized. This course is intended for intercollegiate baseball players only.

FT; AA/AS; CSU; UC.

EXSC 230B Theories and Strategies of Baseball II

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: EXSC 230A with a Grade of "C" or better, or equivalent
Advisory: Concurrent enrollment in: EXSC 202 or EXSC 203
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 252B.
This is the second course in Theories and Strategies of Baseball. Course emphasis is on advanced skills, strategy, tactics, rules officiating, and organizational procedures in baseball. This course is intended for intercollegiate baseball players.

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 232A Professional Activities/Cross Country I

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: EXSC 206 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 258A
This course introduces students to the development of skills for cross country running as well as biomechanics, exercise physiology, workout design, scouting, and procedures for administrating a college cross country meet. The course is designed for students who are participating in this sport and for those who may be interested in coaching cross country teams.

FT; AA/AS; CSU; UC.

EXSC 232B Professional Activities/Cross Country II

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: EXSC 207 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 258B.
This course covers the development of advanced skills in cross country running, including techniques of biomechanics, exercise physiology, workout design, and scouting. Emphasis is placed on procedures for administering college cross country meets and coaching techniques. This course is designed for second-year students who are participating in this sport and for those who are interested in coaching cross-country teams.

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 235A Theories and Strategies of Softball I

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 216
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 253A.
This course explores a variety of softball strategies and techniques focusing on the development of offensive and defensive strategies, rules, officiating, video review, and mechanical analysis of fundamentals through advanced softball skills. The course is open to students interested in participating in intercollegiate softball or kinesiology majors.

FT; AA/AS; CSU; UC.

EXSC 235B Theories and Strategies of Softball II

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 217
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 253B.
This course develops both mental and physical competency with emphasis on advanced skill, mechanics, rules, offensive and defensive strategies, officiating, facilities, video review, organizational procedures and physiological aspects of the game as they relate to college softball. The course is open to students interested intercollegiate softball and kinesiology majors.

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 237A Theories and Strategies of Tennis 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 248A.
This is the first in a series of two courses that explore the theories and strategies of tennis. Emphasis is placed on the theoretical concepts necessary for successful participation in intercollegiate tennis. Topics include the match format and rules of community college tennis, mechanical analysis of fundamental through advanced tennis skills, offensive and defensive tactics and strategies, statistics, and etiquette. This course is designed for first year intercollegiate tennis student athletes.

FT; AA/AS; CSU; UC.

EXSC 237B Theories and Strategies of Tennis II

24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Concurrent enrollment in: EXSC 237A
Limitation on Enrollment: This course is not open to students with previous credit for PHYE 248B.
This is the second in a series of courses that explore the theories and strategies of tennis. Emphasis is placed on the advanced theoretical concepts and practical skills necessary for successful participation in Intercollegiate Tennis. Topics covered include mechanical analysis of advanced tennis skills, advanced ball control, advanced offensive and defensive strategies and tactics, rules, etiquette and statistics. This course is designed for second year intercollegiate tennis student athletes.

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 294 Health and Wellness Coaching
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course provides students with the theoretical knowledge and practical skills required to be a health and wellness coach. Emphasis is placed on effective coach-to-client communication techniques, rapport building, motivational interviewing, and behavior change theories. This course is intended for students who are preparing for the American Council on Exercise's (ACE) Health Coach Certification and/or the National Board for Health and Wellness Coaching's National Board Certified Health and Wellness Coach (NBC-HWC) exam.

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.

FJMP: Film, Journalism, and Media Production

FJMP 100 Introduction to Cinema
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 RTVC 160 or RTVF 160
This course provides an introduction to the medium of cinema as a means of expression and communication. Emphasis is placed on film viewings and analysis, lecture, and discussion. Topics include aesthetic and storytelling techniques, history of the industry, key inventors and artistic contributors, technology, international influences, and current developments. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; UC.

FJMP 101 Introduction to Mass Media
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 JOUR 202
This course in an introduction to mass media in the United States. Emphasis is placed on the analysis of the impact of current and emerging media forms on society, culture, diversity, equity, inclusion, and social justice, as well as on ways that media and social institutions shape each other. Topics include the history, structure, social impact, emerging technologies, and trends in broadcast, cinema, radio, print, and journalism. Problems and issues are examined in light of social and cultural constructs, economics, media literacy, technology, law and ethics, and social issues. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; UC; C-ID: JOUR 100.

FJMP 102 Social Media in the Digital Age
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 JOUR 204 or DJRN 204
This course is a study of social media in contemporary society. Emphasis is placed on creating, communicating, and consuming information via digital, social, and mobile technologies in an evolving global environment. Topics include the history and impact of social media on countries and cultures, copyright and fair use, privacy and identity protection, and social analytics and reputation management. This course is designed for students in the digital journalism major and anyone interested in social media strategy and management.

FT; AA/AS; CSU.

FJMP 110 Introduction to Video Editing
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 153 or DMPR 153 or RTVF 153
This is a practical study of computer-based film and video editing. Emphasis is placed on the technical and aesthetic principles of post-production video editing for broadcast, short film, and web. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 111 Single Camera Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 124 or RTVF 124
This is the first in a series of courses focused on the development, planning, and logistics of single camera video production. Topics include working individually and in groups planning video productions and operating video cameras, audio recorders, and lighting systems. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; UC.

FJMP 112 Introduction to Audio Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 107 or RTVF 107
This course is a study of the theory and practice of sound and audio techniques for media production. Emphasis is placed on project learning using audio software focusing on sound waveform terms, microphones, signal processors, consoles, and control surfaces. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 120 Introduction to Screenwriting
32-36 hours lecture/48-54 hours lab; 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 RTVC 110 or RTVF 110
This course is a study of the theory and practice of writing for film and media production. Emphasis is placed on preparing screenplays in proper formats, including fundamental technical, conceptual, and stylistic issues related to writing fiction and non-fiction scripts. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 121 Fiction Film Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 167 or RTVF 167
This is the first in a series of courses focused on the modes and methods of fiction filmmaking. Emphasis is placed on short fiction film production. Topics include designing and executing multiple film projects individually and in groups as they analyze landmark fiction films. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing film degrees and anyone interested in media-related industries.

FT; AA/AS.

FJMP 122 Documentary Film Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 112 or RTVF 112
This is the first is a series of courses focused on the modes and methods of documentary filmmaking. Emphasis is placed on documentary film production. Topics include designing and executing multiple film projects individually and in groups as they analyze landmark documentary films. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing film degrees and anyone interested in media-related industries.

FT; AA/AS.

FJMP 123 The Producer's Role in Film
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 111 or RTVF 111
This course is an introduction to development, planning, and logistics of film production. Emphasis is placed on the creative and business practices required to transform a film screenplay into a finished film. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing film degrees and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 124 Video Motion Graphics
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for DMPR 156 or RTVF 156
This is a practical study of computer-based film and video motion graphics design. Emphasis is placed on the technical and aesthetic principles of motion graphics and special effects design for broadcast, short film, and web. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 130 Newswriting for Multiplatform Journalism
32-36 hours lecture/48-54 hours lab; 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 200 or JOUR 200 or RTVC 140 or RTVF 140
This course offers instruction and practice in the fundamentals of newswriting, reporting, and editing for professional media environments. Emphasis is on newsgathering strategies, writing basic news stories, and producing news content on deadline for multiplatform journalism organizations. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; C-ID: JOUR 110.

FJMP 131 Multimedia Journalism Reporting
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DJRN 205
This course is a practical study of the basic components involved in using digital and mobile tools to publish news content. Emphasis is placed on using such tools for news reporting and gathering purposes for students to create and manage story packages for multiple media platforms from the standpoint of a working multimedia journalist. Topics include the use of multiple digital elements including text, visuals, audio, interactives, and digital design. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; C-ID: JOUR 210.

FJMP 132 Multiplatform Journalism Production
144-162 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for DJRN 210
This course is an introduction to the study of the practice of multiplatform journalism. Emphasis is placed on students gaining practical experience in a newsroom setting using a convergence model in which students collaborate with other student media on campus. Topics include writing, reporting, editing, and producing content for multiplatform news media publications. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; C-ID: JOUR 130.

FJMP 133 Broadcast News Production
16-18 hours lecture/96-108 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 145 or RTVF 145
This course is an introduction to the study of the practice of broadcast news production. Emphasis is placed on students gaining practical experience in a newsroom and television studio using a convergence model in which students collaborate with other student media on campus. Topics include news gathering, writing, researching, camera operation, and studio production, as well as delivering news programs across platforms. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 134 Multiplatform Magazine Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for DJRN 220
This course introduces students to writing, editing, and producing content for multiplatform magazines. Emphasis is placed on students gaining practical experience in a newsroom setting using a convergence model in which students collaborate with other student media on campus to produce multimedia journalism features and long form writing samples. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 141 Audio Storytelling for Radio and Podcast
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 130 or RTVF 130
This course is an introduction to audio storytelling production for radio and podcasts. Emphasis is placed on learning audio broadcast skills, including research, writing scripts, conducting interviews, and on-air presentation. Topics include remote and studio sound recording, editing, and mixing student-produced content for radio and podcast platforms. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 142 Radio and Podcast Production
16-18 hours lecture/96-108 hours lab; 3 units
Grading: Letter Grade Only
This course is an introduction to the study of the practice of radio news and podcast production and operations. Emphasis is placed on students gaining practical experience in a studio setting using a convergence model in which students collaborate with other student media on campus. Topics include operating all aspects of the student-produced radio and podcast platforms, on-air performance skills, scheduling, the programming formula, the clock, station image, format selection, ratings, and research. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 143 On-Camera Performance
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 121 or RTVF 121
This course is a practical study of all phases of media performance. Emphasis is placed on hosting for news, sports, entertainment, weather, and social media talent. Topics include use of teleprompter, scripts, cue cards, and ad-libbing. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 144 Multi-Camera Studio Operations
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 118 or RTVF 118
This course is a survey of the theory, terminology, and operations of a multi-camera production studio and control room. Emphasis is placed on students gaining hands-on experience in directing. Topics include the operation of audio, camera, video switcher, lighting, graphics, and video. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 145 Art Direction for Film and Media Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 126 or RTVF 126
This course is a study of the aesthetics and techniques of art direction for film and media production. Emphasis is placed on developing the student's ability to control the look of production sets through the use of design techniques. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 146 Lighting for Film and Media Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 128 or RTVF 128
This course is a study of the theory and practice of lighting for film and media production. Emphasis is placed on the essence of various kinds of light and how light works. Topics include lighting techniques to create visual moods for various film and media production projects. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 211 Single Camera Production Workshop
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FJMP 111 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVF 246A
This is the second in a series of courses focused on the development, planning, and logistics of single camera video production. Topics include supervising video productions and operating video cameras, audio recorders, and lighting systems. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 221 Fiction Film Production Workshop

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: FJMP 121 with a Grade of "C" or better, or equivalent

This is the second in a series of courses focused on the modes and methods of fiction filmmaking. Emphasis is placed on short fiction film direction. Topics include designing and executing a single film project individually or with the support of a group and presenting their analysis of landmark fiction films. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing film degrees and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 222 Documentary Film Production Workshop

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: FJMP 122 with a Grade of "C" or better, or equivalent

This is the second in a series of courses focused on the modes and methods of documentary filmmaking. Emphasis is placed on documentary film direction. Topics include designing and executing a single film project individually or with the support of a group and presenting their analysis of landmark documentary films. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing film degrees and anyone interested in media-related industries.

FT; AA/AS.

FJMP 232A Multiplatform Journalism Workshop I

144-162 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: FJMP 132 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for DJRN 211

This course is the first in a series of production workshops in multiplatform journalism. Emphasis is placed on creating content and editing in a newsroom using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include each stage of the multimedia journalism production process, including content development and peer editing. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU; C-ID: JOUR 131.

FJMP 232B Multiplatform Journalism Workshop II

144-162 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: FJMP 232A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for DJRN 212

This course is the second in a series of production workshops in multiplatform journalism. Emphasis is placed on practical experience creating content and managing the production process in a newsroom using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include news editing, management responsibilities, and deadline adherence. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 232C Multiplatform Journalism Workshop III

144-162 hours lab; 3 units

Grading: Letter Grade Only

Prerequisite: FJMP 232B with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for DJRN 213

This course is the third in a series of production workshops in multiplatform journalism. Emphasis is placed on practical experience creating content and supervising a newsroom using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include effective leadership in a newsroom, ensuring continuity of publication structure and content, and connections with other platforms. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 233A Broadcast News Workshop I

16-18 hours lecture/96-108 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: FJMP 133 with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for RTVC 249A or RTVF 249A

This course is the first in a series of journalism and media production workshops in broadcast news. Emphasis is placed on creating content and editing in a newsroom and television studio using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include identifying newsworthy stories, newswriting and reporting for multimedia journalism content development, news and video editing, and control room operations. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 233B Broadcast News Workshop II

16-18 hours lecture/96-108 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: FJMP 233A with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for RTVC 249B or RTVF 249B

This course is the second in a series of journalism and media production workshops in broadcast news. Emphasis is placed on not only creating content, but managing the production process in a newsroom and television studio using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include producing and directing weekly news programs, evaluating newsworthy stories, and implementing newswriting, interviewing, and video standards. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 233C Broadcast News Workshop III

16-18 hours lecture/96-108 hours lab; 3 units

Grading: Letter Grade or Pass/No Pass

Prerequisite: FJMP 233B with a Grade of "C" or better, or equivalent

Limitation on Enrollment: This course is not open to students with previous credit for RTVC 249C or RTVF 249C

This course is the third in a series of journalism and media production workshops in broadcast news. Emphasis is placed on not only creating content, but supervising a newsroom and television studio using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include effective leadership in a newsroom and studio, establishing newswriting and video standards, ensuring deadline adherence, maintaining continuity of broadcast quality, and communicating team goals clearly. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 242A Radio and Podcast Workshop I
16-18 hours lecture/96-108 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FJMP 142 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVF 247A
This course is the first in a series of workshops in radio news and podcast production. Emphasis is placed on creating content and editing in a studio setting using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include creating spoken word content for the student radio station and podcast platforms. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 242B Radio and Podcast Workshop II
16-18 hours lecture/96-108 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FJMP 242A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVF 247B
This course is the second in a series of workshops in radio news and podcast production. Emphasis is placed on not only creating content, but managing the production process in studio setting using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include organizing and scheduling all live and recorded elements for on-air presentation, as well as creating spoken word content for the student radio station and podcast platforms. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT.

FJMP 242C Radio and Podcast Workshop III
16-18 hours lecture/96-108 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FJMP 242B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVF 247C
This course is the third in a series of workshops in radio news and podcast production. Emphasis is placed on not only creating content, but supervising in a studio setting using a convergence model in which students collaborate with other student media on campus to produce a wide range of multimedia journalism samples. Topics include supervising audio storytelling productions for radio and podcast, with an emphasis on editorial oversight, as well as creating spoken word content for the student radio station and podcast platforms. Students gain practical experience in a studio setting using a convergence model in which students collaborate with other student media on campus to produce a wide range of audio storytelling samples. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. This course is designed for students pursuing media-related majors and anyone interested in media-related industries.

FT; AA/AS; CSU.

FJMP 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 experience for students employed in a media-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. One unit of credit maybe earned for each 54 hours of paid employment. This course may be taken up to four times. This course is intended for students majoring in film, journalism, media production, radio and podcasting, or those interested in the media industry.

AA/AS; CSU.

FJMP 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 not open to students with previous credit for DJRN 290
This course is for students interested in individualized learning in the film, journalism, and/or media production field. It is not intended to replace an existing course in the discipline. Emphasis is placed on focused research, creating and completing projects, and/or exploring issues related to the film, journalism, and/or media production field. A written contract of specific activities and assignments to be completed are assessed and approved by the instructor. Regular meetings between the student and instructor are required to evaluate progress.

FT; AA/AS; CSU.

FREN-French

FREN 101 First Course in French
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 FREN 100
This course is a first semester course in French and is designed to introduce students to the French language and cultures of the French-speaking world. In this interactive course, students use the language by speaking, listening, reading, and writing at the novice level. Basic language structures and vocabulary for communication are examined and explored in French. This course is designed for students majoring in French and all students interested in the French language.

FT; AA/AS; CSU; UC.

FREN 102 Second Course in French
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FREN 101 with a Grade of "C" or better, or equivalent or two years of high school French.
This course is a second semester course in French and is intended for students interested in further study of the French language and cultures of the French-speaking world. In this interactive course, students use listening, reading, speaking, and writing at a more complex level than in the first course. The students further develop their receptive and productive competencies to the high-novice/ low-intermediate level. Additional language structures and vocabulary for communication are examined and explored in French. This course is designed for students majoring in French and all students interested in the French language.

FT; AA/AS; CSU; UC.

FREN 201 Third Course in French
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FREN 102 with a Grade of "C" or better, or equivalent or three years of high school French
This is an intermediate course in French. Language structures and vocabulary for communication are examined and explored through speaking, listening, reading and writing at the intermediate level. Students explore in more depth than in previous courses the history and the culture of the French-speaking world. This course is appropriate for students preparing for a major in French as well as for those who wish to continue their studies of the French language and culture.

FT; AA/AS; CSU; UC.

FREN 202 Fourth Course in French
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FREN 201 with a Grade of "C" or better, or equivalent or four years of high school French
This is an advanced-intermediate course and is the fourth course in the French language sequence. In this interactive course, language structures and vocabulary for communication are examined and studied through speaking, listening, reading and writing at the high-intermediate level. Students continue to explore the history and the culture of the French-speaking world. Readings of literary and culturally relevant authentic materials are examined in depth. This course is designed for students preparing for a major in French as well as for those who have a strong interest in the French language and culture.

FT; AA/AS; CSU; UC.

FREN 210 Conversation and Composition in French I

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FREN 102 with a Grade of "C" or better, or equivalent or successful completion of three years of high school French.
This course further develops oral comprehension and fluency as well as written communication at a mid-intermediate level in French through culturally relevant materials. Students develop spoken and written vocabulary, dramatize everyday topics of conversation, interpret and describe materials, and compare and contrast the cultures of the French speaking world 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 French language.

FT; AA/AS; CSU; UC.

FREN 211 Conversation and Composition French II

48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: FREN 210 with a Grade of "C" or better, or equivalent
This course develops oral comprehension and fluency as well as written proficiency in French at an advanced-intermediate level through reading, analyzing, discussing, and reporting on culturally relevant materials. Students develop oral and reading vocabulary skills, study the cultures of the French-speaking world, and further develop the reading strategies introduced in French 210 through reading literature. This course is intended for students who want to further enhance their skills in the French language.

FT; AA/AS; CSU; UC.

FREN 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 intermediate students who wish to work on special projects and to further develop further their skill in communication in French. 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 and preparing reports.

AA/AS; CSU.

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.

GEOG 135 Geography of California
3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course surveys the cultural and environmental landscapes of California with emphasis on cultural-environment interaction and the spatial patterns of natural, socio-political, economic and demographic forces that have shaped the state. Emphasis is placed on historical and current trends in human population, cultural diversity, migration, settlement patterns, and future geographies of climate change and sustainability. Topics include distinctive high-tech industries, iconic urban areas, resource use, transportation routes, and trade with a focus on the profound interconnections between these subjects, on California's diversity, and on the rapid change that is transforming our people and its landscapes. As the most populous state, there will be focus on the ongoing role of its residents in constructing the identity of the 21st Century Californian. This course is designed for students interested in California geography.

FT; AA/AS; CSU; UC.

GEOG 154 Introduction to Urban 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
This course is a survey of urban geography. Students apply a multidisciplinary approach to investigate and assess urban issues at various scales. Topics include the origins of the city, globalization, urban planning, social justice, and sustainability. This course is designed for students interested in geography, anthropology, sustainability, public administration, urban planning, architecture, and landscape architecture.

FT; AA/AS; CSU; UC.

GEOG 175 Sustainable Places and Practices
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 analyzes sustainability from a geographic perspective using case studies to illustrate sustainable practices from local to global scales. Case studies focus on current sustainable practices in industries such as energy, transportation, and water resources. Using climate and environmental justice frameworks, students evaluate nature-society relationships across different cultures. This course is intended for students interested in environmental issues and sustainability as well as those majoring in Geography or Sustainability.

FT; AA/AS; CSU; UC.

GEOG 205 Critical Thinking and Writing in Geography
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 seminar course is designed to develop students' critical thinking, research, and writing skills in preparation for upper-division coursework. The course emphasizes the interconnectedness of people and places using an interdisciplinary lens that bridges the social and natural sciences. The course covers reasoning techniques, geographic methodologies, the analysis of bias, logical fallacies, and cultural humility. Writing assignments focus on critical reasoning, inquiry-driven research, and argumentative writing for specific geography-related outlets. The evaluation of sources based on currency, relevance, credibility, and other measures contribute to the development of geographic research skills. This course is designed for students who want to expand their knowledge on important global issues, gain information literacy, advance their critical thinking skills, and hone their writing skills.

FT; AA/AS; CSU; UC.

GEOG 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 geography. 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.

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 102 Environmental Geology
3 units
Grading: Letter Grade Only
This course is an introduction to the fundamental principles of environmental geology, focusing on the interaction between Earth processes and human activities. Emphasis is placed on the dynamic relationship between geology, society, and the environment. Topics include natural hazards, land use planning, resource management, and environmental impact assessment. A comprehensive overview of geological processes and their influence on environmental issues, sustainable practices, and the role of geologists in addressing environmental challenges is also explored. This course is intended for students interested in sustainable mining practices and geology.

FT; AA/AS; CSU.

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 120 Earth Science Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: GEOL 104 with a Grade of "C" or better, or equivalent
This is a laboratory course related to the essentials of Earth Science including the geosphere, atmosphere, hydrosphere and Earth's place in the solar system. This course focuses on the physical and chemical systems of the Earth such as the tectonic cycle, rock cycle, hydrologic cycle, weather, and climate. This course is designed for teacher education students and anyone with a general interest in Earth Science.

FT; AA/AS; CSU; UC; C-ID: GEOL 120L.

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.

GERM-German

GERM 101 First Course in German
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 GERM 100
This entry level course introduces students to the German language and cultures of the German-speaking world. In this interactive course, students learn and use the language by speaking, listening, reading, and writing at the novice level. They also examine and explore basic German language structures and vocabulary. This course is intended for beginning students who seek basic proficiency in the German language, students who want to take other German courses, and students who want to learn German for their personal enrichment.

FT; AA/AS; CSU; UC.

GERM 102 Second Course in German
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: GERM 101 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for GERM 100
This interactive course is the second in the German language series. Students use increasingly complex German 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 German language for academic purposes and/or personal enrichment.

FT; AA/AS; CSU; UC.

GERM 201 Third Course in German
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: GERM 102 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for GERM 200
This interactive course is the third in the German 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 German and anyone interested in gaining proficiency in the German language for academic purposes and /or personal enrichment.

FT; AA/AS; CSU; UC.

GISG-Geographic Information Systems

GISG 104 Geographic Information Science and Spatial Reasoning

40-45 hours lecture/24-27 hours lab; 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.
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to Geographic Information Systems (GIS). Emphasis is placed on the fundamental concepts of GIS. Topics include an overview of cartography, remote sensing, and global positioning systems (GPS) as well as GIS data sources, implementation steps, spatial analysis, and applications in government and business. Students are provided the hands-on experience required to visualize information and identify spatial patterns. This course is designed for all students interested in GIS and for professionals who want to know how to use GIS to better understand and analyze geographic data in their field.

FT; AA/AS; CSU; UC; C-ID: GEOG 155.

GISG 110 Introduction to Mapping and Geographic Information Systems

40-45 hours lecture/24-27 hours lab; 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 practical study of Geographic Information Systems (GIS). Emphasis is placed on the use of ArcGIS software to map, analyze, and model geographic information relevant to fields such as forestry, economics, cartography, city planning, and health. Topics include map making, GIS data creation and management, and map projections and coordinate systems. This course is designed for students majoring in geographic information systems and professionals in the field who want to update their skills.

FT; AA/AS; CSU; C-ID: GEOG 155.

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 103 Introduction to Public Health

48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course introduces the concepts, terminology, and functions of public health professions and institutions. Various public health professions and agencies will be examined, as well as the role of public health professionals within the overall health care system. Public health applications of epidemiology, disease prevention, and health promotion will be analyzed. Infectious diseases, chronic diseases, and mental illness will be addressed with respect to epidemiology, prevention, and promotion. The social determinants of health and their impact on health disparities will be covered with respect to environmental health, global health, and healthcare policy and management. This course is intended for students in the Health and Wellness Coaching Program and for students interested in Public Health.

FT; AA/AS; CSU; UC.

HEAL 195 Health Education For Teachers

32-36 hours lecture; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for Health Education for Teachers 190
This course overviews health-related issues and problems in the kindergarten through 12th grade. Topic areas include behavior modification, stress symptoms and management, physical activity, nutrition, cardiovascular disease, sexually transmitted diseases, illicit substance abuse, alcohol and nicotine use and misuse. This course satisfies the State of California Health Education requirement for the K-12 Teaching Credential. This course is intended for prospective K-12 teachers.

FT; AA/AS; CSU.

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.

HEAN-Health Sciences

HEAN 93 Residential Services Specialist I

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 HEAN 265: Residential Services Specialist I
This course is a study of the theories and skills needed by persons involved in residential care for the developmentally disabled. Course content emphasizes the history and trends in service provision in the United States. This includes current principles of normalization and assessment procedures as well as an overview of common developmental disabilities. The interdisciplinary team process and basic counseling techniques are included.

FT; AA/AS.

HEAN 94 Residential Services Specialist II

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 HEAN 265: Residential Services Specialist II
This course is a study of the theories, knowledge and practical skills needed by persons involved in residential care for the developmentally disabled. Course content emphasizes hands-on behavior management techniques, health and developmental needs, program planning and implementation, and approaches to developing social adaptation and other life skills.

FT; AA/AS.

HEOP-Heavy Equipment Operator

HEOP 301A Construction Equipment Operator IA

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course familiarizes apprentices with the heavy equipment operator (HEO) trade. There is an emphasis on safety training relevant to working around equipment and others. Course participation includes opportunities to apply knowledge and develop skills in the operation of track-type equipment including bulldozers backhoes, paving machines and trenching equipment. Basic project procedures are introduced.

FT; AA/AS.

HEOP 301B Construction Equipment Operator IB

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: HEOP 301A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course introduces the apprentice to soils. Basic project procedures are introduced. Course components offer the opportunity to apply knowledge and develop skills in the operation of dump trucks and tractors. Site-preparation, set-up and grade checking skills are also developed.

FT; AA/AS.

HEOP 302A Construction Equipment Operator IIA
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: HEOP 301B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course provides an overview of earth moving operations including clearing and grubbing, excavation, embankment construction, and backfilling and compaction. Safety training relevant to working with scrapers, bulldozers, front-end loaders and backhoes is emphasized. Students apply knowledge and develop skills in the use of rubber tire type earth moving equipment including scrapers and bulldozers. Project procedures and related math concepts are introduced and reinforced.

FT; AA/AS.

HEOP 302B Construction Equipment Operator IIB
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: HEOP 302A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course builds on the apprentice's basic knowledge of earth moving operations. Students apply knowledge and develop skills in the operation of rubber tire type earth moving equipment including front-end loaders and backhoes. Safety training relevant to working around equipment and other workers is reinforced. Soil characteristics and standards for working with soils and aggregates are introduced. Students learn to follow contract plans and properly grade a construction site. Project procedures and related math concepts are introduced and reinforced.

FT; AA/AS.

HEOP 303A Construction Equipment Operator IIIA
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: HEOP 302B with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course reinforces and further develops basic project procedures. Students apply knowledge and develop skills necessary to leadership role of the finish operator and the operation of telescoping excavators. Advanced safety training relevant to working around equipment and other workers is emphasized. Relevant math concepts and safety procedures are developed.

FT; AA/AS.

HEOP 303B Construction Equipment Operator IIIB
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: HEOP 303A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course reinforces and further develops the student's understanding of basic project procedures. Crusher operations and grade setting and checking skills are developed. Safety training relevant to working around equipment and other workers is emphasized. Relevant math content and topics related to soil such as backfilling, stabilization, erosion, geotextiles, and moisture and density tests are developed.

FT; AA/AS.

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 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.

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 103 Introduction to the New Testament
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 the New Testament period (First Century C.E.). Emphasis is placed on the history and culture of the New Testament period, the methods of critical analysis of Biblical materials, and the content of the New Testament. The impact of the New Testament on western culture is also examined. This course is intended for students of history, literature, anthropology or those with a general interest in biblical studies.

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.

HUMA 202 Mythology: Hero's Journey
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 hero's journey. Emphasis is placed on the internal and external dimensions of the hero's journey as reflected in myths of the world through written and other artistic sources. This course is intended for all students majoring in the Humanities and all students interested in mythology.

FT; AA/AS; CSU.

HUMA 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 evidence the ability and interest in pursuing special studies in Humanities. 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 and preparing reports.

AA/AS; CSU.

HUMS-Human Services

HUMS 75 Working with Homeless and At-Risk Populations

32-36 hours lecture; 2 units

Grading: Letter Grade Only

This course prepares students to work with San Diego's homeless and at-risk populations. Topics include an overview of populations and their unique needs. Emphasis is placed on community resources as well as skills needed for front line direct service work. This course is designed for anyone interested in working with homeless and at-risk populations in the areas of human services, social work, alcohol and other drug studies, community health work, gerontology, and psychology.

FT; AA/AS.

HUMS 95 Public Assistance and Benefits Program

16-18 hours lecture; 1 unit

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for HUMS 100

This course is a practical study of current public assistance and benefits programs at the local, state, and federal levels. Emphasis is placed on assistance program structures, eligibility requirements, and scope and duration of benefits. This course is designed for human services students and anyone interested in public assistance and benefits programs.

FT; AA/AS.

HUMS 101 Introduction to Human Aging

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent

This is an introduction to the field of social gerontology. A multidisciplinary approach is utilized to examine the basic biological, psychological, and social aspects of aging. Emphasis is placed on the special needs and problems impacting the aged population. Historical, social, and cross-cultural issues in aging are examined. This course is intended for students majoring in behavioral sciences and gerontology as well as all students interested in human aging.

FT; AA/AS; CSU.

HUMS 103 Introduction to Community Health Work

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is an introduction to Community Health Work (CHW). Emphasis is placed on the role of the Community Health Worker as a promoter of health and healthy living within the health care and public health systems. Topics include the fundamentals of public and preventive health in global and community perspective, community health challenges, and the role of education and advocacy in creating and maintaining healthy communities. This course is designed for Human Services students and anyone interested in Community and Public Health.

FT; AA/AS; CSU.

HUMS 105 Family Strengthening Models in Behavioral Health

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is a practical study of the family strengthening model as it applies to behavioral health challenges. Emphasis is placed on the various support programs available to individuals and families, how to access those resources, how to advocate for care, and how to implement care to promote health and well-being. This course is designed for human services students and individuals currently working in the behavioral health field or interested in entry-level positions in the field.

FT; AA/AS; CSU.

HUMS 110 Social Work Fields of Service

48-54 hours lecture; 3 units

Grading: Letter Grade Only

This course is an introduction to the major fields of social work practice in institutions, public and private agencies, and other community settings. Students examine and differentiate between the predominant settings in which social work is practiced and the role of social work in contemporary society in relation to social injustice, diversity, cross-cultural issues, and economic factors.

FT; AA/AS; CSU.

HUMS 111 Introduction to Chronic Disease

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Through interactive lectures, discussions of readings and case studies, the course covers the historical, practical, and theoretical aspects of chronic disease. In addition, students learn about chronic disease risk factors and chronic disease management interventions. This course is designed for Human Services students and anyone interested in community health work with chronic disease patients and their families and communities.

FT; AA/AS; CSU.

HUMS 112 Community Service Practicum
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: HUMS 103 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for HUMS 113 or HUMS 116
This course is a practical application of the skills and tools required to work in the community. Emphasis is placed on creating needs assessments and focus groups in order to define an issue to be addressed through a community organization project. Students may develop and execute an individual project, take part in a group project, or complete an internship at a community organization. This course is designed for human services students and anyone interested in community organizing.

FT; AA/AS; CSU.

HUMS 114 Introduction to Restorative Justice: Concepts, Theory and Philosophy
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a theoretical and practical study of restorative practices. Emphasis is placed on preparing students in the practice of Restorative Practices within alternative dispute resolution models. This course is intended for students interested in working with youth and adults in the areas of health, mental health, education, and/or corrections.

FT; AA/AS; CSU.

HUMS 118 Diversity and Cultural Competency
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is a practical study of the concepts of diversity, cultural competency and inclusion as they relate to human services organizations and delivery systems. Emphasis is placed on the identification of institutional racism and the application of the principles of organizational inclusion to facilitate increased organizational effectiveness in serving diverse communities. This course is for students majoring in human services and those working in the field.

FT; AA/AS; CSU.

HUMS 120 Introduction to Social Work
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to the field of social work. It covers the historical development of social work as a profession. The core knowledge base, including theoretical perspectives underpinning the profession, are introduced. Emphasis is placed on social work roles, training, methods of intervention, and core social work values and ethics. Students are required to complete 40 hours of volunteer work with an instructor-approved social service setting. This course is intended for social work majors and those interested in the field.

FT; AA/AS; CSU.

HUMS 121 Practicum 1: Core Competencies
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: HUMS 103 with a Grade of "C" or better, or equivalent
This course is a practical application of the skills and tools required to work in the community. Emphasis is placed on in-class practice of Community Health Work (CHW) core competencies particularly regarding communication skills, leadership skills, group facilitation skills, health education skills, advocacy skills, individual and community assessment skills and self-care practices. Students may develop and execute an individual project and take part in a group project. This course is designed for Human Services students and anyone interested in community organizing.

FT; AA/AS; CSU.

HUMS 122 Practicum 2: Field Work
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Corequisite: HUMS 270
Advisory: HUMS 121 with a Grade of "C" or better, or equivalent
This course is designed to mentor students enrolled in a field placement course and provides the opportunity to discuss and analyze their experiences while performing their roles and responsibilities as Community Health Workers (CHWs) in the field. Emphasis is placed on application of knowledge especially in the areas of healthy lifestyles, preventive care, community development, team participation, and health behavior modification.

FT; AA/AS; CSU.

HUMS 125 Health Services Fields of Practice
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to and overview of private, public and clinical community health settings and the health services field. Students gain a working knowledge of public and private community health care systems and delivery, with emphasis on services provided by public and social agencies. Issues relating to access to health care, vulnerable populations, ethical issues and policy development are examined. This course helps prepare for beginning positions and/or retraining in public and private agencies and for community volunteer work in health and human service settings.

FT; AA/AS; CSU.

HUMS 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
This course provides on-the-job learning experiences for students employed in a Human Services-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 Human Services or those interested in the Human Services field.

FT; AA/AS; CSU.

HUMS 276 Field Work in Gerontological Services
16-18 hours lecture/48-162 hours other; 2-4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: HUMS 101 with a Grade of "C" or better, or equivalent
This supervised field experience course allows students to be of service to older individuals in the community while observing the ways in which organizations deal with the various aspects of aging, policy, advocacy, and diversity. Emphasis is placed on providing students with practical experience in basic helping skills as well as the opportunity to explore varied career choices in the field of gerontological services. This course is designed for human services students specializing in gerontology.

FT; AA/AS; CSU.

HUMS 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Pass/No Pass Only
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 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.

INWT-Information, Network, and Web Technologies

INWT 100 Computing Fundamentals (A+)
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
This is a project-oriented course that covers the fundamental methodologies of working as an information technology (IT) support professional. Emphasis is placed on hands-on experience deploying, securing, and maintaining computing technology. Topics include operating systems (OSs), security concepts, hardware and networking, virtualization and cloud computing, mobile devices, and operational procedures. This course is intended for students who want to develop essential skills and fundamental knowledge of computing technology. (Preparatory course for CompTIA A+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

INWT 101 Introduction to Information Security
48-54 hours lecture; 3 units
Grading: Letter Grade Only
This course is an introduction to a variety of information security topics. Emphasis is placed on foundational technical concepts as well as the strategic and operational aspects of managing an information security program. Topics include the foundations of information security; legal, ethical and professional issues of security and privacy; threat and vulnerability assessment; security risk management; roles and responsibilities of personnel; introductory cryptography; security considerations in system support; and access controls and maintenance for securing information assets. This course is designed for students interested in information and technology assets and a general awareness of security issues in these systems.

FT; AA/AS; CSU.

INWT 111 Windows Desktop Administration
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an in-depth study of installation and configuration methodologies of a current Windows desktop operating system. Emphasis is placed on the various methods to deploy, configure, secure, manage, and monitor devices and client applications in an enterprise environment. This course is designed for students who plan to take related Microsoft certification exams.

FT; AA/AS; CSU.

INWT 112 Windows Infrastructure Administration
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
This course is an in-depth study of the administration of Windows Server in a cloud and hybrid environment. Emphasis is placed on the services that span storage, security, networking, and cloud computing capabilities in an enterprise environment. This course is designed for students who plan to take Microsoft Role-based certification exams.

FT; AA/AS; CSU.

INWT 120 Network Fundamentals (Network+)
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade or Pass/No Pass
Advisory: INWT 100 with a Grade of "C" or better, or equivalent
This is a project-oriented course that covers the fundamental methodologies used to securely establish, maintain, and troubleshoot networking systems and devices. Emphasis is placed on designing, configuring, managing, and maintaining secure wired and wireless networks. Topics include switching and routing management, firewalls, policies and procedures, hardening, security, and optimization of networking technologies. This course is intended for students who want to develop essential skills and fundamental knowledge of network infrastructure. (Preparatory course for CompTIA Network+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU; C-ID: ITIS 150.

INWT 125 Cloud Architecture (Cloud+)
36-40.5 hours lecture/36-40.5 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
This course is an in-depth study of the skills needed to plan, maintain, and optimize cloud infrastructure services. Emphasis is placed on incorporating and managing multi-cloud technologies as part of broader systems operations. Topics include configurations and deployments, management, maintenance, security, and troubleshooting cloud-based, hybrid, and multi-cloud environments. This course is intended for students who want to develop essential skills and fundamental knowledge of cloud computing technology. (Preparatory course for CompTIA Cloud+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

INWT 140 Security Fundamentals (Security+)
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: INWT 100 with a Grade of "C" or better, or equivalent and INWT 120 with a Grade of "C" or better, or equivalent
This is a project-oriented course that covers the fundamental methodologies necessary to perform core security functions. Emphasis is placed on the knowledge and skills required to assess the security posture of an enterprise network environment and recommend and implement appropriate security solutions. Topics include architecture and design, implementation, threats and vulnerabilities, operations and incident response, and risk and compliance. This course is intended for students who want to develop essential skills and fundamental knowledge required of any cybersecurity role. (Preparatory course for CompTIA Security+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU; C-ID: ITIS 160.

INWT 146 Linux Administration (Linux+)
24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: This course is not open to students with previous credit for INWT 145
This is a project-oriented course that covers the fundamental methodologies used to administer Linux systems. Emphasis is placed on the skills needed to successfully configure, manage, and troubleshoot Linux systems. Topics include installation, kernel modules, storage and virtualization, device management, automation, networking and security, command line and scripting, and troubleshooting. This course is intended for students who want to develop essential skills Linux administration. (Preparatory course for CompTIA Linux+ certification)

FT; AA/AS; CSU.

INWT 170 Network Defense & Countermeasures (CySA+)

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and INWT 120 with a Grade of "C" or better, or equivalent and INWT 140 with a Grade of "C" or better, or equivalent
This is a project-oriented course that focuses on the skills needed to proactively defend and continuously improve the security of an organization. Emphasis is placed on the application of behavioral analytics to networks to improve the overall state of security through identifying and combating malware and advanced persistent threats (APTs). Topics include threat and vulnerability management, software and systems security, incident response, security and operations monitoring, and compliance and assessment. This course is intended for students who want to develop essential skills for continuous security monitoring. (Preparatory course for CompTIA CySA+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

INWT 201 Ethical Hacking and Penetration Testing

24-27 hours lecture/72-81 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in: INWT 120 with a Grade of "C" or better, or equivalent and INWT 140 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for INWT 200
This is a project-oriented course that focuses on techniques used to test the resiliency of networks against attacks. Emphasis is placed on skills used to plan, scope, exploit, and manage weaknesses in networks. Topics include threat vector identification, network scanning, operating system (OS) detection, vulnerability analysis, system hacking and testing, and report writing. This course is intended for students who want to develop skills in cyber operations. (Preparatory course for CompTIA PenTest+ certification - DoD 8140/8570.01-M)

FT; AA/AS; CSU.

ITAL-Italian

ITAL 101 First Course in Italian

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 ITAL 100
This is the first course in the Italian language sequence. In this interactive course, students use basic vocabulary, grammatical structures and idiomatic phrases to speak, listen, read, and write in Italian at the novice level. Emphasis is placed on daily life activities as well as Italian history, culture, and geography. This course is intended for all students interested in Italian language and culture.

FT; AA/AS; CSU; UC.

ITAL 102 Second Course in Italian

80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ITAL 101 with a Grade of "C" or better, or equivalent or two years of high school Italian or equivalent.

Limitation on Enrollment: This course is not open to students with previous credit for ITAL 100
This is the second course in the Italian language sequence. In this interactive course, students use increasingly complex language at the high-novice level. Topics include vocabulary, grammatical structures, and tenses to analyze and express opinions related to a variety of topics, including Italian culture, politics, and the environment. Emphasis is placed on daily life activities as well as Italian history, culture, and geography. This course is intended for all students interested in Italian language and culture.

FT; AA/AS; CSU; UC.

ITAL 201 Third Course in Italian
80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ITAL 102 with a Grade of "C" or better, or equivalent or three years of high school Italian or equivalent.
This is the third course in the Italian language sequence. In this interactive course, students use intermediate level vocabulary, grammatical structures, and tenses to analyze and to express opinions related to a variety of topics, including Italian culture, politics, and the environment. This course is intended for all students interested in Italian language and culture.

FT; AA/AS; CSU; UC.

ITAL 210 The Grammar of Spoken Italian I
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ITAL 102 with a Grade of "C" or better, or equivalent
This course is designed to develop and enhance oral communication skills by means of reading, listening, and practicing Italian in various contexts. Topics include everyday life situations, current events, and culture. The course also includes grammar review, reading and discussion of contemporary literature, and written compositions. This course is conducted entirely in Italian and is intended for intermediate-level students interested in increased fluency in the Italian language.

FT; AA/AS; CSU; UC.

ITAL 211 The Grammar of Spoken Italian II
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: ITAL 210 with a Grade of "C" or better, or equivalent
This course is designed to enhance and refine oral comprehension, fluency, and written communication in Italian. Students use advanced vocabulary and idiomatic phrases to express themselves orally and in writing in social, cultural, and academic settings. This course is conducted entirely in Italian and is intended for advanced-level students interested in increased fluency in the Italian language.

FT; AA/AS; CSU; UC.

ITAL 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
For intermediate students who wish to work on special projects.

AA/AS; CSU.

LABR-Labor Studies

LABR 100 American Labor Movement
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 United States (U.S.) labor movement in historical perspective. Emphasis is placed on the struggles and philosophy of American workers from the colonial era to the present. Topics include, early American class and race conflicts, the fight against slavery, the intersection of race and gender in the workplace and in American politics, the rise of globalization, and the labor movements of the 21st century. Students are required to analyze a variety of primary and secondary sources, think critically, and write thesis-base essays. This course is designed for students majoring in labor studies or history and all students interested in the American labor movement, including students who are employees and/or union members, and workers who are in leadership roles or are preparing for leadership positions in their workplace or unions.

FT; AA/AS; CSU; UC.

LABR 102 Labor Law
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 LABR 105
Labor Law provides an overview of the legal framework and doctrines governing labor-management relations and the workplace rights of minorities and other individual employees. While "Labor Law" generally refers to the National Labor Relations Act or equivalent public sector laws, this class also covers laws that are sometimes referred to as "employment" laws. They include the various discrimination, retaliation, wage, and safety laws that may be enforced by individuals or unions. These laws offer additional ways to facilitate organizing and contract campaigns, as well as grievance handling. Designed to provide practical legal background for the study and practice of labor relations both in California and in the nation at large. This course focuses on real problems brought to the class by the students, and it aims to stimulate ways of using the law to build your local unions, as well as to support broader efforts such as organizing temporary workers, coalition work with human rights and environmental groups, and political lobbying campaigns. This course is intended for anyone interested in Labor Law including students who are employees and/or union members, and individuals who are in leadership roles or are preparing for leadership positions in the workplace or in unions.

FT; AA/AS; CSU.

LABR 104 Collective Bargaining
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course covers major collective bargaining issues including the right to organize, employer/employee rights and the union, the structure of bargaining, bargaining strategies, the organizing component for setting the "climate" for bargaining, negotiating written agreements, public sector bargaining, impasse and arbitration procedures and mock negotiations. This course is intended for workers who are in leadership roles or are preparing for leadership positions in their workplace or unions.

FT; AA/AS; CSU.

LABR 107 Organizing
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 LABR 090
This course is an in-depth study of labor and community organizing. Emphasis is placed on labor and community activism and leadership and organizing theories and techniques. Students analyze various campaigns to illustrate the process of building a culture and capacity for labor and community organizing. This course is designed for labor studies majors, union members, and all members of the community interested in organizing.

FT; AA/AS; CSU.

LABR 108 Labor 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 LABR 135
This course explores the labor movement's role in politics. The class focuses on local, national and international political issues that impact trade, employment, workers' rights, and the lives of working Americans. It addresses labor's relationship to political action committees, the political parties, its activities in the broader political arena, and its interactions with social movements. Specifically, electoral politics, lobbying, strike strategy, living wage and other social justice campaigns, community organizing, class and identity politics, and responses to corporate globalization are addressed in a variety of contexts. This course involves students in hands-on by inviting them to investigate the political process themselves by getting involved in some capacity. This course is intended for anyone interested in the political strategy and tactics of the labor movement, including students who are employees and/or union members, and workers who are in leadership roles or are preparing for leadership positions in their workplace or unions.

FT; AA/AS; CSU.

LABR 122A Shop Steward, Level I
16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
This hands-on course covers the rights and responsibilities of shop stewards. It emphasizes development of communication and informal problem-solving skills, investigation and preparation of grievances, and interpreting and explaining the contract for members. The class addresses the current or past concerns and issues that students deal with in their workplace. This course is designed for shop stewards, union members, and employees who want to learn basic workplace rights and problem-solving skills.

FT; AA/AS; CSU.

LABR 122B Shop Steward, Level II
16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
The course covers skills and knowledge needed for more advanced shop steward responsibilities, such as recruiting new members, providing new member orientations, and educating members on political and workplace issues. It focuses on organizing members to address workplace issues as a group, helping with contract negotiations, and developing the communication and interpersonal skills to deal with difficult individuals. This course is designed for shop stewards, union members, and employees who want to have a leadership role in their union or place of employment.

FT; AA/AS; CSU.

LABR 123A Occupational Safety and Health
24-27 hours lecture; 1.5 units
Grading: Letter Grade or Pass/No Pass
This hands-on course studies the relationship between work and health through a variety of perspectives, beginning with the history of workplace injury, illness and death in the United States. Students learn the Occupational Safety and Health legislation and its implementation at the federal and state level as well as employer and employee rights and responsibilities; the elements of a successful injury and illness prevention program in the workplace; and how to identify and evaluate hazards and control measures. Students apply the topics covered in the course to problem-solving based on workplace experience and case studies. This course is intended for students who are employees and/or union members interested in improving workplace health and safety.

FT; AA/AS; CSU.

LABR 290 Independent Study Labor Studies
48 - 162 hours other; 1-3 units
Grading: Pass/No Pass Only
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 Labor Studies 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.

LBAS-Liberal Arts and Sciences

LBAS 100 Introduction to Climate Literacy
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
This course is an introduction to the fundamentals of climate literacy from the scientific and non-scientific lens. Topics include basic mechanics of climate change and how it effects communities and culture. Emphasis is placed on climate change, sustainability, and environment and social justice issues related to climate change. This course is intended for all students interested in climate literacy.

FT; AA/AS; CSU.

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.

MACT-Machine Technology

MACT 140 Machine Technology

48-54 hours lecture/48-54 hours lab; 4 units

Grading: Letter Grade Only

This course is an introduction to the Machine Technology field. Emphasis is placed on safety, measurements, common formulas, machining applications, drawings, and career opportunities in the field. This course is designed for students planning to major in the occupational field of machine technology.

FT; AA/AS; CSU.

MACT 150 Intro/Computer Numerical Control (CNC)

48-54 hours lecture/48-54 hours lab; 4 units

Grading: Letter Grade Only

This course is a study of advanced machining techniques including numerically controlled mills and lathes. Emphasis is placed on introducing the student to Computer Numerical Control (CNC) programming using "G" and "M" codes. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 160M Introduction to CAD/CAM

48-54 hours lecture/48-54 hours lab; 4 units

Grading: Letter Grade Only

Advisory: Concurrent enrollment in: MACT 161M

This course is an introductory, hands-on study of Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) theory and applications using Mastercam software. Emphasis is placed on generating programs at a basic level for both the Computer Numerical Control (CNC) Mill and CNC Lathe. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 161M Applications of CAD/CAM I

96-108 hours lab; 2 units

Grading: Letter Grade Only

Advisory: Completion of or concurrent enrollment in: MACT 160M with a Grade of "C" or better, or equivalent

This course presents students with intermediate-level Computer Aided Design/Computer Aided Manufacturing CAD/CAM projects dealing with Computer Numerical Control (CNC) program generation for the CNC Mill and CNC Lathe using Mastercam software. Students at this level work under moderate instructor supervision to increase efficiency and quality of work. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 162M Applications of CAD/CAM II
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 161M with a Grade of "C" or better, or equivalent
This course presents students with advanced-level Computer Aided Design/Computer Aided Manufacturing (CAD/CAM) exercises dealing with Computer Numerical Control (CNC) program generation for the CNC Mill and CNC Lathe using Mastercam. Students at this level work with minimal instructor supervision to increase efficiency and quality of work. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 170 Introduction to CNC Controlled Vertical Machining
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 150 with a Grade of "C" or better, or equivalent
This course is an introductory, hands-on study of Computer Numerical Control (CNC) Vertical Machining and CNC Lathe theory and techniques. Emphasis is placed on Vertical Machining operations. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 171 Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers I
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 170 with a Grade of "C" or better, or equivalent
This laboratory course provides exercises in Computer Numerical Control (CNC) Vertical Machining techniques and CNC Turning techniques at an intermediate level. Students at this level work under moderate instructor supervision to increase efficiency and quality of work. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 172 Application of CNC Controlled Vertical Machining and CNC Controlled Turning Centers II
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 171 with a Grade of "C" or better, or equivalent
This laboratory course provides exercises in Computer Numerical Control (CNC) Vertical Machining techniques and CNC Turning techniques at an advanced level. Students at this level work under minimal instructor supervision to increase efficiency and quality of work. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 180M Advanced CAD/CAM
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 161M with a Grade of "C" or better, or equivalent
This course is an advanced, hands-on study of Computer Aided Design / Computer Aided Manufacturing (CAD/CAM) theory and applications using Mastercam software. Emphasis is placed on generating programs using advanced modeling surface techniques for both the Computer Numerical Control (CNC) Mill and CNC Lathe at a beginning level under direct instructor supervision. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 181M Application in Advanced CAD/CAM I
96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 180M with a Grade of "C" or better, or equivalent
This course is an advanced, hands-on study of Computer Aided Design / Computer Aided Manufacturing (CAD/CAM) theory and applications using Mastercam software. Emphasis is placed on generating programs using advanced modeling techniques for both the Computer Numerical Control (CNC) Mill and CNC Lathe at an intermediate level under moderate instructor supervision. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 182M Application in Advanced CAD/CAM II

96-108 hours lab; 2 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MACT 181M with a Grade of "C" or better, or equivalent
This course is an advanced, hands-on study of Computer Aided Design / Computer Aided Manufacturing (CAD/CAM) theory and applications using Mastercam software. Emphasis is placed on generating programs using advanced surface modeling techniques for both the Computer Numerical Control (CNC) Mill and CNC Lathe at an advanced level under minimal instructor supervision. This course is intended for students majoring in machine technology or for professionals who want to update their skills.

FT; AA/AS; CSU.

MACT 290 Independent Study

48 - 162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
For advanced students in machine technology who wish to pursue problems and projects relating to their particular subject area. The student meets with the instructor at specific intervals and is expected to do primary research, analyze problems and submit reports.

FT; AA/AS; CSU.

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.

MARK 105 Professional Selling

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the principles of sales and selling. Emphasis is placed on the role of human relations in the processes of selling products, services and ideas. Topics include sales techniques, including opening the sale, discovering the needs and wants of the client, addressing objections and closing the sale. Students develop and deliver written and oral sales presentations. This course is designed for students majoring in business or marketing and anyone interested in the sales profession.

FT; AA/AS; CSU.

MARK 130 Advertising Principles

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of the principles and practices of advertising. Emphasis is placed on target marketing, consumer behavior, and Integrated Marketing Communications (IMC). This course is designed for students majoring in business or marketing and anyone interested in employment or a career in the field of advertising.

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.

MATH 92 Applied Beginning and Intermediate Algebra

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for Math 265S or Math 96.
This course emphasizes real world applications in the development of beginning and intermediate algebraic topics. Topics include a review of fractions, decimals and percents, as well as the development of linear, quadratic, rational, radical, exponential and logarithmic functions. This course is designed for those students whose major and transfer institution requires only statistics or math for liberal arts as the transfer level math course for the degree.

FT; AA/AS.

MATH 96 Intermediate Algebra and Geometry

80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Advisory: Enrollment in MATH 96X (MATH 96 and MATH 15B learning community)
Intermediate algebra and geometry is the second of a two-course integrated sequence in algebra and geometry. This course covers systems of equations and inequalities, radical and quadratic equations, quadratic functions and their graphs, complex numbers, nonlinear inequalities, exponential and logarithmic functions, conic sections, sequences and series, and solid geometry. The course also includes application problems involving these topics. This course is intended for students preparing for transfer-level mathematics courses.

FT; AA/AS.

MATH 98 Technical Intermediate Algebra and Geometry

64-72 hours lecture; 4 units
Grading: Letter Grade or Pass/No Pass
This course introduces an applied technology approach to problem solving in Intermediate Algebra and Geometry. Students are expected to apply problem solving techniques to technology-based situations in their technical physics and applied technology courses. Topics include scientific notation, algebra of functions, linear systems of equations, graphing using log and semi-log paper, technology applications of quadratic, exponential and logarithmic functions, right triangle trigonometry, applications in electronics of vectors and phasors. Special emphasis is placed on the use of the graphing calculator and mathematical software packages to solve application problems. This course is intended for students in the Engineering and applied technologies majors.

FT; AA/AS.

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 107 Introduction to Scientific Programming

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: MATH 107L
This course is an introduction to mathematical and scientific problem-solving on a computer; focusing on designing algorithms of a high level programming language. Extensive programming is required. Students are expected to plan and write programming projects with documentation. This course is recommended for students transferring to majors in Computer Science and /or mathematics.

FT; AA/AS; CSU; UC.

MATH 107L Introduction to Scientific Programming Lab

48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: MATH 107
Extensive programming is required. Students are expected to plan and write programming projects with documentation. This course is recommended for students transferring to majors in Computer Science and /or mathematics.

FT; AA/AS; CSU.

MATH 109 Explorations in Mathematical Analysis
64-72 hours lecture/48-54 hours lab; 5 units
Grading: Letter Grade or Pass/No Pass
This is the second of a two-course integrated sequence in algebra, geometry, critical thinking, and practical applications of mathematics. This course focuses on the ability to use mathematical concepts to develop quantitative analysis, logic and computation skills. Students analyze, construct, and dissect algebraic topics from the perspective of implementing the concepts in various real life situations and develop a strong mathematical foundation applicable to problem solving in other academic disciplines. Topics include rules of logic, in particular focusing on implications; mathematical reading; algebra of functions; graphing and analysis of functions; reading, interpreting and analyzing graphs; linear, quadratic, exponential and logarithmic modeling; solving polynomial, rational, exponential and logarithmic equations; applications of mathematics in finance and economics. This course is intended for students planning to major in any of the following fields of study: Fine Arts, Visual and Performing Arts, Humanities, Behavioral Sciences, Social Sciences, Business, Economics, or Life Sciences. This course is not intended for students planning to major in Science, Technology, Engineering, and Mathematics (STEM) fields of study.

FT; AA/AS; CSU; UC.

MATH 115 Gateway to Experimental Statistics
48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
This course is a second in the study of statistical methods integrated with algebraic tools to prepare students to analyze these processes encountered in society and the workplace. The course covers a review of functions, their geometric properties, counting principles and probability rules, probability distribution functions, sampling, and inferential statistics of one and two variable data sets. Students are expected to implement technology to perform calculations to analyze data and make statistical conclusions. This sequence of courses is intended for students that are not planning on majoring in a science, technology, engineering or mathematics related discipline.

FT; AA/AS; CSU; UC.

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 210A Concepts of Elementary School Mathematics I

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 a study of the mathematical concepts needed for teaching elementary school mathematics with emphasis on number and function. This course promotes an appreciation of the importance of logical thinking and applications of mathematics in problem solving and critical thinking. It studies the basic computational skills, but also requires the understanding and explanation of the basic mathematical concepts and the connections between them. This course includes content relevant to national and state curriculum standards for elementary school mathematics. It is designed for students preparing for credentials in elementary education.

FT; AA/AS; CSU; UC.

MATH 210B Concepts of Elementary School Mathematics II

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Prerequisite: MATH 210A 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 second course in a one-year sequence in the study of the mathematical concepts needed for teaching elementary school mathematics with emphasis on geometry, transformational geometry, and measurement. This course also promotes an appreciation of the importance of logical thinking and applications of mathematics in problem solving and critical thinking. It studies the understanding and explanation of the basic mathematical concepts and the connections between them. Analytical reading and problem solving are required for success in this course. It is designed especially for students preparing for credentials in elementary education.

FT; AA/AS; CSU; UC.

MATH 212 Children's Mathematical Thinking
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: MATH 210A 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 focuses on children's mathematical thinking and includes an in-depth study of place-value, fractions and how children solve mathematical problems. Students observe children and evaluate the problem strategies that are used. This course is intended for students pursuing a Multiple Subject Credential.

FT; AA/AS; CSU.

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.

MEDA-Medical Assisting

MEDA 115 Pathophysiology

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Prerequisite: MEDA 55 with a Grade of "C" or better, or equivalent or MEDA 110 with a Grade of "C" or better, or equivalent or BIOL 160 with a Grade of "C" or better, or equivalent
The course focuses on disease processes in the human body from a systems approach. Analysis of the most common and significant diseases is included. The signs and symptoms, etiology, diagnosis, and treatment of disease are examined along with the appropriate medical terminology. This course is designed for students in allied health programs, but is also open to those who wish to broaden their medical background or review this information.

FT; AA/AS; CSU.

MFET-Manufacturing Engineering Technology

MFET 101 Introduction to Manufacturing Engineering Technology

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for MFET 101A or MFET 101B or MFET 101C.

This course is designed for students who are interested in the field of Manufacturing Engineering Technology (MFET). The course introduces manufacturing principles, including manufacturing systems, design concepts, process and material selection, computer-integrated manufacturing, quality control and management, global competitiveness and manufacturing costs, safety and environmental concerns. It also provides an overview of the MFET program structure, job perspectives for graduates, salary ranges and various career options in manufacturing.

FT; AA/AS; CSU.

MFET 105 Print Reading and Symbology

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Limitation on Enrollment: This course is not open to students with previous credit for MFET 105A or MFET 105B, or ENGE 108.

This course is a study of the types of symbols and engineering notations used for mechanical, electrical, electronic, hydraulic and pneumatic diagrams, as well as precision sheet metal drawings and welding specifications. Other topics include scales, precision measurement instruments, geometric dimensioning and tolerancing (GD&T). Actual drawings are used to demonstrate concepts and practice in interpreting the symbols and notations. This course is designed for students who are currently working in a manufacturing plant or pursuing a career in an engineering or technology field.

FT; AA/AS; CSU.

MFET 107D STEM Drone Building

8-9 hours lecture/48-54 hours lab; 1.5 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: MFET 101 with a Grade of "C" or better, or equivalent

This course provides students the opportunity to apply manufacturing engineering technology skills to build a multi-rotor Unmanned Aerial Vehicle (UAV), otherwise known as a drone. Students work together in teams to operate tooling in manufacturing processes. Topics include the fundamental principles of manufacturing a multi-rotor UAV, such as production, stages, quality, lean manufacturing, automation, and manufacturing prints. This course is designed for students interested in manufacturing a multi-rotor UAV and preparing to enter the manufacturing engineering technology field.

FT; AA/AS; CSU.

MFET 107G STEM Guitar Building

8-9 hours lecture/48-54 hours lab; 1.5 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: MFET 101 with a Grade of "C" or better, or equivalent

This course provides students the opportunity to apply manufacturing engineering technology skills to build an electric guitar. Students work together in teams to operate tooling in manufacturing processes. Topics include the fundamental principles of manufacturing a guitar, such as production, stages, quality, lean manufacturing, automation, and manufacturing prints. This course is designed for students interested in guitar building and preparing to enter the manufacturing engineering technology field.

FT; AA/AS; CSU.

MFET 107H STEM High Tech Device Building

8-9 hours lecture/48-54 hours lab; 1.5 units

Grading: Letter Grade or Pass/No Pass

Corequisite: Completion of or concurrent enrollment in: MFET 101 with a Grade of "C" or better, or equivalent

This course provides students the opportunity to apply manufacturing engineering technology skills to build a “high-tech” electronic product. Students work together in teams to operate tooling in manufacturing processes. Topics include the fundamental principles of manufacturing an electronic product, such as production, stages, quality, lean manufacturing, automation, and manufacturing prints. This course is designed for students interested in manufacturing a “high-tech” electronic product and preparing to enter the manufacturing engineering technology field.

FT; AA/AS; CSU.

MFET 110 Industrial Safety

32-36 hours lecture; 2 units

Grading: Letter Grade or Pass/No Pass

The course is a study of safety fundamentals in an industrial environment and their relationship to accident prevention. It introduces students to the Occupational Safety and Health Administration (OSHA) policies, procedures and standards for industries. Course topics include electrical safety, hazardous materials and conditions, fire protection, tools and machines, welding and cutting, personal protective equipment, hazard communication, construction, ergonomics and industrial hygiene. This course is designed for students who are currently or will be working in construction or general industries. Upon successful course completion, students may receive an OSHA 30-hour Construction or General Industry Outreach Training Completion Card.

FT; AA/AS; CSU.

MFET 114 Problem Solving and Corrective Action

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: ENGL C1000 with a Grade of "C" or better, or equivalent and MFET 101 with a Grade of "C" or better, or equivalent
This course is designed for students who are interested in learning effective problem-solving methods used in manufacturing industries. Topics include planning for problem solving, developing a competent problem-solving team, defining and describing the problem, proposing interim containment plans, identifying and verifying root causes, identifying and verifying permanent corrections, implementing and validating corrective actions, applying preventive measures, and effectively communicating results. Emphasis is placed on the concept of proactive problem-solving including risk analysis, design for manufacturability, and error-proofing processes.

FT; AA/AS; CSU.

MFET 115 Properties of Materials

40-45 hours lecture/24-27 hours lab; 3 units
Grading: Letter Grade Only
Advisory: CHEM 100 with a Grade of "C" or better, or equivalent
This lecture/lab course is a study of the chemical, physical and mechanical properties of industrial materials including metals, ceramics, polymers and composites. The course emphasizes the processes and tests used with different industrial materials during the manufacturing cycles. It also discusses function and structure as they relate to specific design considerations. This course is designed for students who are currently working in a manufacturing plant or pursuing a career in engineering and technology fields.

FT; AA/AS; CSU.

MFET 120 Manufacturing Processes

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: MFET 115 with a Grade of "C" or better, or equivalent
Advisory: Completion of or concurrent enrollment in: ENGE 151 with a Grade of "C" or better, or equivalent or ENGE 111 with a Grade of "C" or better, or equivalent
This lecture/lab course provides basic understanding of how raw materials, including metals, polymers, ceramics and composites, are converted to finished products. In this course, students study commonly used and advanced manufacturing processes, understand the pros & cons of different industrial techniques. Students also learn key terms in manufacturing, and identify various types of equipment in common manufacturing processes. This course is designed for students who are pursuing a career in engineering or engineering technology fields, or working in a manufacturing industry.

FT; AA/AS; CSU.

MFET 150 Manufacturing Automation

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: MFET 120 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MFET 150A or MFET 150B
This lecture/lab course introduces students to the principles of manufacturing automation, process and machine control, programmable logic controllers, robotics, part handling and assembly. Students also learn concepts of group technology, flexible manufacturing systems and their applications in manufacturing industries. Through lectures, hands-on learning experience and demonstrations, students gain knowledge and skills in modern manufacturing that are necessary for seeking rewarding employment opportunities. This course uses a project-based learning approach. It is intended for students, technicians, technologists and engineers who are interested in manufacturing automation.

FT; AA/AS; CSU.

MFET 205 Introduction to Electronic Manufacturing Services

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MFET 150 with a Grade of "C" or better, or equivalent
This course assists students in developing and building fundamental knowledge of the programming, setup, operation, and maintenance of electronic manufacturing systems. Topics include different surface mount components, solder paste and its application, component placement, flux and cleaning, and quality control. Students also acquire hands-on experience on entering equipment programs, operating an entire surface mount technology line, and maintaining the equipment during and after production. The course is designed for students, technicians, technologists, and engineers from industry who are interested in the manufacture of printed circuit board assemblies.

FT; AA/AS; CSU.

MFET 210 Statistical Process Control

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

Advisory: STAT C1000 with a Grade of "C" or better, or equivalent or Successful completion of Intermediate Algebra with a grade of C or better or appropriate placement based on California Title 5 regulations

This lecture/lab course familiarizes students with the applications of statistics in process and quality control function. Students learn to acquire, analyze and interpret data from a process to determine if it is in statistical control and capable of meeting customer's requirements. Statistical techniques include the use of basic graphs and diagrams, control charts, process mean and variability, process capability, sampling and normal distribution. The course also introduces students to the concepts of Six Sigma and design of experiments as part of quality control and improvement. This course is designed for students who are interested in process control, quality improvement and industrial management.

FT; AA/AS; CSU.

MFET 215 Automated PCBA Inspection and Testing

48-54 hours lecture; 3 units

Grading: Letter Grade Only

Advisory: Completion of or concurrent enrollment in: MFET 114 with a Grade of "C" or better, or equivalent or MFET 150 with a Grade of "C" or better, or equivalent

This course explores the study of automated electronic inspection and testing. Topics include the history of automated quality assurance and how it affects the world, computer integrated manufacturing, machine vision and other sensors used in industrial applications, and the role of robotics and software used for automated electronic inspection and testing. Emphasis is placed on implementing the inspection and testing of printed circuit board assemblies and box builds using an in-house automated quality assurance execution system to continually improve product quality and process efficiency. This course is intended for manufacturing technology students who have selected the Electronics Option and students interested in automated electronic inspection and testing, and automated quality assurance.

FT; AA/AS; CSU.

MFET 215L Automated PCBA Inspection and Testing Laboratory

96-108 hours lab; 2 units

Grading: Letter Grade or Pass/No Pass

Advisory: MFET 114 with a Grade of "C" or better, or equivalent and MFET 205 with a Grade of "C" or better, or equivalent

Advisory: Completion of or concurrent enrollment in: MFET 215 with a Grade of "C" or better, or equivalent

This course explores the study of electronic assembly rework, modification, and repair. Topics include terms and definitions associated with the rework, modification, and repair, the levels of conformance and compliance with the IPC-7711/7721 standards, setting-up rework and repair stations, and utilizing tools and materials to effectively follow the rework and repair processes. Emphasis is placed on reworking and repairing or modifying printed circuit board assemblies identified using automated inspection and testing, inputting and analyzing data to make improvements to the automated electronic manufacturing processes. This course is intended for manufacturing technology students who have selected the Electronics Option and students interested in electronic assembly rework, modification, and repair.

FT; AA/AS; CSU.

MFET 220 Programmable Logic Controllers

32-36 hours lecture/48-54 hours lab; 3 units

Grading: Letter Grade Only

This course assists students in developing and building fundamental knowledge of the operation, construction, interfacing and programming of programmable logic controllers (PLCs). Students learn different hardware components, input and output devices associating with PLCs, and PLC applications in various manufacturing systems. Students also acquire hands-on experience on constructing, operating, configuring and programming PLCs. The course is designed for students, technicians, technologists and engineers from industry who are interested in automation and the integration of PLCs in manufacturing.

FT; AA/AS; CSU.

MFET 225 Introduction to Photovoltaic Manufacturing and Applications

48-54 hours lecture/48-54 hours lab; 4 units
Grading: Letter Grade Only
Advisory: ELCT 111 with a Grade of "C" or better, or equivalent or ELDT 124 with a Grade of "C" or better, or equivalent
This lecture/lab course is a study of solar photovoltaic (PV) cell manufacturing, the types of cells and the advantages and applications of solar PV cells. Emphasis is placed on the underlying physical and chemical characteristics of solar cells, the types of manufactured cells and modules, their fabrication processes and applications. This course is designed for students pursuing a career in engineering and technology fields and anyone interested in understanding solar photovoltaics and their applications.

FT; AA/AS; CSU.

MFET 230 Lean Manufacturing

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: MFET 150 with a Grade of "C" or better, or equivalent and MFET 210 with a Grade of "C" or better, or equivalent
This overview course focuses on the terminology, tools, techniques, concepts and principles of Lean Manufacturing. Students are introduced to different Lean tools including value stream mapping, 5-S process, seven deadly wastes, standardized work flow, error proofing, setup reduction, integrated reliability, and production and inventory control. This course uses a project-based approach; provides students with theories, guided discussions, hands-on exercises and industrial case-studies. Course is open to all students who are planning to join industry or currently working in a company instituting Lean Manufacturing.

FT; AA/AS; CSU.

MFET 240 Six Sigma and Lean Implementation

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: MFET 210 with a Grade of "C" or better, or equivalent and MFET 230 with a Grade of "C" or better, or equivalent
This lecture/lab course concentrates on six sigma concepts and implementation of lean in a business organization. Students learn the principles of six sigma and the utilization of six sigma tools in project application. The course also covers DMAIC (Define, Measure, Analyze, Improve, Control) problem solving methodology, team building and project management skills. This course is designed for those who are interested in participating in and/or implementing lean/six sigma at their organization.

FT; AA/AS; CSU.

MFET 242 Industrial Maintenance & Mechatronics

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MFET 150 with a Grade of "C" or better, or equivalent
This course explores the study of classic industrial maintenance and mechatronics. Topics include hydraulics, pneumatics, mechanical drives, and machining with current electronics and electrical systems used in manufacturing today. Emphasis is placed on maintenance analysis and diagnosis; troubleshooting electrical and electronic applications; installing and servicing hydraulics and pneumatics systems; assembly equipment; Heating, Ventilating, and Air Conditioning (HVAC); and building systems. This course is intended for manufacturing technology students who aim to develop competencies in maintenance and/or advanced lean methodologies, and students interested in learning more about improving manufacturing operations.

FT; AA/AS; CSU.

MFET 250 Manufacturing Capstone Course

16-18 hours lecture/144-162 hours lab; 4 units
Grading: Letter Grade Only
Prerequisite: MFET 101 with a Grade of "C" or better, or equivalent and MFET 105 with a Grade of "C" or better, or equivalent and MFET 115 with a Grade of "C" or better, or equivalent
Corequisite: Completion of or concurrent enrollment in: MFET 110 with a Grade of "C" or better, or equivalent and MFET 230 with a Grade of "C" or better, or equivalent
This is a capstone course for the Manufacturing Engineering Technology program. It provides students the opportunity to apply a combination of skills and knowledge to solve an industrial manufacturing problem. Students work together in groups to tackle an integrated, technical problem selected by industry and approved by program faculty. Topics include, but are not limited to, manufacturing materials and processes, design, quality, lean manufacturing and automation. This course is intended solely for students enrolled in the last semester of the Manufacturing Engineering Technology program, and is a major requirement.

FT; AA/AS; CSU.

MFET 252 Total Productive Maintenance
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: Completion of or concurrent enrollment in: MFET 150 with a Grade of "C" or better, or equivalent and MFET 242 with a Grade of "C" or better, or equivalent
This course explores the study of total productive maintenance (TPM), a lean manufacturing methodology. Topics include the development of maintenance systems, the pillars of TPM, Autonomous Maintenance (AM), analyzing and categorizing failure data, and deciding on a maintenance strategy. Emphasis is placed on proactive and preventative maintenance to maximize the lifespan and productivity of equipment. The aims of TPM are high: no breakdowns, no small stops or slow running, no defects, and no accidents. This course is intended for manufacturing technology students who aim to develop competencies in maintenance and/or advanced lean methodologies, and students interested in learning more about improving manufacturing operations.

AA/AS; CSU.

MFET 270 Work Experience
54 - 216 hours other; 1-4 units
Grading: Letter Grade or Pass/No Pass
Limitation on Enrollment: Obtain Permission Number-Work Exp. Coordinator
A program of on-the-job learning experiences for students employed in a job related to their 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.

MUSC-Music Commercial

MUSC 104 Composition Technology
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 050
This course is a practical study of the fundamentals of technology used for music composition and notation required to work in a professional recording studio or commercial music environment. Emphasis is placed on rudimentary Musical Instrument Digital Interface (MIDI) sequencing, notation of music scores, and basic keyboarding / MIDI controller skills. Topics include meter, pitch, chords, and scales. This course is intended for students majoring in music production technology.

FT; AA/AS; CSU.

MUSC 118 Music Entrepreneurship
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
This course is designed to provide students theoretical and practical applications to build a successful career as a self-employed music artist. Topics range from theoretical, such as goal-setting and building creative discipline, to practical, such as revenue streams, financial planning, and self-ownership. Emphasis is placed on a broad but strong understanding of what is necessary to build a successful life of self-employment in the music industry as well as an education on the specific resources that exist to do so. This course is designed for students interested in music.

FT; AA/AS; CSU.

MUSC 160 Introduction to Electro-Acoustic Music
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 084
This course explores electronic music composition in the digital medium with a primary focus on the creation of works of musical art. This course provides students with the fundamental skills required to operate a digital audio workstation (DAW) for recording, editing, and mixing of audio and Musical Instrument Digital Interface (MIDI) data. Topics include digital audio, MIDI, signal flow in the professional studio, elastic audio and quantization, automation, signal processing, basic mixing and editing techniques, and audio file formats for delivery. This course is intended for students majoring in music production technology and anyone interested in entry-level employment in the music industry. Students may take industry-based certification exams at the conclusion of the semester. This course is an industry-partner training course.

FT; AA/AS; CSU.

MUSC 162 Introduction to Recording and Sound Reinforcement

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 80 or MUSI 190
This course introduces the theory and practice of sound recording and live sound reinforcement. Students learn the technical aspects of live sound, the aesthetic aspects of mixing live sound, and microphone placement and mixing strategies to accomplish these goals. This course is intended for students majoring in music production technology and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 170A Electro-Acoustic Ensemble 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 MUSC 070
This course is the first in a series of electro-acoustic ensemble for the study and performance of selected works that involve music technology and commercial music based instruments. Students practice and perform a wide variety of works from different styles/genres as well as original works. Topics include a history of ensemble as well as tone production and basic music theory in performance practice. Emphasis is placed on developing fundamental skills in incorporating and operating music technology along with traditional commercial music instruments intended for live and studio based performance. Attendance at rehearsals and performance is required. This course is intended for students majoring in music production technology or for anyone interested in developing techniques for commercial music performance.

FT; AA/AS; CSU; UC.

MUSC 170B Electro-Acoustic Ensemble II

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: MUSC 170A with a Grade of "C" or better, or equivalent
This course is the second in a series of electro-acoustic ensemble for the study and performance of selected works that involve music technology and commercial music based instruments. Students practice and perform a wide variety of works from different styles/genres as well as original works. Topics include composing, writing, and arranging as well as improvisation as an accompanist. Emphasis is placed on developing beginning skills in incorporating and operating music technology along with traditional commercial music instruments intended for live and studio based performance. Attendance at rehearsals and performance is required. This course is intended for students majoring in music production technology or for anyone interested in developing techniques for commercial music performance.

FT; AA/AS; CSU; UC.

MUSC 170C Electro-Acoustic Ensemble III

48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: MUSC 170B with a Grade of "C" or better, or equivalent
This course is the third in a series of electro-acoustic ensemble for the study and performance of selected works that involve music technology and commercial music based instruments. Students practice and perform a wide variety of works from different styles/genres as well as original works. Topics include improvisation as a soloist as well stage presence and live mixing. Emphasis is placed on developing intermediate skills in incorporating and operating music technology along with traditional commercial music instruments intended for live and studio based performance. Attendance at rehearsals and performance is required. This course is intended for students majoring in music production technology or for anyone interested in developing techniques for commercial music performance.

FT; AA/AS; CSU; UC.

MUSC 170D Electro-Acoustic Ensemble IV
48-54 hours lab; 1 unit
Grading: Letter Grade Only
Advisory: MUSC 170C with a Grade of "C" or better, or equivalent
This course is the forth in a series of electro-acoustic ensemble for the study and performance of selected works that involve music technology and commercial music based instruments. Students practice and perform a wide variety of works from different styles/genres as well as original works. Topics include studio session musician skills, leading and conducting an ensemble, troubleshooting live performance technology issues as well as recording a live mix. Emphasis is placed on developing advanced skills in incorporating and operating music technology along with traditional commercial music instruments intended for live and studio based performance. Attendance at rehearsals and performance is required. This course is intended for students majoring in music production technology or for anyone interested in developing techniques for commercial music performance.

FT; AA/AS; CSU; UC.

MUSC 220A Music Marketing and Promotion I
8-9 hours lecture/72-81 hours lab; 2 units
Grading: Letter Grade Only
This is the first in a series of music marketing and promotion courses. Students are introduced to concepts of budgeting, project management, talent development, and marketing in the music industry as they assist with the production and promotion of original music recordings and live music performances. This course is intended for students majoring in music production technology and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 220B Music Marketing and Promotion II
8-9 hours lecture/72-81 hours lab; 2 units
Grading: Letter Grade Only
Advisory: MUSC 220A with a Grade of "C" or better, or equivalent
This is the second in a series of music marketing and promotion courses. Students coordinate the production and promotion of original music recordings and live music performances, gaining hands-on practice with talent scouting, event budgeting, and press release writing. This course is designed for students majoring in Commercial Music and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 220C Music Marketing and Promotion III
8-9 hours lecture/72-81 hours lab; 2 units
Grading: Letter Grade Only
Advisory: MUSC 220B with a Grade of "C" or better, or equivalent
This is the third in a series of music marketing and promotion courses. Students manage a team to create original music recordings and/or produce live music events. Through this process, students learn to create budgets, develop project timelines, and implement event marketing plans. This course is designed for students majoring in Commercial Music and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 220D Music Marketing and Promotion IV
8-9 hours lecture/72-81 hours lab; 2 units
Grading: Letter Grade Only
Advisory: MUSC 220C with a Grade of "C" or better, or equivalent
This is the fourth in a series of music marketing and promotion courses. Students direct a team through the production and promotion of original music recordings and live music performances, learning how to evaluate budgets, timelines, and talent. In addition, they gain experience partnering with recording studios and not-for-profit organizations. This course is designed for students majoring in Commercial Music and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 252 Sound Design and Digital Audio Post Production
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: MUSC 160 with a Grade of "C" or better, or equivalent and MUSC 162 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for RTVC 152 or DMPR 152 or MUSC 152
This is an advanced course in audio post-production and synchronization with visual image for video, multimedia, and film. Students use a Digital Audio Workstation (DAW) to produce original audio tracks. This course is intended for students majoring in Commercial Music.

FT; AA/AS; CSU.

MUSC 260 Electro-Acoustic Music Composition
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: MUSC 160 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 095
This course explores electronic music composition in the digital medium. Topics include sound sampling, musique concrete, multiple types of synthesis, physics of sound, and digital audio theory. Emphasis is on application of techniques and theoretical knowledge to produce original musical compositions. Diversity of style and approach is encouraged. This course is designed for students majoring in music production technology and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU; UC.

MUSC 262 Intermediate Recording and Sound Reinforcement
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: MUSC 160 with a Grade of "C" or better, or equivalent and MUSC 162 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for MUSC 82
An intermediate-level exploration of the theory and practice of sound recording and live sound reinforcement. Students learn the technical aspects of live sound, the aesthetic aspects of mixing live sound, and microphone placement and mixing strategies to accomplish these goals. This course is intended for students majoring in music production technology and anyone interested in entry-level employment in the music industry.

FT; AA/AS; CSU.

MUSC 290 Independent Study
48 - 162 hours other; 1-3 units
Grading: Pass/No Pass Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course offers students the opportunity to pursue special interests in music. Projects may include extended research on music subjects addressed in scheduled music classes, as well as topics outside the music curriculum. In this course students have a written contract with their instructor for activities, such as written works, compositions, presentations, performances, or original projects. An Independent Study has to be arranged with, approved, and monitored by a member of the music faculty.

AA/AS; CSU.

MUSI-Music

MUSI 044 Supervised Tutoring in Music
0 units
Grading: Non-credit Course
This course is designed to prepare the student 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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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 110 Music for Elementary School Teachers
40-45 hours lecture/24-27 hours lab; 3 units
Grading: Letter Grade Only
This course prepares students to teach music as part of the curriculum in the elementary school classroom, the preschool, or day-care program. Students develop an understanding of musical concepts primarily by singing and playing an instrument, and practice using lesson plans for teaching these concepts to children.

FT; AA/AS; CSU.

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 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 134A Voice 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 120A or MUSI 120.
This course is an opportunity to explore your singing voice. To become a more expressive singer, a variety of songs are used for developing the range, volume, and tone color of your solo voice. A goal of the course is to provide a musical experience that inspires students to continue singing as a source of self-expression and growth.

FT; AA/AS; CSU; UC.

MUSI 137 Singing Plus
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 MUSI 130A
This course is an introduction to singing in ensembles. Emphasis is placed on developing basic vocal, aural and music-reading skills. Students rehearse and perform solo as well as in concert with others. This course is intended for both music and non-music majors.

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 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 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.

MUSI 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 affords students the opportunity to pursue special interests in music. Projects may include extended research on music subjects addressed in scheduled music classes as well as topics outside the music curriculum. The culmination of the course may include a written paper, presentation or performance. An Independent Study has to be arranged with, approved and monitored by a member of the music faculty.

FT; AA/AS; CSU.

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.

NRSE-Nursing Education

NRSE 92 Nursing Student Success
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Pass/No Pass 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 NRSE 265B
Special Admission - must be admitted to program.
This course is designed to provide the incoming nursing student with an introduction to the study of nursing. The student participates in eight four-hour sessions to explore and become familiar with the expectations and realities of being a nursing student. Utilizing a variety of topics, activities, examinations, and general information. This course is designed to assist the student to develop strategies to be successful in the Nursing Education Program. Emphasis is placed on the student's responsibilities in identifying person learning styles that are most effective and a personal study plan to facilitate mastery of this rigorous and challenging program. The philosophy of the Nursing Education Program and the role of the student in developing accountability, integrity, and meeting the standards of academic and clinical conduct are also discussed.

FT.

NRSE 108 Nursing Skills Laboratory II
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is intended for second semester students pursuing an Associate of Science Degree in Nursing. It provides students an additional opportunity for practice and mastery of basic nursing skills. There is opportunity to apply related theoretical concepts with supervised practice of basic nursing skills that are concurrently presented in the second semester of the Nursing Education Program.

AA/AS; CSU.

NRSE 121 Nursing Skills Laboratory I
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is intended for first semester students pursuing an Associate of Science Degree in Nursing. It provides students an additional opportunity for practice and mastery of basic patient care skills. There is opportunity to apply related theoretical concepts with supervised practice of introductory patient care skills that are concurrently presented in the first semester of the Nursing Education Program.

AA/AS; CSU.

NRSE 140 Foundations of Nursing
32-36 hours lecture/120-135 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: BIOL 205 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
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course provides an introduction to nursing and the roles of the associate degree nurse, the nursing process, critical thinking, knowledge, and foundational skills necessary for beginning-level assessment and interventions (procedures) for adults. It also introduces the learner to the philosophy and conceptual framework of the nursing program. The emphasis is on meeting the client's basic needs throughout the life cycle. Introductory skills of client care are practiced in the skills and simulation laboratories with supervised clinical experiences in a variety of health settings. This course is intended for students enrolled in the first semester of the Associate of Science Degree in the Nursing.

FT; AA/AS; CSU.

NRSE 141 Pharmacology for Nursing
16-18 hours lecture; 1 unit
Grading: Letter Grade Only
Corequisite: Completion of or concurrent enrollment in: NRSE 140 with a Grade of "C" or better, or equivalent
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course introduces basic concepts of pharmacology. Legal, ethical, psychological, cultural, and age-specific aspects of drug therapy are presented. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is intended for students enrolled in the first semester of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 142 Medical Surgical Nursing I
32-36 hours lecture/120-135 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 140 with a Grade of "C" or better, or equivalent and NRSE 141 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an introduction to nursing concepts and practices as they relate to the young adult through geriatric adult in the medical surgical environment. Through utilization of the nursing process, the student begins to recognize alterations in physical and physiological functioning or illness and formulates age-appropriate nursing interventions. Topics include selected psychomotor skills associated with the basic human needs, medication administration, and intravenous therapy, are studied and practiced. This course is intended for students enrolled in the first semester of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 143 Pharmacology for Nursing II
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 142 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course provides supplementary instruction on pharmacologic intervention for medical surgical disorders. Emphasis is placed on drug categories and medications used in medical surgical nursing care environments. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is intended for students enrolled in the Associate of Science Degree in Nursing.

AA/AS; CSU.

NRSE 144 Medical Surgical Nursing II
32-36 hours lecture/120-135 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 142 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course develops the first year nursing student's knowledge and skills as they relate to the adult non-critical moderately complex medical-surgical client. Through utilization of the nursing process, the student recognizes alterations in functioning or illness and formulates age-appropriate nursing interventions. Psychomotor skills associated with moderately complex needs, medication administration and intravenous therapy are studied and practiced. The impact of multiple nursing diagnoses on client outcomes is introduced. This course is intended for nursing students enrolled in the second semester of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 145 Pharmacology for Nursing III
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 144 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course emphasizes drug categories and medications used in acute medical/surgical environments. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is intended for students enrolled in the Associate of Science Degree in Nursing.

AA/AS; CSU.

NRSE 146 Maternal-Child Health Nursing
36-40.5 hours lecture/108-121.5 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 142 with a Grade of "C" or better, or equivalent
Advisory: NRSE 140 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course focuses on integration and application of the nursing process as it relates to the nursing care of the childbearing family, children, and their families. Emphasis is on the concepts and skills related to age-appropriate, family centered care. Clinical experiences provides opportunities for students to participate in therapeutic activities in a variety of pediatric and obstetrical settings. This course is intended for nursing students enrolled in the second semester of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 147 Pharmacology for Nursing IV
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 146 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course emphasizes drug categories and medications used in reproductive health, obstetrics, and pediatrics. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is intended for students enrolled in the Associate of Science Degree in Nursing.

AA/AS; CSU.

NRSE 206 Nursing Skills Laboratory III
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is intended for third semester students pursuing an Associate of Science Degree in Nursing. It provides students an additional opportunity for practice and mastery of intermediate nursing care skills. There is opportunity to apply related theoretical concepts with supervised practice of intermediate nursing care skills that are concurrently presented in the third semester of the Nursing Education Program.

AA/AS; CSU.

NRSE 208 Nursing Skills Laboratory IV
48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is intended for fourth semester students pursuing an Associate of Science Degree in Nursing. It provides students an additional opportunity for practice and mastery of advanced nursing skills required for the care of the complex patient. There is opportunity to apply advanced theoretical concepts to supervised practice of nursing skills needed for the care of the complex patient.

AA/AS; CSU.

NRSE 235 LVN to RN Transition
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Prerequisite: BIOL 205 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
Limitation on Enrollment: Special Admission - must be admitted to program.
This course focuses on the theory and application of the concepts of physical assessment, nursing process, critical thinking, disease processes and nursing competencies in the professional roles of clinician, teacher, leader, and advocate. Emphasis is on assisting the Licensed Vocational Nurse (LVN) to integrate into the Associate Degree Nursing. This course is offered to students accepted into the LVN to Registered Nurse (RN) step up program.

FT; AA/AS; CSU.

NRSE 240 Medical/Surgical Nursing III
32-36 hours lecture/120-135 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 144 with a Grade of "C" or better, or equivalent and NRSE 146 with a Grade of "C" or better, or equivalent and NRSE 235 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course assists the learner to synthesize and correlate nursing knowledge and skills in providing care to multiple clients who have complex, multi-system illnesses. Focus is for the learner to predict client needs and priorities, and evaluate outcomes of care. Associated psychomotor skills are integrated and practiced. This course is offered to students enrolled in the second year of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 241 Pharmacology for Nursing V
16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 240 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course provides supplementary instruction on pharmacologic intervention for medical-surgical disorders. Emphasis is placed on drug categories and medications introduced in advanced medical-surgical nursing care environments. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is offered to students enrolled in the Associate of Science Degree in Nursing.

AA/AS; CSU.

NRSE 242 Mental Health & Gerontological Nursing

36-40.5 hours lecture/108-121.5 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 144 with a Grade of "C" or better, or equivalent or NRSE 146 with a Grade of "C" or better, or equivalent or NRSE 235 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course is an introduction to mental health/psychiatric and gerontological nursing using the nursing process to promote psychosocial and physiological integrity. Emphasis is on therapeutic interaction and communication, bio-psychosocial rehabilitation, and therapeutic use of self. Clinical experiences provide opportunities for students to participate in therapeutic activities in a variety of settings. The student also explores interventions to increase the client's functional abilities with an emphasis on lifestyle and physical changes. This course is offered to students enrolled in the second year of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 243 Pharmacology for Nursing VI

16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 242 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course provides supplementary instruction on pharmacologic intervention in mental health and gerontological nursing. Emphasis is placed on drug categories and medications used in psychiatric/mental health and gerontological environments. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is offered to students enrolled in the Associate of Science Degree in Nursing program.

AA/AS; CSU.

NRSE 244 Medical Surgical Nursing IV

36-40.5 hours lecture/108-121.5 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 240 with a Grade of "C" or better, or equivalent and NRSE 242 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course focuses on the advanced application of the nursing process in the care of critically ill adult and geriatric clients. The student organizes and discriminates data to establish priorities of care. Correlated clinical experiences emphasize the refinement of clinical decision-making, psychomotor skills, and management of client care in professional nursing practice. This course is offered to students in the final semester of the Associate of Science Degree in Nursing program.

FT; AA/AS; CSU.

NRSE 245 Pharmacology for Nursing VII

16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: NRSE 244 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course provides supplementary instruction on pharmacologic intervention for complex medical surgical disorders. Emphasis is placed on drug categories and medications introduced in complex medical surgical nursing care environments. A nursing process approach to the principles of medication administration and dosage calculation is included. This course is offered to students enrolled in the Associate of Science Degree in Nursing.

AA/AS; CSU.

NRSE 246 Leadership in Nursing

36-40.5 hours lecture/108-121.5 hours lab; 4.5 units
Grading: Letter Grade Only
Prerequisite: NRSE 240 with a Grade of "C" or better, or equivalent and NRSE 242 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This course focuses on the transition from student to staff nurse, emphasizing the responsibilities of planning, organizing, directing, and coordinating client care. Principles of leadership, delegation, time management, decision-making, collegial communication, group dynamics, conflict resolution, and change are included. The clinical experience requires the application of all previously learned concepts and skills. Acute care, long-term care, or community settings are utilized. This course is offered to students in the final semester of the Associate of Science Degree in Nursing.

FT; AA/AS; CSU.

NRSE 270 Occupational Work Experience in Nursing Education

54 - 216 hours other; 1-4 units
Grading: Letter Grade Only
Prerequisite: NRSE 144 with a Grade of "C" or better, or equivalent and NRSE 146 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: Special Admission - must be admitted to program.
This is a work experience course authorized by the Board of Registered Nursing. Students must be employed by or volunteer at a clinical site with which the nursing education program has a current affiliation agreement. The clinical site supports the objectives of the course and provides direct supervision of students through staff nurse mentors. Students apply previously learned nursing theory and clinical skills to perform client care. Students must be in good standing to enroll in this course. 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.

NRSE 290 Independent Study

48 - 162 hours other; 1-3 units
Grading: Pass/No Pass Only
Limitation on Enrollment: Special Admission - must be admitted to program.
Obtain Permission Number from Instructor
This course provides students with an opportunity for additional academic and/or clinical experience in a particular area of nursing.

FT; AA/AS; CSU.

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 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.

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 110 Introduction to Law and Society
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 on the American legal system and its impact on society. Topics include different sources of law such as the federal and state constitutions and statutes, court cases, and administrative agency rules. Emphasis is placed on review of basic legal reasoning, the history and structure of the American legal system, and the way the application of the law shapes society, democracy, civil liberties, and equal rights. This course is intended for students pursuing a major in political science, public administration, and other related fields.

FT; AA/AS; CSU; UC; C-ID: LPPS 110.

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.

PEAC-Peace Studies

PEAC 101 Introduction to Peace 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 provides an overview of the field of peace studies and offers an in-depth look into theories related to peace, conflict studies and non-violence. Students gain an understanding of the various tools and processes that are used internationally in working towards a more equitable, just and peaceful world. Contemporary case studies are explored offering students an interdisciplinary approach to the field in order to address the four main pillars of the Peace Studies program which are human rights, conflict studies, peace processes and the concept of justice in relation to peace.

FT; AA/AS; CSU; UC.

PERG-Personal Growth

PERG 31 Career Planning

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 PERG 30
This course is designed for students who are interested in making career choices. Topics include career exploration through self-assessment in values, personality, interests, and skills. Students learn decision-making strategies as they apply to educational planning and career development.

FT.

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 103 Historical Introduction To 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 activity in Western philosophy from the pre-Socratics to the present. Students in this course survey the major philosophers in their historical contexts. Materials may be drawn from classical and contemporary thinkers. 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 philosophy.

FT; AA/AS; CSU; UC.

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 104B History of Western Philosophy: Modern to Contemporary

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 Modern period through the 20th Century. Students in this course survey representative theories and philosophical reflections related to the history of philosophy from the Modern to Contemporary periods. 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 105 Contemporary 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 explores the issues and problems associated with philosophy in the 20th and 21st centuries. Emphasis is placed on the representative thinkers of the modern and post-modern eras. Students are encouraged to engage in independent research, analysis and formulation. This course is designed for students interested in contemporary society and current events.

FT; AA/AS; CSU; UC.

PHIL 106 Asian 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 explores issues in the philosophical study of Asian philosophy, including questions relating to the nature of the universe, the status and meaning of humankind, and the qualities characterizing the good life. This course may be of special interest to students pursuing Pacific Rim or International Studies.

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 108 Perspectives on Human Nature and Society
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 relating to the topics of human nature and human societal configurations. Students in this course survey representative theories and philosophical reflections related to the notions of human nature and human societal configurations such as the nature of society, the state, and government, with an emphasis on experiential elements of meaningful human existence, and notions of ideal society. Students are encouraged to engage in independent research, analysis and formulation. This course is intended for students pursuing studies in behavioral, social or political science, and anyone interested in philosophy of human nature.

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 110 Philosophy of Religion
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 issues associated with the philosophical understanding of religious phenomena and belief. It analyzes philosophical arguments relating to religious beliefs and includes discussions of Western as well as non-Western belief systems. This course may be of interest to students pursuing religious and cultural studies.

FT; AA/AS; CSU; UC.

PHIL 111 Philosophy in Literature and Other Fiction
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 philosophy in literature and fiction in general. Students in this course survey representative theories and philosophical reflections related to the philosophical issues and themes in selected classical and/or contemporary literature and other fiction such as the nature of reality, the notion of the self, the issue of choice and determinism, the problem of good and evil, and the characteristics of the good life. Students are encouraged to engage in independent research, analysis and formulation. This course is intended for students pursuing studies in literature and media theory, the Behavioral and/or Social Sciences, and anyone interested in philosophy in fiction.

FT; AA/AS; CSU; UC.

PHIL 125 Philosophy 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 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 philosophy of women. Students in this course survey representative theories and philosophical reflections related to philosophy of women such as concepts of womanhood and feminism as they have found expression in mythic, classic, medieval and major modern philosophical traditions. Students are encouraged to engage in independent research, analysis and formulation. The course is intended for students pursuing women's studies and/or political, behavioral or social sciences, and anyone interested in philosophy of women.

FT; AA/AS; CSU; UC.

PHIL 126 Philosophy of Contemporary Gender Issues
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 introduction to the concepts of gender and gender relations. Emphasis is placed on the images, roles, and beliefs about gender and gender relations as they vary across cultures. Topics include the impacts of gender on our everyday lives and the broader societies, including experiences of LGBTQ+ (lesbian, gay, bisexual, transgender, queer, plus) communities. This course is intended for students interested in the development of contemporary gender issues from a philosophical perspective.

FT; AA/AS; CSU; UC.

PHIL 130 Philosophy of Art and Music
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 employs philosophical methods to explore the concepts, principles, and criteria used in the creation and evaluation of art and music. In addition to students interested in philosophy, this course is designed for any student seeking to gain a better understanding of why we appreciate art and music and how we develop standards for evaluating them. A variety of arts may be discussed including painting, sculpture, architecture, design, music, dance, theatre, and literature.

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.

PHIL 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 problem, or learning activities in the field of philosophy. 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.

PHOT-Photography

PHOT 100 Introduction to Black & White Photography

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to basic camera handling skills and the aesthetics of photography, utilizing black and white film. Emphasis is placed on how to use cameras, lenses, enlargers, and related equipment. Proper film exposure and compositional skills to create original images are also covered. Laboratory practice includes black and white film processing, darkroom printing, and print presentation. This course is intended for students majoring in photography or those with a desire to explore the "old-school" methods of darkroom printing.

FT; AA/AS; CSU; UC.

PHOT 102A Directed Darkroom Studies I

48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Corequisite: Completion of or concurrent enrollment in: PHOT 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 102
This course is the first in a series of four courses of supervised darkroom studies. Emphasis is placed on basic photographic and darkroom skills. This course is intended for photography majors and those interested in darkroom photography.

AA/AS; CSU.

PHOT 102B Directed Darkroom Studies II

48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Prerequisite: PHOT 102A with a Grade of "C" or better, or equivalent
This course is the second in a series of four courses of supervised darkroom studies. Emphasis is placed on intermediate photographic and darkroom skills and medium format film and print techniques. This course is intended for photography majors and those interested in darkroom photography.

AA/AS; CSU.

PHOT 102C Directed Darkroom Studies III

48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Prerequisite: PHOT 102B with a Grade of "C" or better, or equivalent
This course is the third in a series of four courses of supervised darkroom studies. Emphasis is placed on intermediate-advanced photographic and darkroom skills and non-traditional processes and camera use. This course is intended for photography majors and those interested in darkroom photography.

AA/AS; CSU.

PHOT 102D Directed Darkroom Studies IV

48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Prerequisite: PHOT 102C with a Grade of "C" or better, or equivalent
This course is the final in a series of four courses of supervised darkroom studies. Emphasis is placed on large format film and advanced photographic and darkroom skills and print techniques. This course is intended for photography majors and those interested in darkroom photography.

AA/AS; CSU.

PHOT 103 Digital Directed Photo Lab Studies

48-54 hours lab; 1 unit
Grading: Pass/No Pass Only
Advisory: Completion of or concurrent enrollment in: PHOT 105 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course is a project-based supervised lab in digital photography. Emphasis is placed on instruction and practice in photo lab and photo editing techniques. This course is intended for Photography majors and students interested in digital photography.

AA/AS; CSU.

PHOT 105 Introduction to Photography

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This is a basic photography course for non-photo majors covering use of cameras, lenses, in-camera light meter, and tripods. Topics include shutter speeds, depth of field, portraiture, macro, and night photography.

FT; AA/AS; CSU.

PHOT 109 Photographic Composition and Design
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: Completion of or concurrent enrollment in: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course is a study of image design and composition as applied to photography. Emphasis is placed on identifying and isolating compositional elements of a photograph. Topics include the Rule of Thirds, balance, line, and aspect ratio as applied to photographic imaging. This course is intended for students majoring in photography, pursuing a career in photography, or interested in improving their general photographic skills.

FT; AA/AS; CSU.

PHOT 125 Photo Business Operations
32-36 hours lecture; 2 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent and PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course covers basic business organization and planning techniques appropriate for media and photographic production businesses, including pre-production planning, budgeting, and scheduling. Topics include an exploration of a variety of current photography-related business operations, portfolio development, and presentation skills. This is a course for photography majors and those seeking career opportunities in photography.

FT; AA/AS; CSU.

PHOT 135 Intermediate Black & White Photography
32 - 36 hours lecture/48 - 54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: PHOT 100 with a Grade of "C" or better, or equivalent
This course provides students with intermediate-level instruction and practice in black and white film exposure and development procedures and printing. Emphasis is placed on various techniques for enhancing black and white negative and print quality. Topics also include composition, visual communication skills, use of light, lighting control, and equipment. Instruction includes use of 35 mm format and an introduction to medium format cameras. This course is intended for students majoring in photography or having a serious interest in darkroom / fine art image making.

FT; AA/AS; CSU.

PHOT 143 Introduction to Digital Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an introduction to the methods and processes involved in photographic image acquisition, optimization, and output used in digital photography. Emphasis is placed on the evolution from traditional, analog/wet darkroom to digital approaches to photography and the relationship between these approaches. This is a course for photography majors or those seeking career opportunities in photography.

FT; AA/AS; CSU.

PHOT 150 History of Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a survey of the history and development of photography. Emphasis is placed on the various scientific and aesthetic issues involved in creating the 'light-based' image from its inception as a tool of fine art through its involvement in the digital revolution. Topics include the social and cultural impacts of photography, the chemical and optical requirements of the process, and the major historical figures in the development of photography and photographic genres. This course is intended for students majoring in photography or students interested in the history of photography.

FT; AA/AS; CSU; UC.

PHOT 160 Book Publishing for Photographers
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Letter Grade or Pass/No Pass
Advisory: DSGN 100 with a Grade of "C" or better, or equivalent or PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course is a hands-on study of book publishing for photographers. Emphasis is placed on concept creation, layout, design and assembly strategies, and publishing and promotion options. This course is designed for intermediate-level photography students with an interest in creating photographic books for portfolios, monographs, or self-promotion purposes.

FT; AA/AS; CSU.

PHOT 165 Online Portfolio: Websites for Photographers

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent or PHOT 180 with a Grade of "C" or better, or equivalent or PHOT 181 with a Grade of "C" or better, or equivalent
This course is a hands-on study in the development of an online portfolio to showcase work and/or function as a sales tool for art work or professional services. Emphasis is placed on the special layout and design needs of photographic websites for showing and selling images. This course is designed for intermediate and advanced photo students ready to offer their work and/or creative services.

FT; AA/AS; CSU.

PHOT 180 Photo Editing: Lightroom

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
This course is an introduction to the theories and methods of computer use in image-making utilizing both traditional photography and digital technology. The course provides hands on experience in using computer technology as a digital darkroom. Emphasis is on the use of industry standard photo editing software, specifically Adobe Lightroom. Focus is on the applications and principles of image creation, manipulation, and enhancement for visual expression and communication. This course is for photography students who can demonstrate an introductory-level of skill in digital imaging.

FT; AA/AS; CSU.

PHOT 181 Photo Editing: Photoshop

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
This course presents introductory and intermediate-level techniques utilizing Adobe Photoshop. Students explore a variety of technical and creative tools for producing, editing, and altering digital images. This course is for photography students who can demonstrate an introductory-level of skill in digital imaging.

FT; AA/AS; CSU.

PHOT 201A Photographic Lighting Techniques I

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for Photo 200 or Photo 200A
This is the first in a series of lighting technique courses. Emphasis is placed on a foundational understanding of lighting concepts, techniques, and equipment used in all phases and types of film and digital photography. Topics include control and manipulation of lighting and lighting equipment using both additive and subtractive lighting techniques. This course is designed for intermediate and advanced-level students in photography.

FT; AA/AS; CSU.

PHOT 201B Photographic Lighting Techniques II

32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: PHOT 201A with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 203
This is the second in a series of lighting technique courses. Emphasis is placed on intermediate level lighting concepts and industry-standard practices. Topics include mixed lighting, location lighting, painting with light, green screen sets, tethered capturing, and the use of a light table. This course is designed for intermediate and advanced-level students in photography.

FT; AA/AS; CSU.

PHOT 204A Creative Darkroom Techniques I

8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 204, PHOT 211, or PHOT 265G.
This course is the first in a series for intermediate and advanced photo students. It provides a broad base of creative photographic techniques for the darkroom. Emphasis is placed on printing images from non-traditional camera types, including toy and pinhole cameras. Topics include artistic methods, such as high contrast/litho imagining and specialty films. This course is intended for photography majors or those interested in fine art photography.

FT; AA/AS; CSU.

PHOT 204B Creative Darkroom Techniques II
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent and PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 213
This course is the second in a series for intermediate and advanced photo students. It provides a broad base of creative photographic techniques for the darkroom. Emphasis is placed on printing images from infrared film and modified digital cameras to capture a part of the spectrum unseen by human eyes. Topics include artistic methods, such as infrared film selection, digital camera filters and conversion, and printing from film or digital capture. This course is intended for photography majors or those interested in fine art photography.

FT; AA/AS; CSU.

PHOT 204C Creative Darkroom Techniques III
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 135 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 216
This course is the third in a series for intermediate and advanced photo students. It provides a broad base of creative photographic techniques for the darkroom. Emphasis is placed on historical and alternative photographic processes used in both the fine art and commercial world. This course is intended for photography majors or those interested in fine art photography.

FT; AA/AS; CSU.

PHOT 204D Creative Darkroom Techniques IV
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 135 with a Grade of "C" or better, or equivalent and PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 217
This course is the fourth in a series for intermediate and advanced photo students. It provides a broad base of creative photographic techniques for the darkroom. Emphasis is placed on the creation of quality darkroom prints (silver, cyanotype, etc.) from digital files, including digital single lens reflex (DSLR), iPhone, or scanned negatives. This course is intended for photography majors or those interested in fine art photography.

FT; AA/AS; CSU.

PHOT 205 Travel Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 105 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course provides students with the necessary concepts and techniques to improve their image-making while traveling. The course covers film and digital, color and black and white, infrared, tripods, night photography, lens selection, filters, luggage/packing, X-ray, printing, and more. This course is designed for students with a serious interest or career aspirations in stock, editorial, travel, assignment, or fine art photography.

FT; AA/AS; CSU.

PHOT 206A Creative Digital Techniques I
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 212
This course is the first in a series for intermediate and advanced photo students. Emphasis is placed on creative digital photographic techniques. Topics include High Dynamic Range Imaging (HDRI) photographic techniques and expanding the capture range of digital imaging chips and/or to push processing into impressionistic or surreal output. This course is intended for photography majors or those interested in digital photography.

FT; AA/AS; CSU.

PHOT 206B Creative Digital Techniques II
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 214
This course is the second in a series for intermediate and advanced photo students. Emphasis is placed on creative digital photographic techniques. Topics include the use of multi-shot techniques to create panoramas, mosaics (multi-row panoramas), and extended depth of field using digital editing techniques. This course is intended for photography majors or those interested in digital photography.

FT; AA/AS; CSU.

PHOT 206C Creative Digital Techniques III
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 218
This course is the third in a series for intermediate and advanced photo students. Emphasis is placed on creative digital photographic techniques. Topics include equipment and techniques used for macro and close-up photography. This course is intended for photography majors or those interested in digital photography.

FT; AA/AS; CSU.

PHOT 206D Creative Digital Techniques IV
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 219
This course is the fourth in a series for intermediate and advanced photo students. Emphasis is placed on creative digital photographic techniques. Topics include techniques and materials involved in printing on canvas and other non-traditional surfaces. This course is intended for photography majors or those interested in digital photography.

FT; AA/AS; CSU.

PHOT 215 Photojournalism and Documentary Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for DJRN 215 if taken within the last five years
This course covers the use of photographs to illustrate news stories, feature stories, and other narrative content. Emphasis is placed on the approaches to creating images from the objective news photo to the persuasive documentary image. Topics include exploring the equipment used by professional photojournalists in the field and their interaction with the photo editor/buyer. Legal and ethical issues in news media, including the implications of social and cultural constructs, economics, technology, and equity and social justice, are explored. The course is designed for students pursuing media-related majors and for those seeking employment in the field.

FT; AA/AS; CSU.

PHOT 220 Portraiture
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Prerequisite: PHOT 201A with a Grade of "C" or better, or equivalent
This course covers camera types and formats, lenses, digital capture, and accessory equipment used for portrait photography. Topics include the physical, psychological, and compositional aspects and characteristics of different portrait styles. Emphasis is placed on different types and sources of light, both in the studio and on location, use of black and white (B/W) and color films and digital capture, posing techniques and proper use of cosmetics, clothing, etc. This course is intended for intermediate and advanced photography students.

FT; AA/AS; CSU.

PHOT 221 Fine Art and Photography
16-18 hours lecture; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
This course is intended for intermediate and advanced photography students and covers definitions and characteristics of fine art photography. Many fine art photographers are examined throughout various decades and genres, with an emphasis on the visual tools used to create fine art work. Presentation, framing, and marketing are also researched and analyzed.

FT; AA/AS; CSU.

PHOT 224 Color Management for Digital Photography
8-9 hours lecture/24-27 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
This course is intended for students with previous experience using Lightroom or Photoshop and want to produce prints that match their monitors. Topics include monitor calibration, International Color Consortium (ICC) profiles, inkjet printers, media selection, and profile settings for printing at commercial labs.

FT; AA/AS; CSU.

PHOT 230 Advertising Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent or PHOT 201A with a Grade of "C" or better, or equivalent
This advanced photography course emphasizes production of photographs to sell a client's products or services. Topics include the photographer's role in the advertising industry. Emphasis is placed on terminology used in the advertising field, layout production, working to layouts, the psychology of advertising design, use of color, lighting equipment, and lighting techniques. This course is designed for photography majors or advanced photography students.

FT; AA/AS; CSU.

PHOT 235 Advanced Black and White Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 135 with a Grade of "C" or better, or equivalent
This course concentrates on advanced theory and practice of black and white (B&W) photography including professional applications, specialized processes, and mastery of darkroom skills with an emphasis on individual expression. Topics include advanced printing techniques, film, paper types, toning, archival processing, matting and presentation, digital inkjet printing, and exhibition. This course is designed for advanced photography students.

FT; AA/AS; CSU.

PHOT 243 Advanced Digital Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent
This course enhances the skills obtained in an introductory course. Students explore advanced methods and processes involved in digital image acquisition, optimization, and output. Topics include high dynamic range (HDR), enhanced depth of field imaging / focus stacking, single and multi-row stitching for increased resolution, and shooting tethered, both in studio and on location. This course is designed for advanced photography students with a solid foundation in basic digital acquisition and image editing.

FT; AA/AS; CSU.

PHOT 245 Landscape and Nature Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 105 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 265C
This course explores the application of film and digital photography in the natural outdoor setting. From images of the "Grand Landscape" to details and abstracts drawn from nature, the class studies how light, exposure, composition, concepts of isolation and context, color theory, and various camera shooting techniques affect the final image. Students also analyze the works of well-known landscape and nature photographers, both historical and contemporary. The class is designed for intermediate and advanced level photo students with basic film or digital skills.

FT; AA/AS; CSU.

PHOT 250 Fashion Photography
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Advisory: PHOT 201A with a Grade of "C" or better, or equivalent or PHOT 220 with a Grade of "C" or better, or equivalent
This advanced course is a hands-on study of fashion photography. Topics include the assembling a photographic team, creating promotional collateral, and preparing a portfolio for use in the field. Emphasis is placed on the use of photographic equipment and lighting techniques specific to the creation of professional photographs suitable for publication in fashion magazines and advertisements. This course is designed for advanced photography students or photographers currently working in the field.

FT; AA/AS; CSU.

PHOT 257 Wedding and Event Photography
16-18 hours lecture/48-54 hours lab; 2 units
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 143 with a Grade of "C" or better, or equivalent or PHOT 180 with a Grade of "C" or better, or equivalent or PHOT 201A with a Grade of "C" or better, or equivalent
This course covers the techniques, equipment, and approaches used by wedding and event photographers. Emphasis is placed on "must have" shots, the use of assistants, digital equipment, check-lists, and working with clients. This course is intended for advanced-level photography students.

FT; AA/AS; CSU.

PHOT 259A Photographic Portfolio I
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: PHOT 100 with a Grade of "C" or better, or equivalent or PHOT 143 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for PHOT 265B or PHOT 259
This course covers the design, fabrication, editing, sequencing, assembly, and presentations of portfolios of work for photography students planning to sell their photographic services or products. Art photographers seeking to show their work in galleries or museums also benefit from this course. This course is designed for intermediate and advanced students to create or update their portfolios.

FT; AA/AS; CSU.

PHOT 259B Photographic Portfolio II
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: PHOT 259A with a Grade of "C" or better, or equivalent
This course is designed for photography students who want to continue the study of photographic portfolio creation at an intermediate portfolio level. Emphasis is placed on fine-tuning their portfolio for specific fine art or commercial job searches or a career change from commercial to fine art photography.

FT; AA/AS; CSU.

PHOT 290 Independent Study in Photography
48 - 162 hours other; 1-3 units
Grading: Letter Grade Only
Limitation on Enrollment: Obtain Permission Number from Instructor
This course is designed for students who wish to pursue special projects or studies in the discipline and is not intended to replace an existing course. A written contract with the instructor is required. This course is designed for students pursuing photography majors and anyone interested in photography industries.

FT; AA/AS.

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 101 Survey of Physical Science Laboratory
48-54 hours lab; 1 unit
Grading: Letter Grade or Pass/No Pass
Corequisite: Completion of or concurrent enrollment in: PHYN 100 with a Grade of "C" or better, or equivalent
This course introduces students to the physical science laboratory and is designed to demonstrate the fundamental concepts of astronomy, geology, chemistry, physics and/or the earth sciences. Emphasis is placed on scientific method, real-world application of the physical sciences and collaborative learning. This course is designed for all students interested 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 100 Introductory Physics
48-54 hours lecture/48-54 hours lab; 4 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 is designed for transfer-level students or for those wanting to acquire basic knowledge in physics with a minimum preparation in mathematics. A comprehensive coverage of subject matter in physics is presented, including mechanics, wave motions, thermodynamics, optics, electromagnetism, and atomic and nuclear physics. Emphasis is on the conceptual aspects, including explanation of natural phenomena. Concepts are reinforced through laboratory work.

FT; AA/AS; CSU; UC.

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 31 Social and Behavioral Sciences Statistics Support

16-18 hours lecture; 1 unit
Grading: Pass/No Pass Only
Corequisite: POLI 201
Limitation on Enrollment: This course is not open to students with previous credit for PSYC 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.

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 124 Power and Justice: An Introduction to Political Theory

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 the relationship between power and justice in modern society. Topics include various accounts of the meaning of power and justice, how political institutions harness power, and the ways in which political power can both impede and advance justice. Materials include classic and contemporary texts, films, and literature. This course is intended for political science majors, transfer students, and students interested in these topics.

AA/AS; CSU; UC; C-ID: POLS 120.

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.

POLI 201 Elementary Statistics for Political Science

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.
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This is an introductory course on statistical methods for political and social sciences. Emphasis is placed on basic data analysis techniques as well as elementary statistical and probability concepts. Topics include descriptive statistics; probability and sampling distributions; statistical inference; correlation and linear regression; analysis of variance, chi-square and t-tests; and application of technology for statistical analysis based on data from disciplines including business, social and behavioral sciences, life science, health science, and education. This course is designed for Political Science majors, other Social Sciences majors, and anyone interested in statistics.

FT; AA/AS; CSU; UC; C-ID: SOCI 125.

POLI 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 if for students who wish to study special topics in political science. 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.

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.

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 111 Psychological/Social Aspects of Aging, Death, and Dying

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, physiological and social factors influencing behavior throughout the aging process, including the aspects of death and dying. This course is intended for students majoring in psychology and for all students interested in the psychology of aging.

FT; AA/AS; CSU; UC.

PSYC 130 Introduction to Community Psychology

48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is a study of community psychology. Emphasis is placed on the history and role of community psychology in the broader field of psychology. Students apply the key perspectives and fundamentals of the field to case studies and current issues in the community. This course is designed for psychology majors and students pursuing career paths in counseling, public, mental health, and human services.

FT; AA/AS; CSU.

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 165 Theories of Consciousness
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course explores various theoretical approaches to the mind-body problem, as well as a broad range of different states of consciousness, including normal waking consciousness, daydreaming, sleeping, dreaming, hypnosis, meditation, and psychedelic drug states. States of consciousness are considered by examining both behavioral experiences as well as neural correlates of those states, including case studies of brain-injured patients and neuroimaging of normal participants in different states of consciousness. This course is intended for all students interested in psychology and/or theories of consciousness.

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 276 Field Work in Psychological Services
32-36 hours lecture/48-54 hours other; 3 units
Grading: Letter Grade or Pass/No Pass
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This supervised field experience course enables the student to be of service to the community while learning about the function of human care services. Emphasis is placed on providing students with the chance to explore the varied career choices in the field of psychology as well as on practical experience with basic helping skills in current social service situations. This course is intended for students who want to work with people in human care services.

FT; AA/AS; CSU.

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.

SDGE-San Diego Gas and Electric

SDGE 90 Electric Lineman IA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 302 or ELCT 190
This course provides an orientation in the power distribution and line construction industry. Basic electrical principles and safety on the job are emphasized. Topics include basic mathematical computations, including trigonometry fundamentals, electron theory, and the fundamentals of magnetism. Students combine electrical theory with laboratory and practical applications in the course of study. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 91 Electric Lineman IB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 304 or ELCT 191
This course involves the study of the power distribution and line construction industry. Topics include methods of producing electricity, alternating current (A.C.) and direct current (D.C.) meters, and circuitry and electric batteries. Students also learn about Ohm's Law, Kirchhoff's Law, and electromagnetic induction. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 92 Electric Lineman IIA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 310 or ELCT 192
This course is a study of alternating current circuits, alternating current (A.C.) and direct current (D.C.) motors and generators, pole and overhead construction, and transformers and voltage regulators. Topics include schematics, shunt and series capacitors, and safety issues outlined by the Occupational Safety and Health Act (OSHA). Calculating power used by electrical circuits is also covered. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 93 Electric Lineman IIB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 312 or ELCT 193
This course covers state safety orders for line construction and maintenance, transmission and distribution systems, and conductors and electrical systems faults. Students also learn about short circuits, system protective concepts, and how to identify control circuits from wiring diagrams. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 94 Electric Lineman IIIA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 320 or ELCT 194
This course covers advanced theory of electrical distribution lines and systems. Other topics include phasing, system groundings, substations, and the use of electrical instruments. Students also learn how to connect transformers in accordance with the state code. Usage of fusing tables and reference tables, including technical symbols are also covered. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 95 Electric Lineman IIIB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: This course is not open to students with previous credit for SDGE 322 or ELCT 195
This course is a continuation of advanced theory of electrical distribution lines and systems. Topics include the use of "hot sticks" and special equipment, repair and maintenance of poles and lines - both cold and energized, and safety practices and local/state requirements. Students are expected to master competencies, such as those included in elements of electricity, overhead pole and electrical line construction, safety codes and applications, electric power system, transformer and meter installations, and exploration of underground electrical distribution. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 302 Electric Lineman IA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 190 or SDGE 90
This course provides an orientation in the power distribution and line construction industry. Basic electrical principles and safety on the job are emphasized. Topics include basic mathematical computations, including trigonometry fundamentals, electron theory, and the fundamentals of magnetism. Students combine electrical theory with laboratory and practical applications in the course of study. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 304 Electric Lineman IB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 191 or SDGE 91
This course involves the study of the power distribution and line construction industry. Topics include methods of producing electricity, alternating current (A.C.) and direct current (D.C.) meters, and circuitry and electric batteries. Students also learn about Ohm's Law, Kirchhoff's Law, and electromagnetic induction. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 310 Electric Lineman IIA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 192 or SDGE 92
This course is a study of alternating current circuits, alternating current (A.C.) and direct current (D.C.) motors and generators, pole and overhead construction, and transformers and voltage regulators. Topics include schematics, shunt and series capacitors, and safety issues outlined by the Occupational Safety and Health Act (OSHA). Calculating power used by electrical circuits is also covered. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 312 Electric Lineman IIB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 193 or SDGE 93
This course covers state safety orders for line construction and maintenance, transmission and distribution systems, and conductors and electrical systems faults. Students also learn about short circuits, system protective concepts, and how to identify control circuits from wiring diagrams. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 320 Electric Lineman IIIA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 194 or SDGE 94
This course covers advanced theory of electrical distribution lines and systems. Other topics include phasing, system groundings, substations, and the use of electrical instruments. Students also learn how to connect transformers in accordance with the state code. Usage of fusing tables and reference tables, including technical symbols are also covered. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 322 Electric Lineman IIIB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is not open to students with previous credit for ELCT 195 or SDGE 95
This course is a continuation of advanced theory of electrical distribution lines and systems. Topics include the use of "hot sticks" and special equipment, repair and maintenance of poles and lines - both cold and energized, and safety practices and local/state requirements. Students are expected to master competencies, such as those included in elements of electricity, overhead pole and electrical line construction, safety codes and applications, electric power system, transformer and meter installations, and exploration of underground electrical distribution. This course is designed for students interested in the electric power trade and those pursuing careers in the field, including utility, military, and commercial areas.

FT; AA/AS.

SDGE 330 Substation Electrician IIIA
80-90 hours lecture; 5 units
Grading: Letter Grade Only
This course is a continuation of advanced theory of electrical substations that includes a practical overview of electrical apparatus designed for third-year Electrician Apprentices. Topics include descriptions and examples of different types of apparatus and their functions, where they are encountered, under what circumstance, typical maintenance, and typical approaches to the equipment. Students will be expected to pass a final examination.

FT; AA/AS.

SDGE 332 San Diego Gas and Electric Substation Electrician IIIB
80-90 hours lecture; 5 units
Grading: Letter Grade Only
This course is a continuation of advanced theory of electrical substations that includes a practical overview of electrical and structural drawings designed for third-year Electrician Apprentices. Topics include descriptions and examples of different types of drawings and their functions, wiring nomenclature, IEEE device numbers and functions, relay functions, alternating current (AC) circuit symbols, direct current (DC) circuit symbols, physical layouts, grounding, foundations, and steel. Students will be expected to master the reading and appropriate use of drawings in various substation situations.

FT; AA/AS.

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 125 Sociology of the Family
48-54 hours lecture; 3 units
Grading: Letter Grade or Pass/No Pass
This course is a study of the structures and functions of the family as a social, cultural and historical institution in the United States and throughout the world. Emphasis is placed on an analysis of the family's relationship to economic structures, political institutions and belief systems. Topics include definitions of family, gender roles and family stability. This course is intended for students majoring in sociology, psychology, social work and counseling as well as any student interested in the study of the family as an institution.

FT; AA/AS; CSU; UC; C-ID: SOCI 130.

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 150 Sociology of Latinos/Latinas
48-54 hours lecture; 3 units
Grading: Letter Grade Only
Advisory: ENGL C1000 with a Grade of "C" or better, or equivalent
This course is an in-depth sociological examination of Latino communities in the United States. Topics include family structure, gender roles, and sexuality; religion; economics; racism; social movements; U.S./Mexico border issues and immigration policy; and education. Emphasis is placed on social interactions, the politics of identity formation, and social processes impacting the status of U.S. Latinos. This course is intended for sociology majors or any student interested in the social sciences.

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.

SOLR-Solar

SOLR 349 Solar Work Experience
4 hours other; 4 units
Grading: Pass/No Pass Only
Limitation on Enrollment: Student must be a state registered apprentice in this trade and concurrently enrolled in a related apprenticeship class.
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.

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.

SPAN 215 Spanish for Spanish Speakers I

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 SPAN 201
This course is designed for students who are fluent in spoken, informal Spanish and who need to improve their writing, reading, and grammar skills. Emphasis is placed on formal, written communication skills in Spanish at the intermediate level, and the study of Hispanic and Chicano culture through contemporary reading materials. The course focuses on language challenges particular to Spanish speakers such as orthography, the inappropriate mix of English and Spanish, and contrasts between standard Spanish and regional variations. This course is conducted entirely in Spanish.

FT; AA/AS; CSU; UC; C-ID: SPAN 220.

SPAN 216 Spanish for Spanish Speakers II

80-90 hours lecture; 5 units
Grading: Letter Grade or Pass/No Pass
Prerequisite: SPAN 215 with a Grade of "C" or better, or equivalent
Limitation on Enrollment: This course is not open to students with previous credit for SPAN 202, nor to Spanish speakers who have received the equivalent of a high school degree in a Spanish speaking country.
This course is the second of a two-course sequence in Spanish for Spanish Speakers. It is designed for students who are fluent in spoken, informal Spanish and who need to improve their writing, reading, and grammar skills. It furthers the mastery of formal, written communication in Spanish at the intermediate-advanced level, while integrating instruction in Hispanic and Chicano culture through increased practice in intermediate-advanced level readings, relevant, and authentic materials. The course focuses on language challenges that Spanish speakers still encounter at intermediate-advanced level, such as orthography, the inappropriate mix of English and Spanish in specific contexts, and standard Spanish as contrasted with regional variations. This course is conducted entirely in Spanish.

FT; AA/AS; CSU; UC; C-ID: SPAN 230.

SPAN 290 Independent Study in Spanish

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 intermediate students who wish to work on special projects and to further develop their communication skills in Spanish. 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.

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.

TROL-Trolley, San Diego

TROL 301 San Diego Trolley Light Rail Vehicle I
24-27 hours lecture/24-27 hours lab; 2 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course is an introduction to the San Diego Trolley Light Rail Vehicle apprenticeship program. Topics include organization of the company, on-the-job safety, use of tools and test equipment, lubrication and maintenance, and vehicle layout and component identification.

FT; AA/AS.

TROL 302 San Diego Trolley Light Rail Vehicle II
16-18 hours lecture/24-27 hours lab; 1.5 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course covers beginning levels of maintenance and inspection of Light Rail Vehicles in the San Diego Trolley Light Rail Vehicle apprenticeship program. Topics include mechanical concepts, planned and unplanned maintenance, component inspections, and use of support equipment.

FT; AA/AS.

TROL 303 San Diego Trolley Light Rail Vehicle III
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course covers intermediate levels of maintenance and inspection of Light Rail Vehicles in the San Diego Trolley Light Rail Vehicle apprenticeship program. Topics include electrical theory, electrical measurement, schematic drawings, control systems, and system troubleshooting.

FT; AA/AS.

TROL 304 San Diego Trolley Light Rail Vehicle IV
32-36 hours lecture/48-54 hours lab; 3 units
Grading: Letter Grade Only
Limitation on Enrollment: Apprenticeship - Student must be a state registered apprentice in this trade.
This course covers advanced levels of maintenance and inspection of Light Rail Vehicles in the San Diego Trolley Light Rail Vehicle apprenticeship program. Topics include electrical component and circuit theory, number systems, logic, small to large scale circuit integration, and analysis and troubleshooting of vehicle controls.

FT; AA/AS.

WORK-Work Experience

WORK 270 Occupational 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 a job or internship related to an occupational major. Students develop workplace competencies, critical thinking skills, and problem solving abilities through the creation and achievement of job-related behavioral 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 majoring or interested in an occupational field of study.

AA/AS; CSU.

San Diego City College Community

San Diego City College Faculty/ Administrators

ACEDO, Christopher
Associate Professor, Radio/TV

ADEN, Ahmed (Rasheed)
Associate Professor, Counseling
B.A., M.S., San Diego State University

AKERS-CHACON, Justin
Professor, Chicano Studies
B.A., M.A., Ed.D., San Diego State University Teaching Credential, University of Phoenix

AL ANI, Mohammed
Assistant Professor, Business Studies
B.S., Tufts University
M.B.A., San Diego State University

ALEXANDER, Paul
Professor, English
A.A., San Diego City College
B.A., M.A., San Diego State University

ALSORAIMI-ESPIRITU, Mona
Associate Professor, English
B.A., San Diego State University
M.A., Georgia State University

ANZURES, Marco
Assistant Professor, PLC Coordinator
B.A., University of California, Los Angeles
M.A., Pennsylvania Western University

ARMSTRONG, Dometrives
Associate Dean, Nursing Education
A.S.N., San Diego City College
B.S.N., University of Phoenix
M.S.N., University of San Diego
D.N.P., Walden University

BACON, Sean
Professor, Graphic Design
B.A., San Diego State University
M.A., Savannah College of Art and Design

BALL, Christy
Associate Professor, English
A.A., San Diego City College
B.A., University of California, Berkeley
M.A., San Diego State University

BARON, Chris
Professor, English
B.A., M.F.A., San Diego State University

BATHKE, John
Assistant Professor, Native American and Indigenous Studies
B.A., Yale University
J.D., University of California, Los Angeles

BERHANU, Salem
Professor, Counselor, EOPS
B.A., M.A., San Diego State University

BLAHA, Denise
Associate Professor, Child Development
B.S., San Diego State University
M.S., Bank Street College of Education

BLANCO, Karla
Assistant Professor, Psychology
A.A., San Diego Mesa College
B.A., San Diego State University
Ph.D., Washington State University

BODNAR, Dede
Professor, Exercise Science
B.S., M.S., California Polytechnic State University, San Luis Obispo

BOOTS, Jennifer
Professor, ELAC and English
A.A., Grossmont College
B.A., M.A., San Diego State University

BOUSHEE, Nicholas
Professor, Political Science
B.A., Minnesota State University, Moorhead
M.A., Ph.D., University of California, Riverside

BREAY, Audrey
Professor, English
B.A., Rhodes College
M.A., University of Washington

BROWN, Christopher
Professor, Health & Exercise Science
B.A. Mt. Vernon Nazarene, Mt. Vernon, Ohio
M.S., Cal State University, Fullerton

CALVARIO, Velma V.
Assistant Professor, Chicano Studies
B.A., M.A., San Diego State University

CAMARENA, Misael
Professor, Mathematics
M.A., San Diego State University

CARR, Shana
Acting Dean, School of Business, Information Technology, Cosmetology, Engineering, and Trades
Associate Professor, Accounting
B.A., University of California, San Diego
M.A., University of California, San Diego

CARRILLO, Elsa Cristina
Associate Professor, Counseling
A.A., Southwestern College
B.A., M.A., Ed.D., San Diego State University

CARILLO, Ismael
Assistant Professor, Counseling, EOPS
B.A., M.A., San Diego State University

CHADDOCK, Lisa
Associate Professor, Geography
B.A., M.A., San Diego State University

CHAMBERS, Jennifer
Professor, Biology
B.S., Humboldt State University
M.S., Humboldt State University

CHARLENS, Erin
Professor, Counseling, UMOJA
A.A., Cabot College
B.A., San Francisco State University
M.A., Golden Gate University
Ed.D., San Diego State University

CHARLENS, Mitch
Professor, Exercise Science/Head Men's Basketball Coach
B.A., San Francisco State University
M.A., California State University, Chico

CHAVEZ, Matilda
Vice President, Instruction
B.S.N., Arizona State University
M.S.N., Case Western Reserve University

CHRISTENSEN, Kirsten
Assistant Professor, Psychology
A.A., Middlesex County College
B.A., The College of New Jersey
M.A., Ph.D., University of Massachusetts Boston

COLE, Kristen
Professor, Psychology
A.A., Los Angeles Harbor College
B.A., University of California, Santa Barbara
M.A., Loyola Marymount University
Ph.D., California School of Professional Psychology

COLLINS, Rebecca
Professor, Child Development
B.A., M.A., California State University, Fresno

COVALT, James
Professor, Chemistry
B.S., University of Chicago
M.S., Ph.D., University of California, San Diego

CRANE, Christine
Assistant Professor, Nursing Education
B.S.N., California State University
M.S.N., California State University, Dominquez Hills

CRAWFORD, Kari
Associate Professor, Counselor, DSPS
A.A., College of the Siskiyous
B.S., Southern Oregon University
M.A., Cal Poly, San Luis Obispo

DE LA LAMA, Carlos
Professor, Mathematics
B.A., M.A., University of California, San Diego

DAHLGREN, Amanda
Assistant Professor, Photography
B.S., University of California, Davis
M.F.A., Academy of Art University

DELGADO, Anna
Assistant Professor, Fine Arts
B.A., California State University, San Bernardino
M.F.A., University of North Carolina, Chapel Hill

DETTY, Aaron
Dean, Health, Exercise Science, Nutrition, and Athletics
B.A., University of California, San Diego
M.S., Azusa Pacific University

DURAN, Oscar
Assistant Professor, Counseling, Coordinator NextUP/EOPS
A.A., Palomar College
B.A., San Diego State University
M.S., California State University, Long Beach

EASTON, Leslie
Professor/Director Mental Health Counseling
B.A., University of California, San Diego
M.S.W., San Diego State University
Licensed Clinical Social Worker

ENG, Elaine
Assistant Professor, Director of Student Health Center
B.A., University of Pennsylvania
M.S.N., Columbia University NP

ENGSTROM, Erin
Professor, Communication Studies
B.A., University of Washington
M.A., Colorado State University, Fort Collins

ERUDAITIUS, Anastassia
Assistant Professor, Biology
B.S., University of California, Riverside
M.S., Arizona State University
Ph.D., Arizona State University

ESGUERRA, Genevieve
Dean, Outreach and Enrollment Services
B.A., University of California, Los Angeles
M.S., National University

ESPAR, Michael
Associate Professor, Music
B.A., Yale University
M.A., New York University

ESPITIA, Marilyn
Professor, Sociology
B.A., Cornell University
M.A., Ph.D., University of Texas, Austin

ESTRADA-OLALDE, Jaime
Professor, Spanish
A.A., Palomar College
B.A., Escuela Normal, Mexico
B.A., California State University, San Marcos
M.A., San Diego State University

EVANS, Michael
Assistant Professor, Counseling
B.S., University of California, San Diego
M.S.W., San Diego State University
LCSW

EWELL, Robbi L.
Dean, Information and Learning Technology
B.S., M.A., Cornell University

FADNESS, Soon-Ah
Associate Professor, Philosophy
B.A., University of California, San Diego
M.A., University of California, Irvine

FARES, Caitlin (Caity)
Assistant Professor, Photography
B.A., University of California, Santa Cruz
M.F.A., San Francisco Art Institute

FIS, Dorothy L.
Assistant Professor, Nursing Education
B.S.N., Florida Atlantic University
M.S.N., Colorado Technical University

Diploma in Nursing, University Hospital of the West Indies, Mona Jamaica

FLANAGAN, Erin
Executive Assistant to the President

GALLO, Theresa
Professor, Mathematics
B.A., Catholic University of America
M.A., Ph.D., University of California, San Diego

GARCIA, Georgina Masoni
Professor, Counseling
B.A., M.A., California State University, Long Beach

GARCIA, Octavio D
Assistant Professor, Chicana/o Studies
B.A., University of California, San Diego
M.A., San Diego State University
Ph.D., University of Arizona

GARDELLA, Duane
Professor, Drama and Radio and Television
B.A., M.F.A., University of California, Los Angeles

GODBOUT, Chris
Associate Professor, Mathematics
B.S., Worcester Polytechnic Institute
M.S., Ph.D., Lehigh University

GRACE, Jun
Assistant Professor, Dance
M.F.A., Sara Lawrence College
Ph.D., University of California, San Diego/University of California, Irvine

GREER, Paul
Professor, Exercise Science
B.A., San Diego State University
M.A., Azusa Pacific University

GROOMS-JONES, Patricia
Professor, Cosmetology
A.S., Hawaii Pacific University
B.A., San Diego State University

GROSS, G. Timothy
Associate Professor, Anthropology
B.A., San Diego State University
M.A., Ph.D., Washington State University

GUM, Aileen
Professor, ELAC and English
B.A., University of Minnesota
M.A., University of Colorado
M.A. Monterey Institute of International Studies (TESOL)

GUTIERREZ-AGUERO, Mireya
Director, EOPS, CARE & NextUP
B.S., California State University, San Marcos
M.A., University of San Diego
Ed.D., San Diego State University

GUTIERREZ, Isabel
Associate Professor, Counseling, EOPS
B.A., California State University, Long Beach
M.A., Chapman University

HAGGARD, M. Shane
Associate Professor, Chemistry
A.S., San Diego City College
B.S., M.A., San Diego State University

HARO, Pete
Professor, History
B.S., University of California, Berkeley
M.A., Northwestern University

HART, Allison
Assistant Professor, Nursing Education
A.S., ADN, Grossmont College
B.S.N., M.S.N., Point Loma Nazarene University

HASEGAWA, Susan
Professor, History
B.A., Colorado College
M.P.I.A., University of California, San Diego
M.A., San Diego State University

HAWKINS, Sarah
Associate Professor, Biology
B.S., Elmhurst College
Ph.D., University of Illinois, Chicago

GROSS, G. Timothy
Associate Professor, Anthropology
B.A., San Diego State University
M.A., Ph.D., Washington State University

GUM, Aileen
Professor, ELAC and English
B.A., University of Minnesota
M.A., University of Colorado
M.A. Monterey Institute of International Studies (TESOL)

GUTIERREZ, Isabel
Associate Professor, Counseling, EOPS
B.A., California State University, Long Beach
M.A., Chapman University

HAGGARD, M. Shane
Associate Professor, Chemistry
A.S., San Diego City College
B.S., M.A., San Diego State University

HARO, Pete
Professor, History
B.S., University of California, Berkeley
M.A., Northwestern University

HART, Allison
Assistant Professor, Nursing Education
A.S., ADN, Grossmont College
B.S.N., M.S.N., Point Loma Nazarene University

HASEGAWA, Susan
Professor, History
B.A., Colorado College
M.P.I.A., University of California, San Diego
M.A., San Diego State University<

HAWKINS, Sarah
Assistant Professor, Biology
B.S., Elmhurst College
Ph.D., University of Illinois, Chicago

JAGNANDAN, Kevin
Associate Professor, Biology
B.S., University of Tampa
M.S., Hofstra University
Ph.D., University of California, Riverside

JUN, Grace
Assistant Professor, Dance B.A., University of California, San Diego
M.F.A., Sarah Lawrence College

Ph.D., University of California, San Diego

KELLEY, Rachel
Assistant Professor, Director Student Health Clinic
B.A., San Diego State University
M.S.N. Azusa Pacific University

LAUREIN, Sofia
Professor, History
B.A., M.A., Odessa State University
Ph.D., Moscow Humanities University

LONG, Don
Professor, ILC Specialist Coordinator, Independent Learning Center
Coordinator, Professional Development
B.A. Morehouse College
M.P.A. University of Southern California

LOPEZ, Jesse
Dean, School of Business, Information Technology, Cosmetology, Engineering, and Trades
B.B.A., M.P.A, University of LaVerne

LOPEZ, Leticia
Dean, School of Mathematics, Sciences, and Nursing Education
A.A., Los Angeles Pierce College
B.A., B.S., Mount Saint Mary's University, Los Angeles
M.A., Ph.D., University of California, Santa Barbara

LOPEZ, Manuel
Associate Professor, English
B.A., University of California, San Diego
M.A., San Francisco State University

LOPEZ, Mike
Assistant Professor, Physics & Astronomy
B.A., University of California, San Diego
M.S., Ohio State University

LORENZO, Bernice
Acting Dean of Student Development and Matriculation
B.A., University of California, San Diego
M.A., Ed.D., San Diego State University

MACAPUGAY, Kirin
Associate Professor, Human Services
B.A., M.S.W., San Diego State University

MACNEILL, Andy
Dean, School of Arts, Humanities, Communications, and Telecommunications
B.A., California State University, Chico
M.A., School for International Training, Brattleboro, Vermont
Ed.D., San Diego State University

MAHLER, Jim
Professor, Engineering and Mathematics
B.S., M.S., University of California, Berkeley

MANDILAWI, Nadia
Professor, English
B.A., New York University
M.F.A., San Diego State University

MANSFIELD, Gabriela Coutinho
Assistant Professor, Biology
B.S., Federal Rural University of Rio de Janeiro, Brazil
Ph.D., Federal University of Rio de Janeiro, Brazil

MARTINEZ, America
Assistant Professor, Chicana/o Studies
B.A., M.A., University of California, Los Angeles

MARTINEZ, Hector
Professor, English and Chicana/o Studies
B.A., University of Southern California
M.F.A., San Diego State University

MARTINEZ, Norell
Assistant Professor, English
B.A., M.A., Ph.D., University of California, San Diego

MATEO, Clara
Assistant Professor, Mathematics
B.A., University of California, San Diego
M.A., San Diego State University

MATSUDA, Mariko
Assistant Professor, Alcohol and Other Drug Studies
B.A., San Diego State University
M.S., University of Phoenix

MAYHEW, Kelly
Professor, English
B.A., University of California, Santa Barbara
M.A., San Diego State University
Ph.D., Bowling Green State University

MCGHEE, Patricia
Professor, English
B.A., Cal Poly San Luis Obispo
M.A., University of California, San Diego

MCGRAY, Heather
Professor, Biology
B.S., University of California, Davis
Ph.D., University of California, Irvine

MEEHAN, Elizabeth F.
Professor, English & Humanities
B.A., University of California, San Diego
M.A., Claremont Graduate School

MEDINA, Jessica
Assistant Professor, Counselor, DSPS
B.S., California State University, San Marcos
M.S., San Diego State University

MENA, Mariam
Assistant Professor, Counseling
Coordinator, CalWORKS
B.A., San Diego State University
M.S., National University

MILBURN, Andrea
Professor, Health and Exercise Science
B.S., Regis University
M.S., Azusa Pacific University

MILLER, James
Professor, English
B.A., M.F.A., San Diego State University
Ph.D., Bowling Green State University

MURRAY, Susan Allen
Dean, Institutional Effectiveness
B.A., University of California, Santa

Barbara
Ph.D., Stanford University

MULHOLLAND, Leann
Associate Professor, Librarian
B.A., California State University, San Marcos
M.L.I.S, University of California, Los Angeles

MUSTAFA, Tania
Associate Professor, Business
B.A., M.A., San Diego State University

NAKAJI, Melanie
Assistant Professor, American Sign Language
B.S., University of North Carolina at Greensboro
M.A., M.S., San Diego State University
Ph.D., University of Northern Colorado

NICHOLS, Tayler
Associate Professor, Counselor, DSPS
B.S., Boston University
M.S., Ed.D., San Diego State University

NORVELL, Elizabeth
Professor, Articulation Officer
B.A., University of California, Los Angeles
M.A., M.Phil., Columbia University

PALLESCHI, Alison
Associate Professor, Nursing Education
B.S.N., San Diego State University
D.N.P., M.S.N., Point Loma Nazarene University

PARKER, John
Vice President, Administrative Services
B.S., University of Southern California, University of Phoenix
M.P.A., Arizona State University
D.B.A, Argosy University

PATTO, Philippe
Professor, French
B.A., College De Dieppe, France
B.A., M.B.A., Indiana University of Pennsylvania
M.A., San Diego State University

PEREZ, Jose Luis
Professor, Counselor, Puente
B.A., University of California, San Diego
M.A., Ed.D., San Diego State University

PEREZ, JR, Marciano
Vice President, Student Services
B.A., Denison University
M.A., Ball State University

PERRY, Alexandra
Assistant Professor, Machine Technology
A.S., San Diego City College

PESCE, Sandra
Professor/Librarian
B.A., Tufts University
Professional Certificate in Business, University of Cincinnati
M.L.S., Kent State University
Ph.D., Capella University

PETROVIC, Drazen
Assistant Professor, Mathematics
B.S., M.S., University of Zagreb
Ph.D., Purdue University

PITCHER, Sarah
Professor, Sociology
B.A., California State University Fresno
M.A., Ph.D., Syracuse University

PRAIRIE, Bradford
Associate Professor, Graphic Design
B.A., University of California, Irvine

PRECIADO, Oscar
Professor, English
B.A., M.A., University of California, San Diego

PUGA, Noel Antonio
Assistant Professor, Counselor, Mental Health Counseling/ Student Health Center
A.A., San Diego City College
B.A., M.S., San Diego State University

RANDALL, Tori
Associate Professor, Anthropology
B.A., University of San Diego
M.A., San Diego State University
Ph.D., University of Cambridge, England
Associate Professional Clinical Counselor

REMPALA, Erin
Professor, Biology
B.S., Long Island University, Southampton
M.A., San Francisco State University

RING, Barbara
Professor, Librarian
B.A., San Diego State University
M.A., San Diego State University
MLIS, San Jose State University

RODDA, Katherine
Professor, Dramatic Arts
B.F.A., University of Arizona
M.A., Ph.D., University of California, Santa Barbara

RODRIGUEZ, Crystal
Assistant Professor, Counselor, Promise/Middle College
A.A., Mt. San Jacinto College
B.A., M.A., California State University, San Bernadino

RODRIGUEZ, Marley
Assistant Professor, Librarian
B.A.,M.L.I.S., University of California, Los Angeles

ROGERS, Anna
Associate Professor, English
B.A., University of California, San Diego
M.A., San Diego State University

RUBALCABA, Roberto
Associate Professor, Mathematics
A.A., San Diego City College
B.A., San Diego State University
M.S., Ph.D., Auburn University

SADA, Sandy
Assistant Professor, Counseling
B.A., San Diego State University
M.A., Point Loma Nazarene University

SALEMI, Behnam
Associate Professor, Computer and Information Sciences
B.S., National University of Iran
M.S., Ph.D., University of Southern California

SANCHEZ, Adan
Dean, Student Affairs
B.A., M.A., University of San Diego

Ed.D., University of California, San Diego; California State University, San Marcos

SANDOVAL, Rosalinda
Professor, Spanish
B.A., M.A., San Diego State University

SANZ, Andre
Associate Professor, Counseling
A.A., Saddleback College
B.A., University of California, Berkeley
M.A., San Diego State University

SAVAGE, Nesha
Professor, Counselor, Career
A.A., Santa Ana Community College
B.A., M.A., Ed.D., San Diego State University

SAVARESE, Theresa M.
Professor, Business Studies, Computer Business Technology, Computer Information Sciences
A.A., Phoenix College
B.A., M.A., Arizona State University

SAYEH, Nadia
Professor, Counseling
Mental Health Counseling
B.A., American University of Beirut
M.A., Alliant International University, San Diego
D.S.W., University of Southern California
Licensed Marriage and Family Therapist

SCAPPATICCI, Gerardo
Professor, Physics and Astronomy
B.S., University of Illinois at Chicago
M.S., Ph.D., University of Illinois at Urbana, Champaign

SCAZZOLA, Josephine Dina (Jodina)
Assistant Professor, Radio/TV
B.S., University of Arizona
M.A., Chapman University

SCHOMMER, Steve
Professor, Counseling
A.A., Ventura College
B.A., Southern California College
M.S., San Diego State University

SHABAZZ, Ricky
President
B.A., University of California, Davis
M.A., Ed.D., California State University, San Bernardino

SHELTON, Deanna
Professor, Communication Studies
B.S., University of Texas, Austin
M.A., San Diego State University

SLINGLEND, Nick
Professor, Mathematics
B.S., Wayne State University, Michigan
M.A., University of California, San Diego

SMITH, Manfred C.
Professor, Mathematics
B.A., Berea College
M.S., Miami University
Ph.D., Virginia Polytechnic Institute

SMITH, Susan
Assistant Professor, Nursing Education
A.S.N., Pasadena City College
B.S.N., M.S.N., University of Phoenix

SPEARMAN, Darius
Professor, Black Studies
A.A., College of Marin
B.A., M.A., Sonoma State University
M.A., San Diego State University

ST. GEORGE, Marie
Professor, Psychology
B.A., Fairfield University
M.S., National University
M.A., Ph.D., University of Delaware

STEWART, William
Professor, Philosophy

STONE, Kate
Assistant Professor, Dramatic Arts
B.A., Wheaton College
M.A., New York University
Ph.D., University of California, Irvine

SWEENEY, Kim
Professor, Psychology
B.A., New School for Social Research
M.S., University of California, San Diego

TANORI, Sarah (Sarita)
Assistant Professor, English
B.A., M.A., Rhetoric & Writing Studies, San Diego State University

TAYLOR, LeeAnn
Professor, Health and Exercise Science
A.A., San Diego Mesa College
B.A., California State University, Northridge
M.S., Azusa Pacific University
M.S., California University of Pennsylvania

TESFAMARIAM, Alazar
Professor, Black Studies
B.A., University of Asmara, Asmara Eritera
M.A., Oklahoma State University

TROUTNER, Christina
Assistant Professor, Health and Exercise Science
R.D.N., Bastyr University
B.S., University of California, Santa Barbara
M.S., San Diego State University

TYREE, Ebony
Associate Professor, English
B.A., University of San Diego
M.A., San Diego State University

VALENCIA, Melody Michelle
Acting Coordinator, Counselor, Transfer Center
A.A., Southwestern College
B.A., University of California, San Diego
M.A., San Diego State University

VARGAS, Nicole
Assistant Professor, Journalism
B.A., University of California San Diego
M.A., National University

VASQUEZ, Rebecca
Assistant Professor, Chemistry
B.S., Eckerd College
M.S., University of California, San Diego

VINEGAS, Erelyn
Associate Professor, Nursing Education
A.D.N., San Diego City College
M.S.N., D.N.P., Point Loma Nazarene University

VIZCARRA, Perla
Professor, Counseling
B.A., San Diego State University
M.A., University of San Diego

WALTERS, Darren
Associate Professor, Counselor, DSPS
B.S., Wayland Baptist University
M.S., San Diego State University

WANG, Minxiu
Assistant Professor, Biological Sciences
B.S., M.S., Nanjing Agricultural University
Ph.D., University of Illinois at Chicago, Medical Center

WHITE, Vasugi
Assistant Professor, Nursing Education
B.S.N., Charles Sturt University
M.S.N., University of Phoenix

WEBLEY, Kirk
Assistant Professor, Counseling
B.A., University of California, San Diego
M.A., San Diego State University

WIEHL, Wendy
Professor, Alcohol and Other Drug Studies
Director, Alcohol and Other Drug Studies Program
Pharm.D., University of California, San Francisco

WILL, Lisa
Professor, Physics & Astronomy
B.A., University of California, Los Angeles
Ph.D., Arizona State University

WILLET, Jacqueline
Assistant Professor, Counseling - Veterans
B.A., California State University, Long Beach
M.A., Azusa Pacific University

WILSON, Terry
Professor, Dance
A.A., Palomar College
B.A., San Diego State University
M.F.A., University of Michigan, Ann Arbor

YOUNG, Paul
Professor, Mathematics
B.A., University of California, Berkeley
M.A., University of California, Los Angeles

ZAMORA, Rudy
Professor, Counseling
B.S., M.A., San Diego State University

ZELEDÓN-PÉREZ, Maria-Jose
Assistant Professor, Communication Studies
B.A., Universidad Interamericana de Costa Rica
M.A., Ed.D., San Diego State University

ZUNIC, Koraijka
Professor, English, ELAC
B.A., University of Arkansas
M.A., Hunter College, City College of New York

San Diego City College Faculty/Administrators Emeritus

Abiña, Armando, Administrator
Alexander, Roberta, Faculty
Andersen, Elizabeth, Faculty
Atherton, Jeanne, Administrator
Baldwin, Harry L. Jr., Faculty
Barnes, Randy, Administrator
Battad, Hestor, Faculty
Bauer, John, Faculty
Bell, Jacklyn, Administrator
Berg, Deborah Jo, Faculty
Berkley, James, E., Faculty
Boghos, Moheb E., Faculty
Boley, Rita A., Faculty
Bollinger, John C., Faculty
Bouscaren, Stephen J., Faculty
Brady, Leroy, Faculty
Brashars, Janet, Faculty
Brill, Jack A., Faculty
Brown, Larry J., Administrator
Brown, Michael, Administrator
Burdg, Marvin L., Administrator
Burgess, Terrance, Administrator
Burton, James M., Faculty
Bush, Louis F., Faculty
Butler, Winston, Administrator
Cary, Nancy, Faculty
Castenada, Laura, Faculty
Ceccacci, Vince, Faculty
Czerwonka, Kim, Faculty
Cheung, Cecilia Y.K., Faculty
Clancy, John, Administrator
Clark, Ken A., Faculty
Clowers, Myles, Faculty
Colbert, Jim, Faculty
Cooper, Sherry, Faculty
Coppola, Joseph, Faculty
Cordell, Dotti, Faculty
Corona, Laurel, Faculty
Costello, Joyce, Faculty
Couch, John, Faculty
Crabtree, Lyle Fred, Faculty
Crispen, Nancy, Faculty
Crowe, Alicia, Faculty
Cydell, Alice H., Faculty
Dailard, Doug, Faculty
Dark, James, Administrator
Davalos, Enrique, Faculty
Davies, Thomas, Faculty
Davis, Jerry, Administrator
Dawes, Betty R., Faculty
Deaton, Merilyn S., Faculty
Decker, Mary, Administrator
Dexheimer, Carol, Administrator
Downs, Robert L., Faculty
Dubon, Armando J., Faculty
Duke, Joe W., Faculty
Eichinger, David, Faculty
Elias, Helen, Administrator
Enright, Gwyn, Faculty
Erreca, Lori, Administrator
Escalante, Virginia, Faculty
Escamilla, Augustine, Faculty
Evans, James, Faculty
Fenwick, Jerry, Faculty
Finkel, Pamela, Faculty
Flaherty, Bernard, Faculty
Fontana, Susan, Faculty
Forman, Lawrence, Faculty
Forman, Sidney, Faculty
Francis, Theresa, Faculty
Fredericks, Nancy, Faculty
Galas, James, Faculty
Geddes, John, Faculty
Gerald, Trudy, Administrator
Gooden, Frances, Faculty
Gosewisch, Vincent Robert, Faculty
Gray, Ansel, Faculty/Administrator
Gurumurthy, Ram, Faculty
Halbeisen, Merla, Faculty
Hale, Kris, Faculty
Hammond, John, Faculty
Hansen, Barbara, Faculty
Hardison, James M., Faculty
Harkness, Shirley, Faculty
Harlow, Catherine, Faculty
Harms, Marie-Louise Lind, Faculty
Harris, Berta, Faculty
Harron, Vince, Faculty
Hayward, Peggy F., Administrator
Helt, Nancy, Faculty
Henderson, Charles B., Faculty
Hendry, Willoene, Faculty
Heredia, Gloria, Faculty
Hicks, Barry, Faculty
Hiel, Edwin Ramon, Faculty
Hildebrand, John, Faculty
Hock, Betty, Faculty
Hoeschen, Robert, Faculty
Howard, Dennis, Faculty
Howell, Catherine, Faculty
Hudlemeyer, Elsie B., Faculty
Hunter, Jerry, Administrator
Irwin, Alfred L., Faculty
Jenkins, Marian B., Faculty
Johnson, Anita, Faculty
Julian, Fred, Faculty
Kane, Herald, Faculty
Kater, David, Faculty
Katungi, Nathan, Faculty
Kaye, Robert, Faculty
Keesey, Miriam, Faculty
Kersey, Pamela, Faculty
Kim, Yoonchung, Faculty
Korsedal, Susan, Faculty
Korski, Victor, Faculty
Kosiba, Walter L., Faculty
La Rosa, Frank, Faculty
Lahijani, Roya, Faculty
LaMuraglia, Rose, Administrator
Lang, Curtis E., Faculty
Leavitt, Daniel David, Faculty
Leboffe, Michael J., Faculty
Leiseth, Barbara, Faculty
Lemons, Lemuel W., Faculty
Leon, Sylvia, Faculty
Leslie, Gary E., Faculty
Lewis, Fred G., Faculty
Lim, Patricia, Faculty
Linder, Betty Joe, Administrator
Liska, Paula, Faculty
Lombardi, Jan, Faculty
Long, James H., Faculty
Lopez, Candice, Faculty
Lopez, Catherine, Faculty
Lynch, Donna, Faculty
Lynch, Jeremiah, Faculty
Lyon, Gloria, Faculty
Lyons-Dailard, Cynthia, Faculty
Macias, Cassie, Faculty
MacRenato, Ternot, Faculty
Maes-Erickson, Patsy, Faculty
Mahoney, Pat, Faculty
Manzoni, Ron, Administrator
Margolin, Elias L., Faculty
Markley, John, Faculty
Martin, Fred, Faculty
Martin, Sue, Faculty
Mason, Barbara, Faculty
Massa, Richard N., Administrator
McCarty, Curt, Faculty
McCommins, Patricia, Faculty
McDowell, Madeline E., Faculty
McGinnis, Kathy M., Faculty
Medina, Tanya, Faculty
Menchaca, Miguel, Faculty
Meyers, Lorraine, Faculty
Miller, Carl V., Faculty
Molina, Jake, Faculty
Morgan, Barbara, Faculty
Morton, Cassie, Faculty
Murugesan, Poovan, Faculty
Nelson, H. J., Administrator

Nimmo, Leslie, G., Faculty
Nulton, James D., Faculty
Oblya, Alex, Faculty
Ocen-Odoge, Linda, Faculty
Ortega, Veronica, Faculty
Ottaviano, Pete, Administrator
Owens, Donna, Faculty
Pelletier, Richard, Faculty
Peterson, Catherine Libert, Faculty
Phillips, Sudabeh, Faculty
Pludow, Julie, Faculty
Pruitt, Robert, Faculty
Rangel, Cruz, Faculty
Rangus, Joseph, Faculty
Reid, Josephine F., Faculty
Renker, Laura, Faculty
Repashy, Allen J., Administrator
Richards, Freddie, Faculty
Richards, June, Faculty
Richardson, James R., Administrator
Ripley, Robert, Faculty
Riva, Barbara, Faculty
Rivera, John, Faculty
Roach, Edward, Faculty
Roach, Thomas W., Faculty
Robinson, Patricia, Faculty
Romero-Huerta, Maria Clara, Faculty
Rossitto, JoAnn, Faculty/ Administrator
Rossmaessler, Pauline M., Faculty
Saldivar, Jose, Administrator
Salgado, Jose, Faculty
Salinas, Elva, Faculty
Sauer, June C., Faculty
Schutte, George A., Faculty
Scott, Kathryn Jane, Faculty
Seiler, James, Faculty
Shaff, Jimmie L., Faculty
Shannon, Mary, Faculty
Shaw, Hope W., Faculty
Shina, Abraham, Faculty
Short, Robert, Faculty
Singer, Andrea, Faculty
Singer, David L., Faculty
Skillen, Shirley, Faculty
Sloan, Ella, Faculty
Smith, Dorothy, Faculty
Smith, Robert L., Faculty
Soler-Tossas, José Antonio, Faculty
Spafford, Paul, Faculty
Strecker, Robert, Faculty
Sullivan, Jack, Faculty
Sullivan, Norma, Faculty
Sun, Yu-Hua A., Faculty
Swenson, Darrell, Faculty
Teeple, Kerry J.,Faculty
Tepper, Albert, Faculty
Theis, Edward L., Faculty
Thomas, Carolyn, Faculty
Thomas, Edward L., Faculty
Turkel, Ellen, Faculty
Valenzuela, Dora, Administrator
Van Tassel, Lowell T., Faculty
Von Sein, Edward C., Faculty
Wade, Juanita M., Faculty
Walelign, Adamu, Faculty
Waltz, Candace, Faculty
Weiner, William, Faculty
Weiss, Robert, Faculty
Welch, Douglas R., Faculty
Wellnitz, Jerry N., Faculty
Wemple, Don K., Faculty
West, Harry, Faculty
West, Leo, Administrator
White, Peter, Administrator
Whittleton Jr., H. Mark, Faculty
Willis, John R., Faculty
Wilson, Bobby, Administrator
Wilson, Kenneth, Faculty
Withers, Carol M., Faculty
Wisehart, Gary, Faculty
Witt, Betty, Faculty
Witt, John, Faculty
Wong, Raymond M., Faculty
Worley, Ronald C., Faculty
Wright-Howard, Debra, Administrator
Young, Dwight, Faculty

San Diego City College Contract Classified Professionals

Abbott, Sylvette
Senior Student Services Assistant, Financial Aid

Aguilera Arredondo, Jahaziel I
Program Support Technician, Mental Health Counseling/ Student Health Center
B.S., University of California, San Diego

Antonio, Alyssa
Supervisor, Student Services Admissions & Records

Arellano, Bianca E.
Student Services Technician, HUBU, Puente, Umoja
A.A., San Diego City College
B.A., University of California, Berkeley
M.A., University of San Diego

Arreola, Arturo
Sales Clerk, Bookstore

Arriola, Paolo Joseph
Student Assistance Technician, Financial Aid

Avila-Franco, S. Charlene
Administrative Assistant III, Title V

Bakit, Lydia
Supervisor, Business Office Support, Business Services

Balintec, Regie
Supervisor, Accounting, Student Accounting

Balboa, Brin
Senior Student Services Assistant, Welcome Center

Banzon-Tuazon, Alvin B.
Custodian, Facilities

Bassa, Overath
Custodian, Facilities

Bayisa, Megersa
Instructional Lab Technician, ILC
A.A., San Diego City College
B.A., San Diego State University
M.H.A., National University
M.Ed., Ed.D., Alliant International University

Beck, Gary
Broadcast Operations Specialist, KSDS

Benjamin, Juliet
Senior Account Clerk, Accounting

Bigley, Justin
Administrative Assistant III, Professional Learning

Blas, Francisco
Student Services Assistant, Enrollment Services

Bonner, Jacqueline
Custodian, Facilities

Boyce, John
Occupational, Environmental Health & Safety Coordinator, Business Services

Broussard, Ginger
Administrative Technician - Civic Center, Business Services

Brown, Eugene
Instructional Assistant, Graphics

Browne, Darwin
Program Support Technician, DSPS

Burch, Ashley
Program Support Technician, NextUP/EOPS
B.A., Cal Poly Pomona

Calbeck, Katrina
Custodian, Facilities

Canales, Ivan
Senior Tutor, Tutoring Center

Carroll, Brittney
Research and Planning Analyst
B.A., University of California, Irvine
M.S., San Diego State University

Castellanos, Wendy L.
Senior Tutor, English Center

Castro-Lopez, Gustavo
Custodian, Facilities

Castro Guerrero, Gustavo
Custodian, Facilities

Catarius, Jerimiah
Grounds Crewleader, Facilities

Chandler, Susan
Administrative Assistant III, Nursing Education

Chatfield, Craig H.
Broadcast Engineer, Radio and Television

Chau, Helen
Sales Clerk, Bookstore

Chea, Melissa
Instructional Lab Technician, TSG

Cheshire, Debbie
Lead Food Service Worker, Food Services

Cordeiro, Alberto DaSilva
Micro Specialist Supervisor, TSG

Corro Flores, Magaly
Coordinator, Undocumented Resource Center

Custodio, Kathleen
Research Associate, Institutional Effectiveness and Research
B.A., University of Southern California
M.A., University of California, Los Angeles

Da Rosa, Adam
Custodian, Facilities

Da Rosa, Rogerio
Custodian, Facilities

Davis, Lilia
Student Services Technician, Admissions & Records
M.A., Point Loma Nazarene

Davis, Sheila
Student Services Technician, Financial Aid

D'Ambro, Joseph
Senior Student Services Assistant, Student Transition Services

Day, Alan Jr.
Custodian I, Facilities

de Alba, Ana
Production Services Assistant, Digital Print Production and Mailroom Services

De Alba, Roberto
Gardener/Groundskeeper, Facilities

Devers, Stephen A.
Regional Facilities Officer

Dhanifu, Ronald
Broadcast Operations Specialist, KSDS

Disnew, Marie
Administrative Assistant I – Instruction, Business

Dolfo, Jessica
Student Services Technician, Welcome Center
B.A., Arizona State University
M.A., Point Loma Nazarene University

Dominguez, Nydia
Basic Needs Officer

Donato, Javier G.
Custodian, Facilities

Dunham, Jerry L.
Custodian, Facilities

Duong, Son
Instructional Lab Technician, Electronics

Dupard, Edwidge
Acting Student Services Technician, Scholarship

Ebner, Leslie
Administrative Technician, KSDS

Eddington, Bernetta
Senior Account Clerk, Accounting

Fernandez, Patricia
Supervisor, Digital Print Production and Mailroom Services

Fernandez, Richard
Instructional Assistant, Library

Fox, Chad
Lead Broadcast Operations Specialist, KSDS

Franklin, Todd
Custodian, Facilities

Franklin, Troy
Custodian, Facilities

Frost, Valerie
Administrative Assistant III, Facilities

Garcia, Iramarie
Administrative Assistant IV, Outreach & Enrollment Services

Garcia, Javier
Custodian, Facilities

Garduno, Elena
Senior Student Services Assistant, Enrollment Services
A.A., San Diego City College

Garibay, Susanna
Student Service Assistant, Financial Aid

Gomez, Gustavo
Athletic Equipment Attendant, Athletics

Gonzales, Gabriella
Instructional Lab Technician, Child Development
B.A., California State University, Chico

Gonzales, Lydia
Administrative Assistant V, Instruction
A.A., San Diego City College
B.A., Sacramento State University

Gonzalez, Daniel
Instructional Support Supervisor, Library

Goodman, Alan
Administrative Technician, KSDS Radio/TV Station

Gradilla, John
Student Services Assistant, Counseling
A.S., San Diego City College
B.S., M.S., National University

Green, Tammy
Sales Clerk, Bookstore

Guardado, Carolina
Student Services Supervisor I, VA/ Veterans Service Center

Gumapas, Cesar
Information Officer
B.A., San Diego State University

Gutierrez, Rosangela
Instructional Lab Technician, Child Development
A.S., San Diego City College
B.A., Pacific Oaks College

Guzman, Salvador
Administrative Technician, Business Services

Habeck, Kimberly D.
Athletic Equipment Attendant, Athletics

Hamilton, Jacqueline D.
Custodian, Facilities

Hardwick-Cervantes III, Lawson
Student Support Services Officer, Title III HSI STEM

Hernandez, Abel
Gardener/Groundskeeper, Facilities

Hernandez, Rachel
Student Services Assistant, Admissions & Records

Hicks, Deanna
Administrative Assistant I, Admissions & Records

Hill, Josolyn
Student Services Supervisor, Counseling, Evaluation
A.A., San Diego Mesa College
B.S., MBA, Ed.D., Alliant International University

Holloway, Joan
Senior Food Service Worker

Hurst, Robert
District Network Specialist

Ignacio, Jennifer
Media Technician, Library

Isidro, Emmanuel
Senior Accounting Technician, Student Accounting

Iwuaba, Cyprian
Multimedia Specialist, Communications

Jackson, Terri
Student Services Technician, EOPS

Jenkins, Jayme
Athletic Trainer, HES Program

Johnson, Nicolas
Student Services Technician, Veterans

Johnson, Michelle Y.
Administrative Assistant IV, School of Health, Nutrition, Exercise Science, and Athletics

Jones, Charlene
Clerical Assistant, Tutorial/ Learning Center
A.A., A.S., San Diego City College

Juarez, Rudy
Media Technician, Library

Kabonaizi, Robyn
Senior Student Services Assistant, Admissions & Records

Kapchinsky, Svetlana
Senior Student Services Assistant, Admissions & Records

Kocherhans, Joseph
Radio KSDS, Broadcast Operations Specialist
A.A. San Diego City College

Laredo, Cynthia
Senior Clerical Assistant, Tutorial Learning Services
B.A., San Diego State University

Lee, Lynn
Administrative Assistant III, EOPS
B.S., California State University, Long Beach

Lemus, Ellyzah
Administrative Assistant IV, Academic Senate

Leon, Martha
Administrative Assistant III, College Police

Lewis, Guillemina
Media Technician, Library

Leyva, Noah
Administrative Technician, Institutional Effectiveness

Ligsay, Kathleen Joyce
Instructional Lab Technician, Chemistry

Lollis, Jeffery
Broadcast Operations Specialist, KSDS

Lopez Garcia, Nohely
ILT/Chemistry

Lopez-Rivera, Andrea
Student Services Assistant, Admissions

Lozares, Robert A.
Custodian and Crewleader, Facilities

Lundy, Bruce
Course Materials Buyer, Bookstore

Mansinon-Salazar, Donovan
Instructional Assistant, Graphic Design

Margetta, Vince
Food Service Supervisor, Food Services

Maua, Angelle
Executive Assistant to the President/Exec VC, Office of the President

McClain, Terrellray
Instructional Lab Technician, Information Services

McCullock, James
Theater Technician

Mello, Irene
Administrative Technician, Athletics

Mendoza, Lorenza
Student Services Assistant, Financial Aid

Meza, Dora
Director, Enrollment Services

Michel, Edward G.
Senior Custodial Crewleader, Facilities

Milbrand, Grant
Gardener/Groundskeeper, Facilities

Millan, Maritza
Revenue Assistant, Bookstore

Monsen, Roseana
Instructional Lab Technician, Child Development

Montano, Sofia
Student Assistant Technician, Financial Aid

Morgan, Brent
Gardener/Groundskeeper, Facilities

Morgan, Byron
Instructional Lab Technician, HVAC/R Program

Mouer, Kamini B.
Administrative Technician, Instruction

Muniz Ramirez, Nancy
Administrative Technician, CTE Strong Workforce

Munoz, Mayra
Student Assistant Technician, Financial Aid

Murray, Larry
Broadcast Operations Specialist, KSDS

Najimy, Temmy
Administrative Assistant IV, School of Information and Learning Technology
A.A., San Diego Miramar College
B.A., San Diego State University

Nasrawi, Majeda
Instructional Support Supervisor/ ILC & Office of Classroom Technology Management
B.A., University of California, San Diego
M.S., National University

Navarro, Cecilia
Student Assistant Technician, Financial Aid

Oldham, Lori L.
Coordinator, Student Affairs
A.S., San Diego City College
B.A., The Union Institute and University
M.S., National University

Ortegon, Elda
Instructional Assistant, Child Development

Oviedo, Arlene
Student Services Assistant, Financial Aid

Padilla, Clarissa
Director, Outreach, Welcome Center, and Promise

Patton, Janay
Senior Student Services Assistant, Enrollment Services
M.A., San Diego State University

Payne, Mark
Custodian, Facilities

Petty, Yvette
Senior Food Service Worker, Food Services

Phillip, Louay
Senior Accounting Clerk, Student Accounting

Pickens, Sontia
Administrative Assistant IV, Office of the President

Pitcher, Nathaniel Andrew
Theatre Technician, Dramatic Arts

Pittman, Maria
Student Services Assistant, Financial Aid

Pizana, Lydia
Custodian, Facilities

Ponce, Kenia
Administrative Technician, Business Services

Poston, Kenneth
Radio Station Operations Supervisor, KSDS

Prater, Dena
Administrative Assistant V, Administrative Services

Pugnier, Patricia
Student Services Technician, College Evaluations and Counseling Department

Purnell, Jay
Regional Facilities Officer, Facilities

Quoi, Stephen
Custodian, Facilities

Rangel-Salas, Silvia
Food Service Worker

Rincon, Alisia
Supervisor, Financial Aid
B.A., University of Phoenix
M.B.A., University of Phoenix

Rincon, Cristian
Senior Accounting Technician, Business Services

Rivera, Anthony
Custodian, Facilities

Rivers, Murjaz
Administrative Assistant III, Student Health Clinic

Rodriguez Capilla, Jair
Production Services Assistant, Digital Print Production and Mailroom Services

Rodriguez, Marian
Student Services Assistant, Student Affairs
B.A., San Diego State University

Rodriguez, Yanira
Administrative Technician, TANF

Rofaeel, Nisreen
Student Services Assistant, Counseling
A.A., Grossmont College
B.A., University of Baghdad

Rojas, Rachel
Student Services Technician, Promise

Romero, Berenise
Senior Accounting Technician, Business Services

Rovatsos, Michael
Lead Broadcast Operations Specialist, KSDS

Ruelas, Veronica
Instructional Assistant, Child Development

Russell, Claudia
Lead Broadcast Operations Specialist, KSDS

Ruvalcaba, Jose
Instructional Lab Technician, TSG

Ryan, Sean
Multimedia Specialist, OCTM

Saldana, Evelyn
Instructional Lab Technician, Biology

Saldivar, Angel
Child Development Director

Sanchez, Jose
Job Placement Coordinator, CTE Strong Workforce

Sandoval, Eric
Multimedia Specialist, OCTM
A.S., San Diego City College
B.A., M.A., San Diego State University
Certificates: Certified Technology Specialist; InfoComm International

Sataua, Maria
Instructional Lab Technician, TSG

Sebring, Ed
Instructional Lab Technician, Physical Science

Segala, Andre
Student Services Assistant, Admissions & Records

Segura, Cory
Instructional Lab Technician, MACT

Silva, Albert
Student Assistance Technician, Financial Aid
Silva, Victor
Graphic Artist/Photographer, Communications

Sim, Neary
Administrative Assistant IV, School of Behavioral and Social Sciences and Consumer and Family Studies

Sniff, David
Chief Broadcast Engineer, KSDS Radio/TV Station

Solis, Nicolas
Gardener/Groundskeeper, Facilities

Soukhaseum, Anourack (Lance)
Director, Tutorial Center
B.A., Cal State Fullerton
M.A., San Diego State University

Steininger-Paxton, Laura J.
Instructional Lab Technician, Biology

Stephens, Peter
Custodian, Facilities

Stewart, Jr., Samuel L.
Instructional Lab Technician, TSG

Thibeault, Cecilia
Program Support Technician, Title III HSI STEM

Thibeault, Richard
Network Specialist, TSG

Tirpak, Andrew
Athletic Groundskeeper, Health, Nutrition, Exercise Science & Athletics

Titus, Joseph
Custodian, Facilities

Tong, Nancy
Student Services Assistant, EOPS

Torres, Brenda
Student Services Technician, Extended Opportunity Programs & Services (EOPS), Cooperative Agencies Resources for Education (CARE)
A.A., San Diego City College

Torres Alvarez, Natali
Senior Accounting Technician, Business Services

Tubon, George
Instructional Lab Technician, Photography

Valdes Rankin, Franchesca
Student Services Technician, Basic Needs
B.A., University of California, Irvine

Valdez, Cecilia
Senior Student Services Assistant, Financial Aid

Valentine, Rich
Graphic Artist/Photographer, Communications Office
B.A., The Art Institute of Pittsburgh

Van Patten, Vanessa
Administrative Assistant I, College Police

Van Saanen, Desiree
Administrative Assistant V, Student Services
A.A., San Diego City College
A.A., San Diego Mesa College

Vargas, Elizabeth
Director, Upward Bound
B.S., Bellevue University
M.A., Point Loma Nazarene University

Vela-Osuna, Eric
Student S'ervices Assistant, Admissions & Records

Vidrio, Carlota
Administrative Assistant IV, School of Business, Information Technology, Cosmetology, Engineering, and Trades

Vilaboy, Itza
Administrative Assistant IV, Student Affairs

Villaescusa, Carlos
Gardener/Groundskeeper, Facilities

Washington, Maria
Custodian, Facilities

Welton, William
Facilities Custodial Supervisor II, Facilities

Wilmer, Robert
Custodian, Facilities

Woodward, Kathleen
Administrative Technician, Mathematics

Xu, Yifan (Joseph)
Student Assistant Technician, Financial Aid
B.A., University of California, San Diego

Xiong, Trusty
Student Services Technician, Financial Aid
B.S., San Diego State University

Zhang, Erica
Instructional Lab Technician, Biology

San Diego City College Campus Map

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SAN DIEGO CITY COLLEGE
CAMPUS DIRECTORY

