College Calendar 2023-2024

**Fall Semester 2023**
August 26
August 28
September 4
September 10
September 10
September 11
November 10
November 17
November 23-25
December 16
December 16
December 11-16
December 23, 2023 - January 2, 2024

**August 26, 2023 - December 16, 2023**
Saturday classes begin
Monday-Friday classes begin
Campus Closed - Labor Day
Last day to add a full semester course, add code needed
Last day to drop a full semester course without a “W” and receive a refund
Census for full-term course
Campus Closed - Veterans’ Day Observed
Last day to Withdraw from full-term classes with a “W” and no refund
Campus Closed - Thanksgiving Break
Last day to submit Pass/No Pass grading option for full term course
Last Day of the Semester
Final Exams
Campus Closed - Winter Break

**Winter Session 2024**
January 2
January 15
January 25

**January 2, 2024 - January 25, 2024**
First Day of Classes
Campus Closed - Martin Luther King Jr. Day
Last day of class

**Spring Semester 2024**
January 27
January 29
February 11
February 11
February 12
February 16-19
April 1-6
April 1
April 27
May 18-24
May 24

**January 27, 2024 - May 24, 2024**
Saturday classes begin
Monday-Friday classes begin
Last day to Add a full semester course, add code needed
Last day to Drop a full semester course without a “W” and receive a refund
Census for full-term course
Campus Closed - Presidents’ Days
Spring Break
Campus Closed - Cesar Chavez Day
Last day to Withdraw from a full-term class with a “W” and No refund
Final Exams
Last day to submit Pass/No Pass grading option

**Summer 2024**
The 2024 Summer term instruction dates are to be determined. Classes will begin in June, and most will run for six weeks. Check the college website or the 2024 Summer and Fall Class Schedule for updates.

*In courses other than semester length, consult the Office of Admissions and Records or the instructor regarding add, drop, withdrawal, refund, and grading option deadlines.*
Hello and welcome to Mission College, where you'll find your mission and become part of our Saints Family! I’m Dr. Seher Awan, the proud president of Mission College, and I am very excited to share with you our College Catalog!

Mission College is here to support your personal and professional goals and provide you with the tools you need to succeed. Know that you belong here, and we are dedicated to your success and spirit, no matter where you are in life.

Our diverse and caring faculty, classified professionals, and administrators are committed to helping you thrive. We offer a range of resources, from free laptops and Wi-Fi to housing and food support and more, to ensure you have everything you need to excel in and out of the classroom.

Our campus is constantly evolving to provide you with the best learning experience. We offer cutting-edge technology, innovative programs, and a brand-new Business and Technology Building that opened in 2023.

While with us, focus on yourself and your dreams. We are here to support you in finding your dream career, succeeding in your classes, prioritizing your mental health and wellness, and bringing your authentic self to campus. Whatever you need, we’re here to make it happen. Your success and the success of your family are deeply important to us as you join our campus community.

At Mission College, we believe in the power of community. We stand together, supporting and uplifting one another. I hope you will consider getting involved on campus by joining our clubs, committees, and the Associated Student Government to make your voice heard and make a difference in our community.

I am confident that your experience at Mission College will be nothing short of wonderful. I am here for you every step of the way. Wishing you all the best in your personal and professional endeavors and I look forward to seeing you on the commencement stage!

Seher Awan, Ed.D, MBA, MPA
President, Mission College

Instagram: @missionscprez
Twitter: @seherawan13
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Introduction

History of the West Valley-Mission Community College District and Mission College

The first public meeting convened to address the formation of the West Valley Joint Community College District was held in July 1962. In October 1962, the California State Board of Education approved the District’s formation, and in January 1963, the voters residing within the Campbell, Los Gatos-Saratoga, and Santa Clara High School Districts established the District.

The first college, West Valley, opened on a temporary site in Campbell in 1964 and moved to its permanent campus in Saratoga in 1968.

In Fall 1975, Mission’s first classes were held at 3585 Monroe Street, the site of the former Jefferson Intermediate School. By December, the college had 1000 students and 32 faculty.

Groundbreaking for the 160-acre site of Mission's current home was on July 9, 1976. On September 5, 1979, classes began in the Main Building and a gala was held four days later. The last piece of the building fell on February 11, 2019, as a new campus began in Ste. 204, Novato, CA 94949, (415) 506-0234, accjc@accjc.org, an institutional accrediting body recognized by the Commission on Accreditation of Postsecondary Accreditation and the U.S. Department of Education.

Mission College is accredited by the Accrediting Commission for Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges, (WASC) 10 Commercial Blvd. Ste. 204, Novato, CA 94949, (415) 506-0234, accjc@accjc.org, an institutional accrediting body recognized by the Commission on Recognition of Postsecondary Accreditation and the U.S. Department of Education.

Accreditation

Mission College is proudly to be both an Hispanic-Serving Institution (HSI) and an Asian American and Pacific Islander Serving Institution (AANAPISI). HSI-STEM grants support the enrollment of Latinx and low-income students from our area high schools to Mission College and provide services to aid their retention and degree completion in the areas of Science, Technology, Engineering and Math (STEM). Programs and services include the MC ACT project -Access, Connection & Transition- which funds STEM Peer Support Specialists, Caring Campus activities, the STEM Faculty Community of Praxis (Faculty Professional Development), STEM Counseling services, a variety of Career Readiness & Transfer experiences, staffing of the STEM Learning Center, plus funds summer research opportunities for Mission faculty and students.

AANAPISI grants have serviced to work alongside the major units of the college including Student Support Services, Instruction, and the Office of Research to pilot programs, activities, curriculum, and other resources to promote student success with an aim to assist AAPI and low-income students from matriculation through degree attainment and transfer to four-year colleges/universities.

Some programs are accredited by additional agencies, programmatic accreditors are listed under the applicable degree in this catalog.

Equal Opportunity and Non-Discrimination

Mission College is an Affirmative Action, Equal Opportunity Employer and in compliance with Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, and Title VI of the Civil Rights Act of 1964. The college does not discriminate on the basis of race, color, national origin, mental or physical handicaps, age, or sex in any of its policies, practices, or procedures. Limited English skill will not be a barrier to admission and participation in Vocational Education programs. Persons who seek information and/or resolution of alleged acts of discrimination are directed to contact the offices listed in the box below.

In accordance with Title IX, all courses offered in the district are open to individuals of both sexes. Some courses may emphasize information related to either men or women specifically, but no course is prohibited to any student on the basis of sex. In physical education classes, students may be separated by sex within coeducational classes when participating in contact sports (including wrestling, football, basketball, or any other sport “the purpose or major activity of which involves bodily contact”). West Valley-Mission Community College District is an open-door community college district. Mission College does not discriminate on the basis of age, sex, handicap, race, color, or national origin in any of its programs or courses of study.
Student Learning Outcomes
The college has identified key learning outcomes for students which they are to achieve as they move through their programs of study.

Course Student Learning Outcomes (SLOs)
In every course, students achieve a specific set of outcomes. These outcomes are provided to students on the syllabus the first day of class.

Program Learning Outcomes (PLOs)
Degree and certificate program completer’s will achieve the Program Learning Outcomes specific to their program of study. These outcomes are listed under each degree and certificate in this catalog.

Institutional Learning Outcomes (ILOs)
Students achieve institutional outcomes as they complete degree programs and participate in learning experiences outside the classroom. Mission College’s Institutional Learning Outcomes are:

• Effective Communication: Students will successfully engage in verbal and non-verbal expression through written, oral, signed, and/or artistic communication of ideas and concepts.

• Personal Development and Ethical Responsibility: Students will apply techniques for physical and mental development that include the application of ethical principles to personal, academic, and professional matters.

• Critical Inquiry: Students will apply principles of scientific and critical inquiry, including quantitative and qualitative techniques for the analysis of relevant questions, problems, or issues.

• Community and Citizenship: Students will analyze the interconnectivity between social, political, economic, and ecological systems to effectively live and work in diverse communities.

• Information and Technology Literacy: Students will apply current techniques, skills, and tools to responsibly access, analyze, and effectively use information, technology, and media.

Catalog Policies
Continuous Enrollment and Catalog Rights
Students maintaining attendance in the district in at least one regular semester, summer session, or winter session of an academic year are considered continuously enrolled and, therefore, receive “catalog rights.” Catalog Rights refer to Board-approved graduation, general education, proficiency, and degree/certificate requirements. Students may elect to follow the requirements in effect the year they began their study or in the year they graduate from Mission College. Students considered returning students, meaning those not enrolled for a year or more before returning to college, must follow the catalog requirements in effect at the time of re-enrollment. For catalog rights, the academic year begins each fall and ends with the subsequent summer session.

While Catalog Rights retain graduation, general education, proficiency, and degree/certificate requirements, they do not apply to changes in prerequisites (courses required for a given course). Prerequisite requirements are stated in the Course Description section of the current catalog.

Please note that certification of a student’s CSU GE or IGETC requirements are not graduation requirements, and thus are not governed by catalog rights. Students requesting GE certification may use courses taken at any given time and at any accredited institution as long as they appeared on the general education list at the time they were completed. This catalog spans July 1, 2023, through June 30, 2024, providing graduation requirements for all students who begin their study or re-enroll during this period.

Changes in Rules, Policies and Offerings
Mission College and the West Valley-Mission Community College District have made every reasonable effort to determine that everything stated in this catalog is accurate. Courses and programs offered, together with other information contained herein, are subject to change without notice by the administration of Mission College for reasons related to student enrollment, level of financial support, or for any other reason, at the discretion of the College.

At the time of publication, the fees described in this catalog are accurate. However, at any time local or State mandated fees may be imposed or increased. The College and the District further reserve the right to add, amend, or repeal any of their rules, regulations, policies, and procedures, in conformance with applicable laws.

Alternative Media
This publication is available in alternative media on request. Please contact the Disability Support Programs and Services in the Campus Center Bldg., 2nd Floor, Room CC240, or call 408.855.5085 or TTY 408.727.9243

Photography
Mission College, a non-profit California Community College, reserves the right to use photography and video images of students and visitors 18 years and older taken on our property and at college-sponsored events for marketing and promotional purposes. Objection to the use of an individual’s photograph may be made in writing to the Marketing Office, Student Engagement Center, Room SEC-348

OUR MISSION
Mission College serves the diverse educational needs of our student population by providing equitable access and support towards completing associate degrees and certificates aligned with transfer and career pathways to meet educational and personal goals as well as the workforce demands of the city of Santa Clara and Silicon Valley.

OUR VISION
Empowering every student to find their mission.

At Mission, students are the highest priority. We Value:
Social Justice, Continuous, Learning, Equity, Excellence, Community, Curiosity, Integrity, Inclusivity, Sustainability, Innovation
Thank you for choosing Mission College as your educational partner! We’re dedicated to providing you with the support you need to succeed.

If you ever find yourself needing assistance, simply visit welcome.missioncollege.edu to live chat with our team.

We understand that life can get busy, and if you happen to miss a semester, don’t worry! You can easily re-activate your student ID through CCC Apply to register for your desired classes. If you’ve misplaced your student ID number, we’ve got you covered! Visit web.wvm.edu/whatsmyid/gnumber to retrieve it.

We’re committed to ensuring that your time at Mission College is as smooth and successful as possible, and we can’t wait to see all that you accomplish.

START AT APPLY.MISSIONCOLLEGE.EDU

APPLY FOR ADMISSION
- Apply via CCC Apply at cccapply.org. You will receive a Student ID Number (G01234567) within 24 hours. The CCCID number is not your Mission College ID number.
- F-1 international students cannot apply using CCC Apply. They must submit their information via the International Student Application at iis.missioncollege.edu.
- High school students will need to have a counselor or principal sign off on their courses. See hs.missioncollege.edu for details.
- Explore college resources on MyPath via your My Mission Portal.

APPLY FOR FINANCIAL AID
- Apply for Financial Aid by submitting the Free Application for Federal Student Aid (FAFSA) at studentaid.gov/h/apply-for-aid/fafsa and/or the CA Dream Act Application at dream.csac.ca.gov. FAFSA can take between 2-3 weeks to process. You will need the school code (014458).
- Visit financialaid.missioncollege.edu for information.

DETERMINE YOUR PLACEMENT
- Complete the self Placement Process for math and English in your My Mission Portal.
- Clear Prerequisites from prior experience or college classes, if applicable, via the assessment webpage.
- Students taking ESL for credit classes need to complete a separate ESL assessment.
- For support, visit assessment.missioncollege.edu

COMPLETE THE REQUIRED ORIENTATION
- Visit the My Mission Portal to complete the self-paced, online orientation.
- View the orientation tutorial video about getting started at welcome.missioncollege.edu

MEET WITH A COUNSELOR TO SELECT CLASSES
- Go to My Mission Portal or to the Counseling website to schedule an appointment with a counselor.
- Visit counseling.missioncollege.edu to schedule an appointment.

REGISTER AND PAY FOR CLASSES
- You can also register for classes via My Mission Portal with a current Student ID Number (G01234567).
- Fees are due at the time of enrollment and must be paid at the start of a term.
- Students can also register and pay for classes on the “Go Mission” app. Details on downloading are available at go.missioncollege.edu.
- For more, visit missioncollege.edu/admissions/become-a-student

WVM EMAIL / SINGLE SIGN-ON
- You will need a West Valley-Mission Community College District email address to access services via Single Sign-On and will receive a WVM email address once you register for classes.
- It can take up to 72 hours after you receive a student ID number (G01234567) for all your resources to become active.
**Admissions**

**Welcome Center**
The Welcome Center located in the entry lobby of the Student Engagement Center (SEC) assists prospective, new, continuing, returning students, and the public with applying for admissions, registration processes, My Mission Portal, financial aid applications, scholarship resources, campus tours, Canvas navigation, payment information, document printing, information regarding student support services, and any other general questions you may have about Mission College.

Contact the Welcome Center staff in person, via phone at 408-855-5007, or via online chat on the Mission College website. Additional Welcome Center information can be found at welcomecenter.missioncollege.edu.

**General Eligibility Requirements for Admission of Students**
In accordance with the “open door” mission of community colleges, WVMCCD shall admit any California resident, and may admit any non-resident, who meets any of the following conditions and can benefit from the instruction offered: (District Policy 5.2.1)

- Any person over the age of 18 and possessing a high school diploma or its equivalent.
- A non-high school graduate, above 16 years of age, who has in his/her possession at the time of registration one of the following: Certificate of the State Proficiency Test.
- G.E.D., California high school (HS) Equivalency Certificate
- A formal, written document from the student’s high school district indicating he or she is exempted from any high school attendance.
- Persons who are apprentices as defined in Labor Code 3077.
- Students will apply for admission online via CCC Apply. Access the application at apply.missioncollege.edu

**Dual Enrollment High School Students Admission**
The Dual Enrollment program is a cooperative venture between Mission College and local high schools’ districts. Under this program, high school students in grades 10-12 may take college courses to supplement their educational programs. High school students wanting to enroll at Mission College are required to submit an online Application for Admission for each term they want to attend, and to submit a High School Dual Enrollment Form for registration.

Registration in any college course must be approved by the students’ high school principal or designee, and students are required to meet all prerequisite(s) for the course(s) into which they want to enroll. Pupils enrolled in 9th grade and below are subject to the college determining whether they are prepared for college level work. When requesting admission, students in the 9th grade and below must apply for admission to receive a student identification number, after which they must contact the appropriate Mission College representative to be cleared for enrollment.

Dually enrolled students are limited to a maximum of three (3) courses not to exceed eight (8) units per term. Dually enrolled high school students may not register into Kinesiology activity courses or 900 level courses.

Dual Enrollment students will be required to pay any course lab or material fees and the mandatory health services fee. Dually enrolled special full-time high school students registering in over 11.5 units are required to pay ALL enrollment fees. Students admitted to Mission Early College High School (MECHS) are exempt from paying the enrollment fees. High school students enrolled in courses offered at their local high school are exempt from paying the health fee.

The Dual Enrollment Program provides an opportunity for students to:
- Complete advanced academic work that can provide a head start in a college major or completion of college graduation requirements.
- Earn credit for courses that may be used for both high school and college credit (confer with the student’s governing K-12 school district for further information).
- Take Vocational-Technical Career Courses not available at their school or obtain advanced work beyond the scope of their school vocational curriculum.

**International Student Admission**
The International Student Center (ISC), located in the Student Engagement Center, SEC - 111, offers complete services to F-1 visa students including international admissions, international counselor services, and immigration advising.

Residents of other countries may apply for admission as F-1 visa status students through the International Students Center, located in the Student Engagement Center, SEC - 111. Special requirements and application deadlines apply.
Because immigration regulations change frequently, it is recommended that international students or potential international students contact the International Students Center (ISC) directly for the latest information, deadlines and advising. In general, the requirements for applying for admission for new international students are:

- Completing an International Student Application Form
- Submitting an application fee of $100
- Demonstrating college English competence by taking one of the accepted English language exams: iBT TOEFL, IELTS, STEP EIKEN, Duolingo, PTE, GTET, Cambridge English Language Assessment, and Itep. The qualifying test scores for each exam can be viewed on our website. Students without a qualifying language proficiency score may attend Mission College’s Intensive English Language Program first.
- Providing proof of financial sponsorship of at least $21,500 or its equivalent in foreign currency
- Providing official English transcripts for the last three years of high school or college
- Writing a personal statement explaining what the student wants to study at Mission College and their educational goals.

To maintain immigration status, students must be enrolled in and complete 12 units each semester (degree seeking) and 20 hours per week (intensive English). International Student Tuition Fees apply. For the 2023-2024 academic year, the non-resident tuition and fee is $404.00 per semester unit.

Persons from foreign countries with other kinds of visas are asked to call the ISC for advising. United States Department of Homeland Security regulations affect who may or may not take classes at community colleges.

**GETTING CONNECTED WITH MISSION COLLEGE**

**LIVE CHAT WITH OUR WELCOME CENTER**
When visiting our website, you may see a chat pop-up or orange Live Chat button where you can converse instantly with our Welcome Center ambassadors. Our friendly ambassadors are here to answer your questions or connect you with others who can assist you.

**ACCESS AND USE MY MISSION PORTAL**
Students will access many important service and tools through My Mission Portal including registration services, Canvas, Microsoft Office 365, DegreeWorks, Online Orientation, Career Coach and My Path. New students will also access placements for English and Math through the My Mission Portal, and Students also access grades at the end of a semester in the portal. Students should log on to My Mission Portal with their @mywvm.wvm.edu email address for access.

**ACCESS AND USE CANVAS**
Canvas is how students access online classes. All instruction will occur within Canvas for Asynchronous Online courses. It is how you communicate with your classmates and your instructors, and access course materials. Students can access Canvas in the My Mission Portal through single sign-on with their WVM email address or use their student ID number (the default password is your 8-digit birthdate, mm/dd/yy).

**KNOW AND USE YOUR STUDENT ID NUMBER**
Every student is issued a unique Student ID number. If at any time you lose this number you can retrieve it here: web.wvm.edu/whatsmyid/onumber.

**Other Immigration Statuses and Admission**
Mission College is committed to providing access to all eligible students regardless of immigration status. In addition, any student, except a non-immigrant alien, who meets the requirements of state laws AB 540, AB 2000, and SB 68 shall be exempt from paying the nonresident tuition. These state policies are entirely separate and distinct from Deferred Action for Childhood Arrivals (DACA) and federal enforcement of immigration laws.

The AB 540/AB 2000 and SB 68 Affidavit grants in-state tuition and allow income-eligible students to apply for AB 130 and 131 (California state financial aid and scholarships). More information can be found in this catalog under Costs and Financial Aid.

**Notification of Tax Identification Numbers (TIN) or Social Security Numbers (SSN) Required Collection and Usage**
Federal legislation relating to the Hope Tax Credit and Internal Revenue Service (IRS) 1098T production mandates that all colleges report student SSN or TIN numbers to the IRS. This IRS mandate requires colleges to collect the SSN or TIN. A student may refuse to disclose his or her SSN or TIN to the IRS but the IRS is then authorized to fine the student in the amount of $50.

The West Valley-Mission Community College District (WVMCCD) assigns a unique student ID to every student and does not use the SSN or TIN as a student identifier. All SSNs and TINS collected as mandated are protected by federal regulations under the Family Educational Rights and Privacy Act (FERPA).

**DOWNLOAD OUR MOBILE APP**
With our app you can:
- Search, add, drop and pay for classes.
- Connect to Canvas from the app.
- Review maps and directions.
- Learn about events and activities on campus.
- Find links to the Library, Tutoring and Bookstore.
- Receive real-time VTA schedules.

Download at go.missioncollege.edu.
Placement and Assessment Services

Placements for Math and English Course
Mission College students enroll directly into college-level, transferable Math and English courses. Some students receive recommendation to enroll in additional support to promote their success, based upon their high school coursework and performance. Student will find their placement recommendations by logging into their student portal.

Students who did not attend high school in the United States will be directed to the college’s Guided Self-Placement process to receive their placement recommendation.

Students with disabilities who need assistance with placement should contact the Disability Support Programs and Services (DSPS) in the Campus Center Room 240 or by calling 408-855-5085 or e-mailing DSPS@missioncollege.edu.

All students are encouraged to meet with counseling to identify and discuss the best options for their own educational goals.

Placement for English as a Second Language (ESL) Courses
Mission College offers both noncredit and for-credit courses for English learners.

Students may enroll in NCE 010, NCE 910 or NCE 920 without completing the placement process. Enrollment in NCE 930 or ESL 930 or higher requires students to complete the ESL placement process.

Students can access the ESL placement process in the Student Portal or at missioncollege.edu/student_services/assessment/esl.html

Assessment Services/Prerequisite Clearance
Placement and Assessment Services assists students in clearing course prerequisites. A prerequisite is a class or skill required for enrollment in a subsequent course. Additional information is found online at the Placement and Assessment webpage. Students are encouraged to provide their high school transcripts and transcripts from previously attended colleges to Placement and Assessment Services for prerequisite clearance requests. Transcripts require a minimum grade of C or Passing notation to qualify for a prerequisite clearance. Unofficial AP, IB, or CLEP scores can be submitted for prerequisite clearance. Students may also appeal to have a prerequisite cleared if they have gained the necessary skills or knowledge through alternative learning experiences. Receiving a prerequisite clearance is not the same as receiving course credit through testing, transfer courses, or alternative learning experiences. Students wishing to receive course credit should find additional information in this catalog in the “Credit for Prior Learning” section or visit missioncollege.edu/depts/articulation/external-credit/
Orientation Services for New Students
New students are encouraged to complete a Mission College orientation. There are several different ways to complete the Mission College Orientation. Students can complete the Online Orientation through their Mission College Student Portal, or by registering for one of the following courses:
- COU 000A: Orientation to Mission College;
- COU 005: Strategies for Success;
- COU 023: Becoming a Master Student-Athlete; or
- COU 145B: Bridge to College.

Online Registration Services
Mission College offers online registration. To register select “My Portal” on the Mission College home page, and click on the West Valley-Mission Portal, “Login into My Web Services” link. The “Schedule of Classes” lists the details, dates, and procedures for each type of registration, and is available in April for the following Summer/Fall terms, and in November for the following Winter/Spring terms. Online registration services allow students to enroll, add, drop, or withdraw from courses.

Enrollment Procedures and Policies
Students may enroll into open classes from the time of their assigned registration dates until the day before the first day of class instruction using online registration. Once a class has begun, but prior to the census date, students must contact the instructor and ask for an “Add Code” to enroll in a class. If there is room in the class, the instructor will assign an Add Code to the student, who can enroll in the class via online registration. The student will enter the Add Code when prompted. Students must use the add code within three (3) days of issue. A student may not add a course on or after census date except with written permission of the instructor and the endorsement of the Dean assigned to the area.

Unit Load Limitation
A normal class load is 15 units. Twelve units is considered the minimum number of units required for classification as a full-time student.

Unit limitations are applied as follows for each fall and spring semester:
- Students are restricted to a maximum load of 18 units.
- Mission Early College High School (MECHS) students are restricted to 15 units.
- High school students (not part of MECHS) are restricted to 8 units.

Unit limitations are applied as follows for the winter intersession:
- Students, including MECHS and high school students, are restricted to a maximum load of 6 units.

Unit limitations are applied as follows for the summer session:
- Students, including MECHS and high school students, are restricted to a maximum load of 9 units.

Petitioning Unit Limitations
Students may petition to exceed the unit limitations. The petition process requires students to meet with their counselor to discuss the request. Students must have completed at least 12 units, not withdraw from more than one class, and have a minimum 3.0 GPA to be eligible for a unit limitation override.

Overlapping Classes
Per Board Policy 4226 and Administrative Procedure 4226, students may not enroll in two or more classes where the meeting times overlap, unless:
- The student provides a valid justification, other than scheduling convenience, of the need for an overlapping schedule.
- The overlapping time does not exceed 10% of the class meeting time.
- The student makes up the overlapping hours at some other time during the same week under the supervision of the instructor of the class.

The petition can be obtained online at: missioncollege.edu/admissions/forms.html or from Counseling, or Admissions and Records. The instructor of the class that will require make-up hours outside of the regularly scheduled class times must agree to the modified schedule and the form must be approved by the Chief Instructional Officer or designee.

Auditing of Classes
After the last date to add classes for college credit a student may audit selected community college courses with the following provisions:
- The student has completed the course for credit the maximum number of times allowed.
- Priority in class enrollment shall be given to students electing to take the course for credit.
- No student auditing a course shall be permitted to change their enrollment to receive credit for it.
A student wishing to audit a class must obtain prior written permission from the instructor. Attendance, participation, and related academic expectations shall be determined by the instructor. Students may be withdrawn from audit status by the instructor if the student does not satisfy class standards. The fee for auditing a class shall be $15.00 per unit per semester. Students enrolled in classes to receive credit for ten or more semester units shall not be charged an additional fee to audit three or fewer units per semester. Fees must be paid prior to auditing a course. Fees are non-refundable.

**Course Repetition and Families of Courses**

State regulations limit the ability of courses to be repeated after either receiving a grade or a notation on student records. Students may not repeat courses that have been successfully completed unless it is deemed that special extenuating circumstances exist, or the course has been designated as repeatable.

In addition, there are groupings of courses in the West Valley-Mission Community College District with similar active participatory content called “families” within the Kinesiology, Physical Education, Art, Theatre, and Music disciplines (additional disciplines may be added to a family when appropriate). West Valley and Mission Colleges’ courses in these families are linked, independent of location taken, and students may only attempt up to four (4) courses in any single family. An attempt is defined as receiving any grade or notation (e.g., W for withdrawal) in any previous or current terms–this is a cumulative count of attempts. If a family has fewer than four (4) courses in its offerings and a student has received passing grades or notations in these courses, the maximum attempts allowed may be fewer than four (4). Students with documented, extenuating circumstances must complete and submit a Student Petition to the Admissions and Records Office for consideration of attempts beyond the four (4) within an individual family.

**Drop/Withdrawal Procedures and Policies**

Any student dropping or withdrawing from a class must follow established college procedures. The responsibility for withdrawing from courses by the published deadlines rests with the student. Students are responsible for referencing the My Mission Portal for ‘My Class Dates,’ which identify course registration status, grade mode, Pass/No Pass eligibility, and key term dates, including drop deadlines for refunds and official withdrawal. The ‘Registration and Records’ tab on the My Mission Portal lists ‘My Class Dates. The following includes important deadlines for drop and withdrawal and explain the relationship between withdrawal and the assignment of a grade by the instructor.

**Dropping a Course without a Record**

A student may drop a regular Fall or Spring semester-length class during the first two weeks of instruction, and no notation of the course will be made on the student’s academic record. In Summer, Winter, or in courses of less than a regular semester’s duration, a student may withdraw prior to the census date, and no notation of the course will be made on the student’s academic record. Students who fail to attend a course in which they are registered may be dropped by the instructor prior to or on the census date, and no notation of the course will be made on the student’s academic record.

**Withdrawal from a Course with a “W”**

After the second week of instruction, a student may withdraw from a semester-length class, whether passing or failing, at any time through the last day of the 12th week or before the 75% mark of a term. A “W” grade shall be recorded on the student’s academic record. In courses less than a regular semester’s duration, a student may withdraw prior to the completion of 75 percent of the period of instruction and a “W” grade shall be recorded on the student’s academic record.

The academic record of a student who remains in class beyond the time periods set forth above must reflect a grade as assigned by the instructor other than “W” (refer to Grades, Grade Points). A student who must withdraw for verifiable extenuating circumstances (i.e., personal illness, automobile accident, death, or severe illness in the immediate family or other severe physical or emotional hard- ship), may petition the Student Petition Committee for an exception to this policy. Any extenuating circumstance must be verified in writing, including, but not limited to, a letter from a physician, official accident report, obituary notice, etc.). Supporting documentation is required.

**Excused Withdrawal**

In accordance with Title 5, section 55024 (e), an EW symbol may be requested by the student at any time during the semester and no later than the two-year period when the district/college policy allows a grade change.

In circumstances where a letter grade has been assigned and the two-year period has not been surpassed, the student may petition for an EW. The Student Petitions Committee will consult with faculty following the Grade Change Policy as outlined in Board Policy and Administrative Policy 4231.

Symbols for Excused Withdrawal shall not be counted in progress probation or dismissal calculations, nor shall it be counted towards the permitted number of withdrawals or counted as an enrollment attempt. The financial aid of a student may be affected depending on individual circumstance. A student should consult with the financial aid staff regarding any impact. An EW is acceptable when a student withdraws from a course(s) due to reasons beyond their control, which include but are not limited to, the following:

- Job transfer outside the geographical region;
- Illness in the family where the student is the primary caregiver;
- An incarcerated student in a California State Prison or County Jail is released from custody or involuntarily transferred before the end of the term (In the case of an incarcerated student, an excused withdrawal cannot be applied if the failure to complete the course(s) was the result of a student’s behavioral violation or if the student requested and was granted a mid-semester transfer);
- The student is the subject of an immigration action;
- Death of an immediate family member;
- Chronic or acute illness;
- Verifiable accidents; or
- Natural disasters directly affect the student.

**Military Withdrawal**

Students who are members of an active or reserve military service may request that their academic record reflect an “MW” symbol when military orders compel them to withdraw from courses during the semester. The military orders must be verified by the Admissions and Records Office. The military orders must be issued after the end of the period in which courses may be dropped with no notation appearing on the student’s academic record and prior to the end of the scheduled final examination period. The student’s academic record shall reflect the “MW” symbol. The “MW” symbol shall not be counted in progress probation and dismissal calculations. The “MW” shall not be used in the calculation of grade point averages. The “MW” symbol will be assigned to those courses for which no academic credit has been awarded.

**Failure to Withdrawal**

The responsibility for withdrawing from courses by the published deadlines rests with the student.

The academic record of a student who remains in the class beyond the time periods set forth above must reflect an authorized assignment of a grade by the instructor other than “W.” Withdrawal may be authorized in the case of extenuating circumstances after the 12th week or 75% of the period of instruction in extenuating circumstances defined as verified cases of accident, illness or other circumstances beyond the control of the student. In such cases, the student must submit a Petition to the Student Petition Committee in Admission and Records.

After a letter grade has been assigned, the student must confer with the instructor rather than submit a petition as the instructor has sole authority for grade changes. Further information on this process is available in the Admissions and Records Office, website, or portal.
All fees and charges are subject to change without notice by action of the California Legislature, the California Community College Board of Governors, or the Board of Trustees of the West Valley-Mission Community College District.

**Enrollment Fee**
California residents are required to pay a Community College Enrollment Fee of $46.00 per unit per semester. Note: fees are subject to change after publication of the catalog. Students planning to enroll in both West Valley and Mission College classes should show all receipts at the time of registration to avoid duplicate payment of some fees. All fees are payable at the time of registration. Exemption for the enrollment fee will be allowed for those students who qualify for the California College Promise Grant A, B or C. The California College Promise Grant (CCPG) application is available on the Financial Aid webpage at missioncollege.edu/student_services/financial_aid/regulations/california-collegepromise-grant.html

**California Residency Defined**
A resident student is one who has been physically present in the state for more than one year and one day prior to the start of the term in which attendance will begin. A person capable of establishing residency in California must be able to provide objective evidence of eligible immigration status, physical presence in the state of California, and the intent to make California a permanent home. Residency status is determined at the time of admission. Applicants who cannot establish residency, as defined above, will be considered as non-residents or international students.

The College may admit students who are non-California residents, subject to the rules and regulations outlined in the Educational Code. These students shall be required to pay non-resident tuition.

**Non-resident Tuition**
Students not meeting the requirements of California residency, international students, non-immigrant visa holders, and those not qualified under AB540/AB2000/SB 68 are required to pay non-resident tuition in addition to enrollment fees and other college fees. Fees are due and payable at the time of registration. As of Summer 2023, non-resident tuition is $358 per unit, in addition to the enrollment fee of $46 per unit.

**Exemptions to Non-Resident Tuition:**
**AB540/AB2000/SB68**
Certain non-resident students (including U.S. citizens, permanent residents, and undocumented individuals) may be exempted from paying nonresident tuition. Such students must remain classified as “nonresidents” for residence classification and financial aid eligibility purposes.

AB 540/AB2000 and SB 68 waives non-resident tuition for those eligible and allows income-eligible students to apply for California state financial aid and scholarships, including the California College Promise Grant. All eligible students must file a “California Non-resident Tuition Exemption Request” form along with supporting documents (i.e., transcripts, proof of attendance) to the campus Admissions and Records Office. This legislation does not apply to students who hold F-1 Visa for International Students, or other non-immigrant visa holders.

**Eligibility criteria for AB540/AB2000/SB68**
Students are eligible by meeting one of the time and coursework requirements AND one of the degree or unit requirements.

1. **Time and coursework requirements**
   Attendance for three full-time years or the equivalent at any combination of the following:
   - California high school
   - Three years of California high school coursework and three years of total attendance at a California elementary school, California secondary school, or any combination of the two.
   - California community college (maximum of two years of credit bearing courses can count toward this OR
   - California high school, California adult school, and/or California Community College for the equivalent of (3) years or more.
2. Degree or unit requirements
Meet one of the following requirements:

- Graduated with a California high school diploma or the equivalent (i.e., California-issued GED, CHSPE)
- Attainment of an associate degree from a California Community College
- Fulfillment of minimum transfer requirements from a California Community College to a UC (University of California) or CSU (California State University) campus

A year’s equivalence at a California Community College is either a minimum of 24 semester units of credit or 36 quarter units. For noncredit courses, a year’s attendance is a minimum of 420 class hours per year (a semester is equivalent to a minimum of 210 hours and a quarter is equivalent to a minimum of 140 hours).

Full-time attendance at a California adult school is a minimum of 420 hours of attendance for each school year.

If applicable, students seeking to be reclassified under AB 540/ SB 68/AB2000 should complete an affidavit with the Admissions and Records Office stating that an application to legalize their immigration status or that an application will be filed as soon as they are eligible to do so, AND do not hold a valid non-immigrant visa (F, J, H, L, A, AB, C, D, E, etc.)

Other College Fees

Associated Student Government (ASG) Representation Fee
This is a $2.00 fee per semester. The proceeds support student government representatives stating their positions and viewpoints before city, county, and district government, as well as offices and agencies of the state government. Should a student choose not to be represented at the time of initiating registration for the first time for the term for which they are registering the student must indicate on the questionnaire presented that they do not want to be assessed the fee. If the student does not opt out the fee will be assessed.

Associated Student Government (ASG) Fee
This $7 membership fee charged at the time of registration supports a variety of student services, activities, programs, scholarships, and discounts, and covers the initial cost of the student ID card. ID cards and stickers are available in the Campus Center Lobby. Should the student choose not to be a member, the fee is refundable if a petition for refund is submitted to ASG by the published “refund” deadline. Petition forms are available in the ASG office.

Campus Center Fee
This non-waivable fee supports the Campus Center and is assessed at $1 per unit up to a maximum of $5 per semester.

SmartPass Fee
The SmartPass allows students to enjoy unlimited bus and Light Rail trips on VTA (Valley Transportation Authority) while enrolled at Mission College. The fee is $12.00 for full-time students or $10.50 for part-time students. This fee is not waivable. Fees are subject to change according to VTA contract terms and the West-Valley Mission Community College District Board of Trustees. During the summer, continuing students, those enrolled in spring, will not be assessed the SmartPass fee. Only new and returning students are assessed the $10.50 fee during the summer.

Health Fee
The health fee has been suspended through Fall 2024.

Instructional Material Fee
It is the policy of the West Valley-Mission Community College District that the Governing Board may require students to provide instructional and other materials required for credit and non-credit courses, if such materials are of continual value to a student outside of the classroom setting and on condition that such materials are not solely or exclusively available from the District.

REQUIRED- Students are to provide certain instructional materials that have a continuing value and are essential to complete the course objectives.

OPTIONAL- Students are ADVISED to provide certain instructional materials: that enhance a student’s learning experience in the classroom but are not essential to completion of course objectives.

Refunds
To be eligible for a refund of fees and tuition, students must drop classes by the published deadline. Students are responsible for referencing the My Mission Portal for ‘My Class Dates,’ which identify drop deadlines for refunds and official withdrawal. The ‘Registration and Records’ tab on the My Mission Portal lists ‘My Class Dates. It normally takes four to six weeks to receive a refund of enrollment fees. Depending on the method of payment, the student will receive a check or a debit/credit card refund. Refunds for eligible students are processed after census for full term courses, unless otherwise requested by the student. Refunds for complete withdrawals from short-term courses are processed within 7 to 10 business days.

Drop for Non-Payment
Payment of fees is due at time of registration. The West-Valley Mission Community College District may institute a drop for non-payment policy. Students with outstanding balances on their accounts may be dropped from their courses before the beginning of the term. Students with a Community College Promise Grant, a Nelnet payment plan in place, or those with established 3rd party payments are exempt.

Holds on Student Records
Holds will be placed on students’ records for unpaid fees, materials loaned and not returned, and any other financial obligations owed to the college. Mission College will not allow a student to re-register in the college or forward student information to other institutions when students have holds on their records. Degrees and certificates will also be held until all outstanding fees have been paid or cleared.

Financial Aid
A variety of Financial Aid programs are available at Mission College. To apply students are encouraged to complete an application form, available on the web at FAFSA.ed.gov or the California Dream Act Application at dream.csac.ca.gov. The application assists the Financial Aid Office staff to determine student eligibility.

Student financial aid is money awarded to eligible students to assist them in meeting their educational expenses while attending college. It is intended to supplement, not replace, the amount students and their families can afford to pay towards these costs.

The Financial Aid Office reserves the right to make or change policies and procedures at any point during the academic year to reflect changing federal, state, or institutional rules and regulations.

Federal Financial Aid
Mission College participates in the Department of Education Title IV federal financial aid programs including Federal Pell Grant, Federal Supplemental Educational Opportunity Grant (FSEOG), Federal Work Study (FWS), and Federal Direct Loans. Detailed information about the federal financial aid programs is available from the U.S. Department of Education at studentaid.ed.gov.
State Financial Aid
Mission College participates in state financial aid programs including California College Promise Grant (CCPG); Cal Grant A, B and C; Student Success Completion Grant (SSCG); Chafee Grant; Extended Opportunity Program and Services (EOPS) Grant; and the Cooperative Agencies Resources for Education (CARE) Grant. Applications, links to application sources, and information on the application process are available at missioncollege.edu/student_services/financial_aid/.

Institutional Aid
Scholarships
Mission College offers over 150 scholarships. Applications are available in mid-to-late January and have an early March deadline. Criteria for each scholarship vary and may require community service, financial need, a specific grade point average, overcoming obstacles, majoring in certain fields and many more. Additional scholarship information can be found at mission.college.edu/scholarships.

Student Employment
On campus positions are funded either by department budgets or by federal work study. Only students with federal work study awards can apply for and work in federal work study funded positions. Additional information can be found at: jobs.missioncollege.edu.

Payment Plan
Mission College is committed to providing you with options to pay your enrollment fees. Through a partnership with Nelnet, you can make payments to make your educational dreams possible. By establishing a payment plan with Nelnet, you will have the opportunity to select a payment schedule to make your enrollment expenses more convenient and manageable. For additional information go to MyCollegePaymentPlan.com/wvmc or call Nelnet on (800) 609-8056.

We are here for You!
Mission College has waived parking and health fees and will offer free childcare to all students!

NO MORE HEALTH FEES
The Health Center will provide its services for free, including registered nurse consultation and counseling with mental health specialists as well as flu shots, immunizations, TB testing and more.

NO MORE PARKING FEES
Mission College won’t charge to park on campus. Students must still request their free, semester-length permit in their student portal, though.

NO MORE CHILDCARE FEES
Child Development Lab Center will waive its childcare costs for students enrolled in at least three units and have a family income of $150,000 or less. Interested? Email anne.horgan@wvm.edu.
Associated Student Government (ASG)

asg.missioncollege.edu | CC 231 | (408) 855-5072

Student Government at Mission College is represented by the Associated Student Government organization which annually elects its own administrative officers and student senators who are provided with practical leadership training and education in the functions of government and leadership. In addition, the student body elects its own student trustee to the District Board of Trustees and the Student Senate. Students are also afforded a variety of opportunities to participate in various college-wide committees and task forces. All these activities serve to provide the student with opportunities to participate in the decision-making and policy-making processes of the college.

Campus Clubs

asg.missioncollege.edu | CC 231 | (408) 855-5407

At Mission College, students are given opportunities to participate in various clubs or as a student advisory committee member. Clubs directed at a variety of interests are led by students and an on-campus advisor.

Campus Events

events.missioncollege.edu | SEC 109

A wide variety of events are always happening on campus. Check the college calendar at events.missioncollege.edu to see upcoming activities and events.

Athletics - Intercollegiate

missionsaints.com | Athletics Building by Tennis Courts | (408) 855-5540

The college offers men’s and women’s sports at the intercollegiate varsity level. Mission College is a member of the Coast Conference and participates in baseball, men’s and women’s tennis, women’s basketball, and women’s badminton. Student athletes regularly transfer and play at four-year colleges.

Students interested in participation and in learning about eligibility requirements may contact the appropriate coach or the Athletic Director at (408) 855-5540.

Arts at Mission

art.missioncollege.edu | Vargas Gallery Gillmor Center

Mission College has a Symphony, Chorus, Dance Company, and Vargas Art Gallery for students to learn skills in the arts and express their creativity.
Services for Students

Admissions and Records

apply.missioncollege.edu | SEC 118 | (408) 855-5007
Admissions and Records staff manage the admission application and registration processes for students pursuing degrees/certificates, transfer, career, and basic skills at Mission College. Services include but are not limited to:

- Registration assistance – adding and dropping classes
- Receiving payments; initiating refunds, Parking Permit sales
- Transcripts and enrollment verifications
- Student Petitions and Appeals
- Veterans/Veterans Certification
- Evaluations for degrees and certificates completion

Child Development Center (CDC)

cdc.missioncollege.edu | CDC | (408) 855-5173
The Mission College Child Development Center provides childcare for children of Mission College students, Mission College staff, and community members. Financial assistance is available for low-income families. Eligibility is determined by income and availability of space.

Counseling

counseling.missioncollege.edu | SEC 139 | (408) 855-5034
Counselors support Mission’s diverse student population with the many academic and personal needs that may arise during the college experience. Students are encouraged to meet with a counselor for a comprehensive educational plan during their first semester or by the time they have completed 15 units. Counselors assist students with:

- Academic and transfer counseling
- Career exploration
- Personal counseling and crisis intervention
- Community referrals
- And more

Bookstore

bncvirtual.com/wvm
West Valley College and Mission College have partnered with one of the nation’s largest college bookstore operators, Barnes and Noble College, for our school’s official online bookstore. Our online bookstore provides convenient ordering with accurate and timely fulfillment. Our students will benefit from better overall services and can easily acquire the course materials you choose before each academic term begins.

Career Services Center

jobs.missioncollege.edu | SEC 122 | (408) 855-5304
The Career Services Center provides services supporting the workforce development needs of students. Students have access to our job portal Handshake and can benefit from additional services relating to securing internships, apprenticeships, and on and off campus work opportunities. The center sponsors:

- Resume and interview workshops
- A career closet for student’s professional attire needs
- Career and job fairs
- Job listings exclusive to students

Financial Aid

Financial.aid.missioncollege.edu | SEC 118 | (408) 855-5065
The financial aid office assists students with:

- The FAFSA application for grants and loans
- The California College Promise Grant
- Work study and on-campus employment
- Scholarships
- And more
Health and Mental Health Services

[healthservices.missioncollege.edu](http://healthservices.missioncollege.edu) | SEC 104 | (408) 855-5140

A team of health professionals, including registered nurses, consulting physician, mental health professionals, and other health care specialists, provide a variety of student health services. Services include health guidance, limited clinical services, and first aid. Free limited services are available to any registered student.

Specific services include confidential health, personal and mental health counseling, limited medical evaluation and treatment, blood pressure screenings, vision, hearing, pregnancy, and other conditions. Health assessment, education, and referrals to community resources are available.

Student Health Services is located in room SEC-104 and operates during hours that are convenient to students. Appointments are encouraged, but walk-ins are welcomed if time is available.

International Student Center

[IIS](http://iis.missioncollege.edu) | iis.missioncollege.edu | SEC 111 | (408) 855-5110

The International Student Center (ISC) offers complete services to F-1 visa students including international admissions, international counselor services, and immigration advising. In addition, the ISC houses Mission College’s Institute for International Studies (IIS), an intensive English language program for students who have not met the English proficiency requirement for college admission.

Placement and Assessment Services

[placement.missioncollege.edu](http://placement.missioncollege.edu) | SEC 139

Placement and Assessment Services assist student with accessing placement recommendations for Math and English courses, completing the placement process for ESL courses, and clearing prerequisites which have been met through external exams or work completed at other institutions.

Transfer Center

[transfer.missioncollege.edu](http://transfer.missioncollege.edu) | SEC 139 | (408) 855-5115

The Transfer Center provides a variety of services to assist students interested in transferring to four-year colleges and universities including:

- Career exploration and decision-making process when selecting a major
- Selecting and applying to various 4-year universities.
- Completing college applications and admissions essays
- Completion of Admissions Guarantee applications
- Articulation services to ensure the classes you take at Mission College will be credited toward your bachelor’s degree requirements

Welcome Center

[welcomecenter.missioncollege.edu](http://welcomecenter.missioncollege.edu) | SEC 105 | (408) 855-5083

The Welcome Center provides an initial point of contact for prospective, new, continuing, and returning students, and the public. The Welcome Center is in the Student Engagement Center. Assistance is available via online chat, email, phone, and in-person. Our staff speak multiple languages. Key services include assistance with:

- Admissions and registration process
- Accessing My Mission Portal, Canvas, and student email accounts
- Financial aid applications and scholarship resources,
- General questions and much more
Academic Support Services

**Academic Support Center (ASC)/Tutoring**
tutoring.missioncollege.edu | SEC 154 | (408) 855-5095
The Academic Support Center provides academic assistance for all Mission College students. Our in-person and online tutoring programs support students in a wide range of subject areas. Services are available by appointment and drop-in.

**Library**
missioncollege.edu/lib | (408) 855-5150
The Mission College Library offers numerous resources and services to students, faculty, and staff. Librarians assist students with research needs across all disciplines.

In the Library, students can access computers, Wi-Fi, reserve textbooks, printers, photocopiers, anatomy models, and other study aids. Quiet individual study space and collaborative group study space is available.

The popular Semester Text program allows students to check-out a textbook for select courses to use for the semester at no cost.

Consult the Library web site for information on hours of operation. Contact the Information Desk for research assistance. Contact the Check Out Desk for inquiries regarding library account such as checked out items, overdue items, or fines. Write to mc.circ@wvm.edu or call (408) 855-5150. The Mission College Student/Staff ID card is your library card. ID cards are available at the Campus Center and online.

**STEM Learning Center**
stem.missioncollege.edu | SCI 131 | (408) 855-5157
The STEM Learning Center is the central hub for students seeking majors/career paths in the Science, Technology, Engineering, and Math (STEM) areas of study at Mission College.

Services provided through the center include:
- Meeting space for individual and group studying with whiteboards
- Meet with faculty and STEM peer navigators during office hours
- Personalized connection to internship opportunities with local corporations and industries
- Use of STEM reference materials (textbooks, model kits, anatomical models, etc.)
- Student computers with science related programs (including Chem Draw and MATLAB) and free printing access (up to 10 pages)
- Access to 3D Printers and engineering software

**Community Education**
missioncollege.edu/community/ | SEC 332 | 408-855-5170
Mission College Community Education Department offers a wide variety of fee-based, not-for-credit courses that support specialized career training and lifelong learning. Our courses are designed and delivered to meet your need for career advancement or personal enrichment. Classes are available to anyone in our community, regardless of education goals of achievement or student status. Classes are available to students of all ages, from high school to seniors, and are offered year-round with flexible, convenient schedules. Current program offerings can be found on our website.
Mission College has a variety of student support programs. Students may need to meet specific qualifications to participate in these programs. Please contact the program for further information.

CalWORKs

calworks.missioncollege.edu | SEC 150 | 408-855-5226
CalWORKs at Mission College works in collaboration with the Santa Clara County Department of Social Services and serves students who currently qualify for CalWORKs or TANF. CalWORKs provides educational counseling and support services to help students identify a certificate, degree, or transfer program that aligns with their career goals and builds toward family-supporting employment. CalWORKs assists students with identifying and accessing community resources to support their educational, housing, childcare, and other needs.

Support Services available to students:
- Financial assistance for books and supplies
- Educational counseling & priority registration
- On-campus and community resource referrals
- Program assistance with county caseworkers
- CalWORKs on-campus work-study employment

Disability Support Programs and Services

dgps.missioncollege.edu | CC 240 | 408-855-5085 | TTY (408) 727-9243
Disability Support Programs and Services support students with both permanent and temporary documented disabilities to access college-level courses for degree, transfer, certificate programs and career.

DSPS encompasses two areas: Academic Support Services for Mainstream Classes and Compensatory Strategy Courses.

The following services are offered within their Center:
- Appointments for Eligibility, Accommodation Planning, Course Selection, Counseling for Education Planning, Disability Advising, Crisis Counseling, Course Test-Taking Arrangements, Specialized Tutoring, and Learning Disability Assessments (upon approval).
- Student Computer Lab
- Study Cubicles
- Proctored Testing Center
- Compensatory Strategies Courses in Technology, Math, Writing and Study Skills are offered throughout the MC Campus.

Cooperative Agencies Resources for Education (CARE)

eops.missioncollege.edu | SEC 148 | (408) 855-5056
The Cooperative Agencies Resources for Education (CARE) Program, a component of EOPS, is designed to focus on the unique needs of single-parent students who receive Cash Assistance or TANF. CARE assists students in realizing their visions of educational success and economic independence.

Program services include:
- CARE Grants (In addition to EOPS Grant)
- Books and supplies
- Caring environment for single parents
- Referrals to social services agencies and community resources
- Educational trips
- And many more resources
- To maximize the resources available, students may participate in both CARE and CalWORKs at the same time.

EOPS offers support services and grants to students from educationally and economically disadvantaged backgrounds, who are often within the first generation in their families to attend college.

Support services available include:
- Academic counseling and advising
- Financial grants, book vouchers, and school supplies
- Basic needs support
- Enrollment assistance and priority registration
- Financial aid application assistance
**Honors Program**

honors.missioncollege.edu

The Honors Program gives highly motivated students the chance to work closely with instructors and other students in advanced critical thinking, analysis, research, writing and communication. Honors courses offer enriched educational experiences through challenging coursework, stimulating discussions, and the opportunity to study with other students interested in the highest level of learning. Students must apply to participate in the Honors Program and become eligible to enroll in honors courses.

**Math Engineering Science Achievement (MESA)**

mesa.missioncollege.edu | SEC 152 | (408) 855-5482

MESA CCP (Math Engineering Science Achievement Community College Program) is a STEM social justice program providing academic support, community, and leadership opportunities to transfer pathway math, engineering or science major students who are first generation college students and receive need-based financial aid.

MESA students receive the mentorship and academic support they need on campus, while getting connected to external scholarships, internships, and summer research at universities and in the STEM Community.

**MESA’s components include:**

Opportunities on-campus include STEM Academic, Transfer, and Career Counseling, dedicated Student Study Center (SEC 152) with access to printing, a lending library, and key course software as well as Tutoring and weekly Academic Excellence Workshops (AEW’s) in Math, Physics, Biology, and Chemistry.

Opportunities off-campus include UC/CSU campus and lab tours, industry tours, STEM student conferences, partnerships with professional organizations, connections to Scholarships and summer undergraduate research, and volunteer opportunities.

**Puente Project**

puente.missioncollege.edu | CC 221 | (408) 855-5362

The Puente Project focuses on Latinx culture. Participants engage in a learning community during their first year in the program. The program provides assistance in helping underrepresented students transfer to four-year colleges and universities. This transfer-prep program focuses on providing students with academic counseling, support with college-level writing, and mentoring. Students also participate in university trips and events with mentors from the community. The program is open to students of all backgrounds.

**TRIO and TRIO STEM**

trio.missioncollege.edu | SEC 146 | (408) 855-5192

TRIO and TRIO STEM are federally funded Student Support Services projects that provide assistance for Mission College students that are underrepresented in higher education. To be eligible for TRIO services, students must be a U.S. Citizen or permanent resident, and must represent at least one of the following: First generation to college (neither parent has earned a 4-year degree), low income or a student with a disability.

**TRIO provides the following services:**

- Academic advising
- Tutoring
- Computer lab use with printing and copying
- University and company tours

**Umoja Community**

umoja.missioncollege.edu | SEC 109

Umoja is a Kiswahili word meaning unity. The Mission College Umoja Community (MCUC) will empower and motivate African American students and other students from disproportionately impacted populations to excel in academics through community engagement, cultural empowerment, culturally responsive pedagogy, and self-love. Participants engage in a learning community during their first year in the program. Students of all backgrounds are welcome to join.

**Veterans Program (VALOR)**

valor.missioncollege.edu | CC 240 | (408) 855-5418

The Veteran Program, although primarily serving Military Veterans, is accessible to all Military Members, including Reserves, Active Duty, and their qualifying Dependents. Through the VALOR Center (VRC), student-veterans have access to full-time staff and ongoing appointments with a VA Certifying Official and Student-Veteran Counselors. The VALOR Center hosts outside resources including VA Health through the Palo Alto Medical Center, Department of Rehabilitation, and benefit assistance through Veteran Administration services.

**Services with the VALOR Center include:**

- Peer Mentoring and Tutoring
- Academic, Career and Disability Counseling
- Access to Certifying Official
- Lounge, study area, coffee, and snacks
- Computer Lab and printing
Campus Events

events.missioncollege.edu
A variety of events both for students and the public are always happening on campus. Visit events.missioncollege.edu to stay up to date with our events calendar.

Child Development Center (CDC)

cdc.missioncollege.edu | (408) 855-5173
The Mission College Child Development Center provides childcare for children of Mission College students, Mission College staff, and community members. Financial assistance is available for low-income families. Eligibility is determined by income and availability of space.

Food Services

There are many options for food services while on campus. The Saints Café located in the Campus Center is typically open weekdays when classes are in session. It provides an assortment of food options including hot breakfast items, Asian and Mexican food plus an expansive salad bar.

Located in both the Student Engagement Center and the Gillmor Center, KJ’s Cafe offers coffee and non-coffee beverages, pastries, grab and go sandwiches and salads. They are open when classes are in session; hours may vary by location.

Vending Machines - The College also offers food and snacks from vending machines located throughout the campus.

Hospitality Management—During the Fall and Spring, the Hospitality Management Program serves lunch in their dining room two days a week. The meals are open to the public and arrangements can be made to accommodate special parties by contacting the Hospitality Management Department Chair at 408-855-5252. The menu for the day can be accessed at hm.missioncollege.edu.

Parking Information

parking.missioncollege.edu | Campus Police | 408-855-5435
Students are expected to observe all parking and traffic regulations, including permit requirements, speed limits, no-parking zones, restricted areas, loading zones, handicapped and special permit spaces, no overnight parking, etc., when parked on campus. The West Valley Mission Community College District Police Department strictly enforces student parking permit requirements Monday through Sunday between 7:00 am and 10:00 pm, excluding district holidays. All other regulations are enforced every day, seven days a week, 24 hours a day.

Semester-length student parking permits can be ordered at no cost to students if registered in a minimum of one course at the time of order. Non-students wishing to purchase a semester-length student parking permit will be charged $50. Both Mission College and West Valley College semester permits are valid for use at either campus. Students or visitors can also purchase daily permits at the one-day “daily” parking permit machines located in Parking Lots B, C, and D. Daily permit machines accept dollar bills, coins, and credit cards. Permit pricing is based on the current Board approved parking fee schedule.

Mission College rents out its parking lots for Levi’s Stadium event parking and other special events, but accommodates faculty, staff, and students as the priority. Parties interested in renting a parking lot should contact the college rental office.

Second Harvest Food Bank Distribution

missioncares.missioncollege.edu
The college serves as a distribution location for the Second Harvest Food Bank. All Mission College students and any community members who live in the Santa Clara Valley are eligible to receive food support. Drive-thru or walk-up stations are available.

Welcome Center

welcomecenter.missioncollege.edu | SEC 105 | (408) 855-5007
The Welcome Center provides an initial point of contact for prospective, new, continuing, and returning students, and the public. The Welcome Center is in the Student Engagement Center. Assistance is available via online chat, email, phone, or in-person. Our staff members speak multiple languages. Key services include assistance with:

- Admissions and registration process
- Accessing My Mission Portal, Canvas, and student email accounts
- Financial aid applications and scholarship resources
- General questions and much more

Free Transit on VTA

smartpass.missioncollege.edu | CC 231
Mission College is served by multiple direct bus routes operated by the Santa Clara Valley Transportation Agency (VTA). In addition, the area is also served by Light Rail and several other transit lines. Bus schedules may be available at the Campus Center Information Desk and Welcome Center.
Rights and Responsibilities

Chapter 5: Student Services: wvm.edu/policies

Drug-Free Environment and Drug Prevention Program WVMCCD Administrative Procedure - AP 3550

Standards of Conduct WVMCCD Board Policy - BP 5500

Student Discipline Procedures WVMCCD Administrative Procedure - AP 5520

Student Rights and Grievances WVMCCD Administrative Procedure AP 5530

Speech: Time, Place and Manner WMCCD Administrative Procedures AP 3900

Student Rights and Responsibilities

Students have not only the right to an education, but to the rights of citizenship as well; therefore, no student shall be deprived of equal treatment and equal access to educational programs, due process, the presumption of innocence prior to proof otherwise, free expression and association, or privacy of thought.

Students bring to college various interests and values previously acquired and they develop new interests as members of an academic community. They shall be free to organize and join groups, in the pursuit of those interests, subject only to regulations and procedures which are intended to preserve the integrity of the district, and which are consistent with constitutional guarantees.

In keeping with the ideals of a democracy, students shall be granted the rights and responsibilities of self-government. In the activities of student groups and the conduct of student government, discrimination based on race, ethnic background, national origin, sex, age, sexual orientation or physical handicap shall be expressly prohibited.

Students and recognized student organizations shall be free to examine and discuss questions of interest to them and to express their opinions publicly and privately without fear of reprisal. They shall be free to support legal causes by orderly means that do not disrupt the operation of the college.

Attendant upon the right guaranteed to each student are certain responsibilities, which are respect for the rights of others, acceptance of properly constituted authority, and compliance with the policies, regulations, and procedures of the district. Each student bears full responsibility for his or her actions.

Specific complaints, questions, or concerns may be directed to the Associate Vice Chancellor of Human Resources, (408) 741-2060, or the Mission College responsible officer, Vice President of Student Services, (408) 855-5197.

Title IX: Sexual Harassment and Assault

Title IX Coordinator
Dr. Omar R. Murillo, Vice President, Student Services, (408) 855-5195 • Campus Center, Room 222
TitleIX@missioncollege.edu

Title IX report submission: missioncollege.edu/gen_info/info-and-disclosures/report-it/

Mission College provides a safe environment that supports learning and encourages all students to pursue their goals and successfully achieve them. This means the College does not tolerate sex discrimination—including sexual harassment and violence—and is committed to empowering all students and employees to take actions to eliminate sex discrimination on campus and to know how to get help if sex discrimination occurs.

Mission College takes all complaints of sexual harassment and sexual violence very seriously. Victims or those who have witnessed a violation can come forward and file a complaint by contacting the Title IX Coordinator by calling (408) 855-5195 or via email at TitleIX@MissionCollege.edu.

Anyone who files a sexual harassment or sexual violence complaint is protected from all forms of retaliation, and the College will ensure that intimidation, threats, coercion, or discrimination does not occur. Students, faculty, and staff who participate in a Title IX investigation or advocate for a victim are also protected from retaliation.

If you have been the victim of sexual harassment or sexual assault, or you know of someone at the college who has been a victim, please report this to the Title IX team so we can take actions to help and stop future incidents of harassment and violence.

WVMCCD Board Policy: Prohibition of Harassment
WVMCCD Administrative Procedure - AP 3430

Title IX, Education Amendments of 1972;

Title VII of the Civil Rights Act of 1964, 42 U.S.C.A. Section 2000e

The District is committed to providing an academic and work environment free of unlawful harassment. This procedure defines sexual 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.

For additional information on harassment and filing a complaint, refer to the website for instructions and process: missioncollege/gen_info/info_and_disclosures/title_IX/index.html.
If you believe you have been discriminated against on the basis of age, sex, handicap, race, color or national origin, refer to the following information:

**Title VI Civil Rights, Equal Opportunity**
Director of Human Resources and Employee Relations Human Resources
West Valley-Mission College District
14000 Fruitvale Ave., Saratoga, CA 95070-9698 • (408) 741-2060

**Title IX Gender Equity**
Chief Student Services Officer
3000 Mission College Blvd., Santa Clara, CA 95054-1897
Section 504 Disabled
Director of Human Resources and Employee Relations Human Resources
West Valley-Mission College District
14000 Fruitvale Ave., Saratoga, CA 95070-9698 • (408) 741-2060

**Privacy Rights of Students Annual Notification (FERPA)**
The Family Educational Rights and Privacy Act (Section 438, Public Law 93-380), as amended, requires educational institutions to provide: access to official educational records directly related to the student; an opportunity for a hearing to challenge such records on the grounds that they are inaccurate, misleading, or otherwise inappropriate; that the college must obtain the written consent of the student before releasing personally identifiable information about the student except to those persons and agencies specified by the Act; and that these rights extend to present and former students of the college. College documents are subject to the Family Educational Rights and Privacy Act.

Education records generally include documents and information related to admissions, enrollment in classes, grades, and related academic information.

Educational records will be made available for inspection and review during regular working hours after receiving a written request from the student. If a student wishes to challenge any information in the educational record, the student shall review their request with the Director of Admission and Records. The Director will inform the student of the process and if needed assist the student in correcting the formal record.

The Act provides that the college may release certain types of Directory Information, unless the student submits in writing to the Records Officer that certain or all such information not be released without his/her consent. Directory Information at this college includes: (1) student name and city of residence, (2) participation in recognized activities and sports, (3) dates of attendance, (4) degrees and awards received, (5) the most recent previous educational agency or institution attended, (6) height and weight of members of athletic teams.

A copy of the college policy, The Family Education Rights and Privacy Act, Section 438 (PL. 93-380) and other pertinent information is available for review and inspection in the Records office during normal working hours.

**Student Need-to-know Policies and Information**

**Campus Safety**
WVMCCD Administrative Procedure - AP 3500
Campus Security Act of 1990
A campus safety plan shall be developed and provided to students and employees. Information is available in the printed schedule of classes and on the District’s website. The Chief of Police is responsible for the preparation and annual updates of a report of all occurrences reported to the District Police Department of arrests for crimes that are committed on campus and that involve violence, hate violence, theft or destruction of property, illegal drugs, or alcohol intoxication, and of all occurrences of noncriminal acts of hate violence reported to campus authorities. A written report will be submitted to the Board.

Written records of noncriminal acts of hate violence shall include at least a description of the act of hate violence, the victim characteristics, and offender characteristics, if known. The Chancellor or Vice Chancellor shall ensure that the District is in compliance with State requirements for workplace safety and requirements of Federal Right-to-Know legislation. Required reports will be shared with the Board. In all aspects of plant operations and maintenance, the safety of employees, students, staff, and visitors will be a primary consideration. Safeguards against hazards, through avoidance of risks, through training of personnel (employees, staff, and students) and through practices and use of safety procedures will be observed.

**Consensual Relationships**
Romantic or sexual relationships between supervisors and employees, or between administrators, faculty or staff members and students are discouraged. There is an inherent imbalance of power and potential for exploitation in such relationships. A conflict of interest may arise if the administrator, faculty or staff member must evaluate the student’s or employee’s work or make decisions affecting the employee or student. The relationship may create an appearance of impropriety and lead to charges of favoritism by other students or employees. A consensual sexual relationship may change, with the result that sexual conduct that was once welcome becomes unwelcome and harassing.

In the event that such relationships do occur, the District has the authority to transfer any involved employee to eliminate or attenuate the supervisory authority of one over the other, or of a teacher over a student. Such action by the District is a proactive and preventive measure to avoid possible charges of harassment and does not constitute discipline against any affected employee.

**Student Participation in Institutional Government**
As constituents of the college, students shall be free individually and collectively to express their views on issues of college policy and on matters of general interest to the student body. The Associated Student Government will participate in the formulation and application of college policy affecting academic and student affairs.

**Student Production of Goods and Services**
Students may produce services and materials for community organizations or groups only to the extent that such production furthers such students’ educational development.

**Student Learning**
Students are responsible for completing the learning and performance objectives of the courses in which they are enrolled and giving evidence of such learning through examinations, essays, term papers, journals and such other requirements as the instructor may deem appropriate for demonstrating mastery of skills required in the course.

**Student Grievance and Appeal Procedures**
Mission College is committed to the idea that all students should have recourse from unfair and improper action on the part of any member of the College Community. In all instances, a student who has been subject to an academic or administrative sanction has the right to appeal the decision of the professor/administrator/staff in accordance with the due process procedures established by the College.
Students may file a grievance or appeal if the student believes that:

- Student has been subject to unjust action
- Denied rights
- Mistake
- Decision or action taken in response to an alleged violation of the Student Code of Conduct or Academic Integrity Policy is harsh or unjust
- Disciplinary procedures were not followed in accordance with College Policies and
- District Rules and Regulations

Student filing grade grievances must be able to demonstrate one of the following:

- Fraud
- Bad faith
- Incompetence in the academic evaluation of their performance

Incompetence in the academic evaluation of their performance in the absence of mistake, fraud, bad faith or incompetence, the grade determined by the instructor shall be final (Ed. Code Section 76224). Grade grievances must be filed within one year of issuance of the grade in dispute.

Filing all grievances and appeals must be done in accordance with the College Policies and District Rules and Regulations. The Grievance form can be found on the following webpage: missioncollege.edu/gen_info/info-and-disclosures/report-it/

Please refer to the West Valley-Mission Community College District Website for additional information at wvm.edu
Academic Freedom

The West Valley-Mission Community College District is committed to the free expression of diverse viewpoints on the part of faculty and students, as well as encouraging critical examination of these various perspectives. The District is also committed to the conduct of research and observation of the natural world unimpeded by social, religious, political, or theoretical biases, and prejudices.

Academic freedom requires that all faculty members establish and preserve an open learning environment at the college. No special limitations shall be placed upon students in their study, investigation, presentation, and interpretation of facts and ideas concerning human society, the physical and biological world, and other branches of learning, subject to accepted standards of academic responsibility. Students shall have the opportunity to study controversial issues and divergent views and to arrive at their own conclusions—even if they differ from those of the instructor.


Academic Honesty

Academic Honesty is the pursuit of scholarly activity in an honest and responsible manner. All students should act with honesty, personal integrity and civility and should respect other students' dignity, rights, and property. For students, all academic work will be done by the individual to whom it is assigned, without unauthorized aid of any kind.

The district expects students to conduct themselves in a manner consistent with the educational purposes of the college. Students have many responsibilities when they become members of the West Valley-Mission College community. The Student Code of Conduct, local State and Federal laws and regulations, as well as other published rules, procedures and regulations provide a clear statement of those expectations.

Behavior that is not consistent with those standards will be subject to disciplinary sanctions and appropriate external sanctions. However, disciplinary proceedings should play a secondary role to counseling when admonitions have been present.

To protect the rights of students to due process, students will always be informed of the charges against them, be given an opportunity to refute the charges, and permitted an appeal of any decision. Disciplinary proceedings and their outcomes are confidential.

Academic Dishonesty includes but is not limited to in-class cheating, out-of-class cheating, plagiarism, knowingly assisting another student in cheating or plagiarism, or knowingly furnishing false information to college staff, faculty, administrators or other officials.

Discipline Process

When a student is charged with plagiarism or cheating related to a class activity or assignment, and the instructor has reasonable proof or documentation or the student admits the violation, the instructor will proceed with the following:

- Issue an NC or a failing grade (“F”) or “0” for the assignment in question.
- Refer the student to the Vice President of Student Services, for disciplinary action.

Course Preparation

Degree applicable courses require that a student be able to read college level textbooks, write college level essays, think critically, and study independently. All degree applicable courses carry an advisory of eligibility for ENG 001A or ENG 001AX and RDG 054. Some courses carry additional advisories which are indicated in the course descriptions. An ADVISORY recommends a skill you should have or course you should have taken or should be eligible to take prior to enrollment in the course which carries the advisory. Advisories are recommendations, not requirements. Some courses require specific pre- or corequisites to qualify for enrollment.

A Prerequisite is a course or skill which is required before you can enroll in a particular course. If you successfully completed a prerequisite course at Mission College, you will be eligible to enroll in the subsequent course as stated in the Catalog and Schedule of Classes. If you are currently enrolled in a prerequisite course, you may enroll now in the subsequent course for next
A Corequisite is a course which you must take at the same time as another course as a condition of enrollment. You are not be permitted to enroll in a class for which you cannot demonstrate you have met the prerequisite or are enrolled in the corequisite. In some cases, a course may be listed as prerequisite OR corequisite. In this case the course can be taken prior to or at the same time as the course listing the prerequisite or corequisite.

All prerequisites and corequisites may be met with an equivalent course. Placement and Assessment services can assist you with clearing or challenging prerequisite or corequisite requirements if you believe you have acquired the necessary knowledge or ability through alternative means.

Mission College also offers noncredit courses, non-degree applicable credit courses, and some degree applicable credit courses which can help develop skills for success.

Types of Courses
Mission College offers a variety of course types to help students meet their individual educational goals. Below is an explanation of terminology used to differentiate course types.

Credit Course: Most Mission College courses are credit courses, meaning students earn units for the courses that appear on their transcript. However, not all units earned in credit courses apply toward a degree or certificate or transfer to four-year colleges and universities.

Noncredit Course: Mission College offers noncredit courses, for which students do not have to pay enrollment fees. Noncredit courses have no units, value. The courses do not apply toward a degree or certificate or transfer to four-year colleges and universities. Many noncredit courses can help students build skills to prepare them for greater success in credit courses.

Degree Applicable Courses: All credit courses, except those with course numbers in the 900’s will apply as credit toward an A.A. or A.S. degree, and may apply toward an AA-T or AS-T degree. Not all degree applicable courses will transfer to four-year colleges and universities.

Non-degree Applicable Courses: All noncredit and some credit courses are non-degree applicable. Non-degree applicable courses carry a notation in their course description in this catalog. Students may or may not earn credit for these courses, but any credit earned is not applicable to any Mission College degree.

Class Attendance and Participation
Students are expected to attend all sessions of each class and participate in class activities and the requirements for the course. Instructors may drop students from class if they fail to attend the first class meeting or when the instructor determines that the student is no longer reasonably participating in the activities and requirements of the course. Definition of non-participation shall include but not be limited to excessive absences defined by when accumulated hours of absence exceed ten percent of the total number of hours the class meets during the semester.

Final Examinations
A final examination will be required of all students in all courses during the last week or the last scheduled class meeting of each regular semester or term. Final examinations will not be given in advance of scheduled times unless special permission to do so is granted by the instructor in exceptional cases.

Units of Work and Credit
Title 5 (55002) specifies that the minimum standard for unit calculation for all credit courses is three hours of work per week for lecture classes, including class time, for each unit of credit, and prorated for short-term, laboratory, and activity courses. This usually means two hours of independent assigned work for each lecture hour spent in class, some or all of which may require the student to be on campus for completion. In the case of lab hours, a minimum of 3 hours is required for each unit of credit.

Transcripts
Students may secure official transcripts of work completed at Mission College by submitting a request to the Admissions and Records Office (Mission College, 3000 Mission College Blvd., Santa Clara, California 95054-1897) or online at missioncollege.edu/admissions/transcript.html. Transcripts may be sent to an educational institution or may be mailed to the student. Processing a standard transcript request usually requires 5 to 10 business days. There is no charge for the first two paper transcripts requested by the student; thereafter, a $6.00 fee will be assessed for each transcript request, whether requested in person or online.

Rush transcripts can be requested at the Admissions and Records Office or online at a cost of $20 per transcript copy.

For online transcript requests, go to: missioncollege.edu/admissions/transcript.html

Graduation Application
Students may petition to graduate in the Fall, Spring and Summer terms. The Graduation Application is available online on the My Mission Portal.

When to apply?
Students should apply for graduation during the term all requirements will be completed for the intended program of study, not before. Before applying, students should meet with a counselor to ensure all requirements have been met.

Application Deadlines
Student can apply for a certificate and/or degree online via the Portal, and the deadlines are available online at missioncollege.edu/admissions/graduation/index.html. If the deadline is missed, students may apply for the following application cycle.

Transcripts from other institutions
Official copies of transcripts from other institutions must be received in the Admissions and Records Office prior to the graduation application deadline for any coursework being applied to your degree or certificate requirements. Applications for graduation will not be processed if official transcripts are not on file. Once coursework is complete and final grades are posted, official transcripts must be sent to Admissions and Records. All units recorded on transcripts from other colleges are factored in with Mission College units for a total cumulative GPA.
Grade System

Evaluative Grade Symbols
Grades from a grading scale shall be averaged based on the point equivalencies to determine a student’s grade point average. The highest grade shall receive 4 points and the lowest grade shall receive 0 points, using only the following evaluative symbols, except if a student receives a non-evaluative grade symbol (see below):

A student’s grade point average on this 4.00 scale is calculated in the following manner: the grade points for each course in which the student is enrolled are first determined by multiplying the grade point value for the grade awarded times the number of semester units represented by the course. Next, total grade points are summed for all courses in which a grade of A, B, C, D, or F has been awarded. This total is then divided by the total number of units for all courses in which one of these five grades was awarded.

<table>
<thead>
<tr>
<th>Symbol</th>
<th>Definition</th>
<th>Grade Point</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Satisfactory</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Passing, less than satisfactory</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failing</td>
<td>0</td>
</tr>
<tr>
<td>P</td>
<td>Pass (at least satisfactory; units not counted in GPA)</td>
<td>No value</td>
</tr>
<tr>
<td>NP</td>
<td>No Pass (less than satisfactory; units not counted in GPA)</td>
<td>No value</td>
</tr>
<tr>
<td>SP</td>
<td>Satisfactory progress (satisfactory progress for noncredit courses only; units not counted in GPA)</td>
<td>No value</td>
</tr>
</tbody>
</table>

Pass/No Pass
Courses may be offered in the following categories (as referenced in The California Code of Regulations, Title 5 §55752):

- Courses are eligible for the Pass/No Pass notation.
- Once applied, a Pass/No Pass grading option becomes a permanent part of the student’s academic transcript and may not be revoked.

Satisfactory Progress
Title 5, section 55023 includes SP as an official grading designation. This evaluative symbol is defined as “Satisfactory Progress towards completion of the course (used for noncredit courses only and is not supplanted by any other symbol).” The adoption of this new grading designation was preceded by a substantial vetting process that was initiated in 2009 when the effort of establishing a grading system for all noncredit providers began. The SP designation completes the list of noncredit progress indicators, which already includes P (passing) and NP (no pass). These two grade indicators have been in existence but were insufficient on their own because the progress of noncredit students cannot be divided into passing and non-passing cohorts without losing track of efforts made towards attendance and course completion by students who, for a variety of reasons, cannot complete their courses in a single academic term.

Noncredit apportionment is based on positive attendance, which means that noncredit institutions are reimbursed by the state only for students who are attending classes. Because of the open entry - open exit system of noncredit institutions, students are free to come and go from the class of their choosing. Students with the fewest hours of attendance earn an NP grade because they are not able to achieve the course outcomes in the limited time they attend. Students with P grades normally attend school more consistently and are able to achieve the course outcomes. The SP designation shows that students are progressing and have acquired some of the skills and knowledge needed to achieve course outcomes but still have work to do. The SP designation is therefore a reflection of student progress and success.

A notation of SP may be awarded to a student who has met at least one of the following criteria:
- Did not attend enough class meeting (e.g. added to class too late) to adequately learn the materials
- Demonstrated improvement/making progress, but not enough to pass
- Showed consistent effort, but overall low scores
- Has imbalanced skills
- Missed several class meetings for a legitimate reason and exhibits potential for successful completion of program level when able to attend for the duration of the term

Nonevaluative Symbols

I - Incomplete
- The grade “I” may be recorded when students doing passing work and regularly attending at least 75% of a course are unable to take the final exam or otherwise complete the course because of illness or other unforeseeable emergency and justifiable reasons. Conditions for the removal of the “Incomplete” shall be set forth by the faculty member in a written record which also indicates the grade assigned in lieu of removal. The student will receive a copy of this record and a copy will be filed by the Director of Admissions and Records or the responsible Vice President. A final grade will be assigned by the faculty member when the stipulated work has been completed and evaluated. The “I” grade shall not be used in either calculating units attempted or for the computation of the grade point average.
- An “Incomplete” grade must be made up no later than one year following the end of the term in which it was assigned. Established College procedures may be utilized to request a time extension in cases involving unusual circumstances.


- An "incomplete" grade not completed within the year's time frame and that is not extended will be converted to a final grade of "F".

**IP - In Progress**
- This symbol is to be used in the student's permanent record to confirm enrollment and to indicate that the class extends beyond the normal end of the term. It indicates that work is "In Progress" and that unit credit and a grade will be assigned when the course is completed.
- If a student enrolled in an open-entry, open-exit course is assigned an "IP" grade and does not re-enroll for the subsequent attendance period, the faculty member will assign an evaluative symbol in accordance with evaluative symbols in 5.6.5 (a) above, to be recorded on the student's permanent record for the course. The "IP" grade shall not be used in the computation of grade point average.

**RD - Report Delayed**
- This symbol is to be used only by the Director of Admissions and Records or the designee of the responsible Vice President for the purpose of indicating that there has been a delay in reporting the grade due to circumstances beyond the control of either the student or the Admissions and Records Office. It is to be replaced by a permanent symbol as soon as possible.
- The "RD" grade shall not be used in the computation of the grade point average.

**W - Withdrawal**
- The student may withdraw from a semester length class through the end of the 2nd week and no notation will be made on the student's academic record. In courses of less than a regular semester's duration, a student may withdraw prior to the completion of 10 percent of the period of instruction and no notation will be made on the student's record.
- Thereafter, a student may withdraw from a semester-length class, whether passing or failing, at any time through the last day of the twelfth week of instruction and a "W" grade shall be authorized. In courses of less than a regular semester's duration, a student may withdraw prior to the completion of 75 percent of the period of instruction and a "W" grade shall be authorized.
- The academic record of a student who remains in class beyond the time periods set forth above must reflect an authorized symbol other than "W." However, after the end of the twelfth week (or after 75 percent of the period of instruction in courses of less than a regular semester's duration), withdrawal may be authorized in the case of extenuating circumstances beyond the control of the student. In such cases, the student must submit a petition in accordance with established College procedures. Approved withdrawal, under the conditions set forth, shall be recorded as a "W."
- A student is only allowed to attempt a course three times when they receive a W, NP, D or F grade. The student will have to visit Admissions and Records to request the third and final repeat in person during the registration period.

**MW - Military Withdrawal**
- "Military Withdrawal" occurs when a student who is a member of the active or reserve United States military service receives orders necessitating a withdrawal from classes. Upon verification of such orders, the withdrawal symbol of "MW" shall be assigned. Military Withdrawals shall not be counted in "satisfactory progress" probation and dismissal calculations. Further, the following courtesies are available to the student:
  - In lieu of an “MW” symbol, a student may directly petition the faculty member for an Incomplete (“IP”) grade. If granted, the student will receive an “IMW.” This grade will default to a “MW” grade as opposed to one of the standard letter grades if the student fails to ever complete the class.
  - In the case of a student who is an active or inactive member of the military service and who receives orders compelling a withdrawal from courses, the District shall, upon petition of the affected student, refund the entire enrollment fee for courses in which academic credit is not awarded.
  - Appeals of Withdrawal Decisions: A student may appeal a decision regarding withdrawal in accordance with District policy, 5.21 (Student Grievances and Appeals) and the California Education Code.
  - The District shall maintain procedures for such appeals and those procedures shall be published and widely available to students.

**EW - Excused Withdrawal**
(In accordance with Title 5, section 55024(e), the governing board of a district shall adopt an EW procedure based upon verifiable documentation supporting the request. An EW is acceptable when a student withdraws from a course(s) due to reasons beyond their control, which include but are not limited to, the following:
- Job transfer outside the geographical region;
- Illness in the family where the student is the primary caregiver;
- An incarcerated student in a California State Prison or County Jail is released from custody or involuntarily transferred before the end of the term (In the case of an incarcerated student, an excused withdrawal cannot be applied if the failure to complete the course(s) was the result of a student’s behavioral violation or if the student requested and was granted a mid-semester transfer);
- The student is the subject of an immigration action;
- Death of an immediate family member;
- Chronic or acute illness;
- Verifiable accidents; or
- Natural disasters directly affecting the student.

Verifiable documentation can include, but is not limited to a note from a doctor stating the student is not currently able to complete the work due to illness, employment verification of a new job, a booking report, police report of an accident, or any other documentation that proves the student’s completion of a course is impractical. The Chancellor’s Office defines impractical as impossible due to reasons beyond the student’s control. The determination shall be made by the local college’s admissions and records office.

A student may request to use an EW for only one course or all courses in a term depending on the reason for the request. It is possible a student, based on an illness for example, is not able to participate in an in-person course but is able to continue with online courses. Colleges should use individual case facts to determine the continuity of some courses and not others. Units for courses assigned an EW grade may be included in FTES calculations and reporting.

In accordance to Title 5, section 55024 (e), an EW symbol may be requested by the student at any time during the semester and no later than the date when WVMCCD the district/college policy allows a grade change. Excused Withdraw shall not be counted in progress probation or dismissal calculations nor shall it be counted towards the permitted number of withdrawals or counted as an enrollment attempt. The financial aid of a student may be affected depending on individual circumstance. A student should consult with the financial aid staff regarding any impact.

In lieu of a "MW" symbol, a student may directly petition the faculty member for an Incomplete ("IP") grade. If granted, the student will receive an "IMW." This grade will default to a "MW" grade as opposed to one of the standard letter grades if the student fails to ever complete the class.
Grade Change Policy (AP 4231)
The instructor of the course shall determine the grade to be awarded to each student.

The determination of the student's grade by the instructor is final in the absence of mistake, fraud, bad faith, or incompetence. "Mistake" may include, but is not limited to, errors made by an instructor in calculating a student's grade and clerical errors. "Fraud" may include, but is not limited to, inaccurate recording or change of a grade by any person who gains access to grade records without authorization.

The removal or change of an incorrect grade from a student's record shall only be done pursuant to Education Code Section 76232 or by an alternative method that ensures that each student shall be afforded an objective and reasonable review of the requested grade change.

In cases, where the grade change request is due to a discrimination complaint, another faculty member may substitute for the instructor if the student has filed a discrimination complaint, or if the instructor is not available or where the District determines that it is possible that there may have been gross misconduct by the original instructor.

In the case of fraud, bad faith, or incompetence, the final determination concerning removal or change of grade will be made by the Vice President of Instruction or designee.

Grade appeals shall be made within a two-year period upon completion of the course.

Grade appeals are first handled by the instructor and second appealed to the department; and finally to the Division chair/dean. In cases, where the instructor is no longer employed within the district or unable to be contracted the grade appeals would be by the educational dean or designee. In all cases, the instructor who first awarded the grade will be given written notice of the change.

Academic Standing

Academic Honors
Honors List - Students in good standing who complete at least six units in any semester and who earn a grade point average of 3.00 for the semester will qualify for the Honors List.

Honors Graduate - Graduates who have achieved a cumulative Mission College grade point average between 3.3-4.0 will be designated as Honors Graduates and receive special recognition at Commencement as outlined below:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.30-3.49</td>
<td>Cum Laude</td>
</tr>
<tr>
<td>3.50-3.79</td>
<td>Magna Cum Laude</td>
</tr>
<tr>
<td>3.80-4.0</td>
<td>Summa Cum Laude</td>
</tr>
</tbody>
</table>

Dean's List - Students who complete 12 units or more in any semester, and earn a minimum 3.00 ("B") grade point average, qualify for the Dean's list.

Dean's List for Part-Time Students - Students who complete between 6 and 11 ½ units in any semester and earn a minimum of 3.00 ("B") grade point average, qualify for the Dean’s list for part-time students.

Minimum Standards of Progress
The college’s minimum standards of academic progress require the student to maintain an overall grade point average of 2.00 and successful completion of at least fifty percent of the overall credits in which the student has enrolled. The 2.00 grade point standard is the minimum acceptable standard for graduation or transfer.

Failure to Meet Minimum Standards of Progress
Inclusion/Exclusion of Units Attempted
The determination of the applicability of the policy on academic probation and dismissal will be based on the inclusion of:

- All units in which the student has been officially enrolled, except those in which the student has been assigned a grade or non-evaluative symbol of "W," "MW," "EW," "P," "NP," "SP," "IP," "RD," or "NC" when computing grade point average.
- All units in which the student has been officially enrolled, except those in which the student has been assigned a non-evaluative symbol of "W," "MW," "RD," or "IP," "I" when applying the satisfactory progress rule.
- All District units in which the student has been enrolled will be utilized in determining the applicability of the policy on academic probation and dismissal.
- Coursework completed at previously attended institutions that has undergone a transcript evaluation is included in the official transcript for West Valley-Mission Community College District and thereby considered for academic progress standard calculations.

Probation
A student shall be placed on probation if their academic record of performance, at Mission and/or West Valley College(s), including evaluated coursework completed at previously attended institutions through the transcript evaluation process meets any of the following standards:

- **Academic probation** - A student who has earned a minimum of 12 semester grade units, at Mission College and West Valley College(s), including transfer articulated credit from previous institutions, shall be placed on Academic Probation 1 when the institutional GPA is below 2.00. The institutional GPA includes the calculated GPA from previously articulated credit from a transcript evaluation. Students on any Academic Probation status will be notified at the end of primary terms which include fall and spring. Students on Academic Probation 1 will be assigned a status of Academic Probation 2 if the overall GPA remains below 2.00 at the completion of Academic Probation 1 semester. Students on Academic Probation 2 will move to Subject to Dismissal status at the end of Academic Probation 2 semester, if the overall GPA remains below 2.00. Notification of Academic Probation statuses will appear on the student’s semester grade report and the transcript of academic work.

- **Progress probation** - A student who has enrolled in at least 12 cumulative semester units, at Mission and/or West Valley College(s), and who has been assigned final grades of 'W,' 'I' and 'NC' in fifty percent (50%) or more of those units shall be placed on progress probation. Students on Progress Probation status will be notified by the college at the end of the primary terms which include fall and spring. A student may be on progress probation after the first semester, progress probation 2 after the second semester and subject to dismissal at the end of the third consecutive semester. Notification of probationary status will appear on the student’s semester grade report and on the transcript of academic work.

Removal from Probation
A student on academic probation for a grade point deficiency shall be removed from probation when the cumulative grade point at Mission and/or West Valley College(s), reaches 2.00 or higher. Likewise, a student on Progress Probation shall be removed from probation when the total percentage of cumulative units, at Mission and/or West Valley College(s), in the 'W,' 'I,' 'NP,' and 'NC' category drops below fifty percent (50%).

Students on probation are strongly advised to promptly consult their counselor regarding the best and most appropriate course of action to be followed in being removed from probation. Students who believe that their placement on academic or progress probation is the result of an error may petition the Student Petition Committee for relief.
Dismissal
A student whose academic performance, at Mission and/or West Valley College(s), falls under one or more of the criteria listed below shall be subject to Academic Dismissal from the college:

• A cumulative grade point average of less than 2.00 upon completion of ‘Subject to Dismissal Status’.
• A student whose total percentage of ‘W,’ ‘I’ and ‘NC’ grades reaches or exceeds fifty percent (50%) of the total units attempted for three consecutive semesters progress dismissal.

Academically disqualified students are dismissed from the college and shall not be reinstated until one semester has elapsed after dismissal unless an Appeal for Readmission is approved by the Student Petitions Committee. An academically dismissed student must apply for readmission when returning to the college. If readmitted, the student will be admitted on a Probationary status and will continue to be subject to the standards for probation and dismissal cited above. Notification of academic probation status will appear on the student's end-of-semester grade report and transcript.

Effect on Priority Registration Status
Students whose academic or progress status of Good Standing, Academic Probation 1, and Progress Probation 1 status are considered for priority registration (early enrollment date).

Academic Probation 2 - loss of priority registration
Progress Probation 2 – loss of priority registration
Subject to Dismissal - loss of priority registration
Dismissal - registration not allowed

Grade Alleviation through Course Repetition
• A student who has earned a grade of “D,” “F,” or “NP” in a credit course at any College in the District may repeat the course for the purpose of grade alleviation.
• A student may repeat a credit course for purposes of grade alleviation three times. A student may petition the appropriate College appeals body for permission to repeat a course more than three times, but the petition will be granted only based on a finding that unusual circumstances exist which justify a fourth repetition.
• Upon satisfactory completion of the repeated course, the last grade earned in the repeated course is used in the computation of the grade point average.
• In no case will the unit value of the repeated course be counted more than once.
• The permanent academic record shall be annotated in such a way that all courses attempted will be indicated on the transcript in showing a true and complete academic history.
• Under special educationally justifiable circumstances, repetition of credit courses other than those for which substandard work has been recorded may be permitted.
• A student may petition the appropriate College appeals body to authorize course repetition consistent with the California Code of Regulations, Title 5, § 55762-3.

Academic Renewal Policy
Per California Code of Regulations, § 55046, the Academic Renewal process permits students the opportunity to petition to have up to 24 units of substandard academic work completed within the West Valley Mission Community College District (WVMCCD) disregarded from their cumulative grade point average when such work does not reflect their current demonstrated ability. If Academic Renewal is approved, the student’s permanent record will be noted with Academic Renewal comments and the units will be removed. The renewed course(s) will not be removed from the record, as the district is required to show the student’s complete and accurate academic record. Only substandard notations may be renewed (“D,” “F,” “NP,” “NC”).

Coursework previously applied toward a degree, certificate or GE certification (IGETC/CSU GE-B) at WVMCCD are not eligible for academic renewal.

Academic Renewal at WVMCCD does not guarantee that other colleges will accept this action.

Approval of an Academic Renewal request is subject to the following conditions:
Since the coursework to be alleviated was completed, a student must meet one of the following conditions in the District and/or at another regionally accredited institution (official transcripts must be attached to petition):

• Completion of 12 units with 3.0 cumulative GPA
• Completion of 24 units with a 2.0 cumulative GPA

A period of 2 semesters must have elapsed since the substandard work.

The College will disregard individual courses selected by the student in consultation with a Counselor.

Courses alleviated still reflect a course attempt for the purposes of the repeat policy, pursuant to California Code of Regulations, § 55042.

Once applied, Academic Renewal may not be reversed.

Students must consult with a counselor before petitioning for Academic Renewal. After obtaining the Counselor’s signature, the completed Petition for Academic Renewal is submitted to the Admissions and Records Office.
Coursework Completed at Other Institutions
Students may use coursework completed at other institutions to fulfill program, general education, and/or elective unit requirements for the Associate Degree, Associate Degree for Transfer or certificate programs at Mission College. Note: Foreign coursework cannot be used to satisfy requirements for ADTs, CSU or IGETC certifications. See the Foreign Coursework Policy.

Colleges and universities must ensure the quality of their programs by adhering to specific evaluation criteria established and evaluated by private educational associations called accrediting agencies. Mission College accepts courses from institutions accredited by the following regional agencies:

- WASC-ACSCC - Western Association of Schools and Colleges-Commission on Institutions of Higher Education
- WASC-ACCJC - Western Association of Schools and Colleges-Commission on Accrediting for Community and Junior Colleges
- WASC-ACCS - Western Association of Schools and Colleges-Commission on Schools and Colleges-Accrediting Commission for Higher Education
- WASC-ACCS - Western Association of Schools and Colleges-Accrediting Commission for Senior Colleges and Universities

Mission College recognizes those institutions that are either fully accredited or as listed as a candidate for accreditation as published in the Database of Accredited Postsecondary Institutions and Programs maintained by the U.S. Department of Education.

Course Evaluation for General Education
Courses completed at another California Community College that are approved for an associate degree general education category, for CSU GE-B or for IGETC will be applied to the parallel general education category at Mission College regardless of whether Mission College has an equivalent course. Visit ccctransfer.org/ge to locate General Education requirements at other California Community Colleges.

General education courses completed at a U.S. regionally accredited institutions will be applied to the parallel general education category at Mission College.

If you wish to have your transcripts evaluated, you have the option to request one once you have finished or are in-progress of completing 12 units at Mission College. However, before doing so, it’s highly recommended that you schedule a meeting with a Mission College counselor. Once a transcript evaluation has been completed and added to a student’s academic record, it is considered a permanent part of their educational history and cannot be removed. To learn more about transcript evaluations, please visit missioncollege.edu/admissions/student-records/transcript-evaluation.html.

General Education Reciprocity Agreement for A.A. and A.S. Degrees
The West Valley Mission Community College District has entered into a mutual agreement with 12 other Community Colleges to accept the General Education of these colleges “as completed.” The participating colleges are Cabrillo College, Chabot College, De Anza College, Evergreen Valley College, Foothill College, Gavilan College, Hartnell College, Las Positas, Monterey Peninsula, Ohlone College, San Jose City College and West Valley College.

This means that students who obtain a certification of completion of the Associate Degree General Education requirements will have both their General Education and competency requirements accepted “as completed.” No additional general education coursework will be required if the certification is officially presented. However, students will still be required to complete all course or prerequisites needed for a major. The agreement also means that the other participating colleges will accept the General Education pattern of Mission if a certification is presented to the member colleges. To obtain certification of Mission College General Education, students must present a General Education Reciprocity Program Certification form to the Records Office.

Completion of General Education for A.A. and A.S. Degrees for Holders of an Associate or Baccalaureate Degree from Other Institutions
Mission College will accept “as completed” the required units and proficiency of General Education needed for an Associate in Arts or Associate in Science degree from a U.S. regionally accredited institution under the following parameters:

1. The student has been granted an associate’s degree or a baccalaureate degree from a U.S. regionally accredited institution.

   Per Title 5, §55063, the earned degree confirms completion of English Composition and Intermediate Algebra (or higher).

   The student will then be eligible to receive a Mission College Associate in Arts or Associate in Science degree when the following are complete:

   1. The student has completed all program and elective requirements of the Mission College degree.

   2. The student has completed at least 12 units in residence at Mission College.
3. The student has an overall grade point average in all college work of 2.00 or better.
4. The student has completed all courses in the major with a “C” or P or better.

It is the student’s responsibility to request that official transcripts be sent directly to the Admissions and Records Office at Mission College. For purposes of satisfying graduation requirements, transcripts of prior college work must be on file by the fourth week of the semester in which such degree requirements will be satisfied.

Course Evaluation for Major/Program Requirements:
Courses completed at a regionally accredited institution can be used to satisfy major requirements at Mission College upon approval by the appropriate Department Chair or designee with a Course Substitution request. These are approved on a case-by-case basis. Equivalency may be determined by any one of the following:
1. Direct articulation between Mission College and the sending institution.
2. Indirect articulation between Mission College and other California Community Colleges based on approval of courses for the California Identification Number System (C-ID).
3. Indirect articulation between Mission College and a sending institution determined by cross referencing additional public colleges and universities included on ASSIST. For example, if a course under review is not approved for C-ID and Mission College does not have direct articulation with the California Community College, a C-ID that maintains articulation with both Mission College and the other California Community College could be used to establish indirect articulation.
4. A critical evaluation of the course to verify core elements of the course including topics, course objectives, lecture and/or lab hours, and pre-/corequisites are sufficiently aligned with Mission College courses. This review will be conducted by the evaluation staff, the College’s Articulation Officer, appropriate faculty content experts and/or the appropriate department chair.

NOTE: These approvals may not be honored at other campuses or universities, so it is recommended that you work closely with a Counselor or the Articulation Officer.

Course Evaluation for Elective Credit
Courses completed at a regionally accredited institution can be used to satisfy elective requirements at Mission College as long as they are associate degree or baccalaureate level.

Course Evaluation of Upper Division Units
In general, non-CCC courses applied to general education and Mission College program requirements should be classified as lower division. However, Mission College will accept coursework completed at the upper division level from a regionally accredited college or university if the course is deemed comparable to a Mission College course by the appropriate Department Chair, a designee, an articulation agreement or based on one of the following:
1. A non-CCC course is determined to be comparable to one taught and approved for AA/AS, IGETC or CSU GE-B at a CCC.
2. When a CSU uses an upper-division course in its “lower-division” General Education Breadth Pattern.
3. When a UC or CSU campus has classified a course or series as upper division but has requested that the system-wide offices allow lower division transfer credit an equivalent course is taught at a community college or because the preparation of the subject is desired prior to transfer from the 2-year institution to the 4-year institution. Current examples include some math, organic chemistry and abnormal psychology courses.

Course Evaluation for Upper Division Units
Courses may be used to meet a program requirement, an associate degree general education requirement, or a prerequisite but, at this time, will be accepted for subject credit only; units will not be awarded. In all cases, these courses should have sufficient breadth to meet CSU GE-B and IGETC.

NOTE: To graduate, CSU students are required to complete a minimum of 39 semester units of lower-division general education and UC students are required to complete a minimum of 34 units of general education. If students apply upper division units to the lower division requirements for certification, they may need to complete additional lower-division units to reach the minimum requirements.

Evaluation of Foreign Coursework
Foreign coursework must first be evaluated by an accredited and approved evaluation service, and then reviewed by the Mission College Records Office. Some courses may also require approval by the appropriate department chair. Courses may be used to fulfill prerequisite, program, general education and elective unit requirements only if course descriptions, in English, are submitted for review along with the evaluated foreign transcript. Mission College will not determine course transferability to other colleges and universities.

To have foreign coursework evaluated, students need to contact one of the approved evaluation agencies listed below and request a detailed equivalency report that includes the course level (upper or lower division), its U.S. semester-unit equivalency and the grade the student earned:
- IERF (International Education Research Foundation | ierf.org)
- NACES (National Association of Credential Evaluation Services) | naces.org
- WES (World Education Service) | wes.org
- IIC (International Institute of California | iicus.com)
- IESCAREE (International Evaluation Service Center) | iescaree.com

The official foreign evaluation along with a Transcript Evaluation Form. For evaluation of general education, complete the Transcript Evaluation Form. For evaluation of major requirements, complete the Course Substitution Form. Both forms can be found at missioncollege.edu/admissions/forms.html

Note: Foreign coursework cannot be used to satisfy requirements for ADTs, CSU or IGETC certifications

Prerequisite Clearance and Challenge
Prior coursework, including some high school courses, external exams or alternative learning experiences can often be used to grant student clearance for a course prerequisite. Please visit prerequisites.missioncollege.edu for the most up to date information on the prerequisite clearance process.

Credit for Military Service
Six (6) semester units will be granted to any actively enrolled student with an approved DD-214 that shows completion of basic training in the Armed Services of the United States and any discharge other than dishonorable. An approved DD-214 will satisfy AA/AS General Education Area E and CSU GE-B Area E. Additional credit may be awarded for military service in accordance with recommendations by the American Council on Education (ACE Military Guide). Any credit granted will be posted to the student’s academic record upon receipt of the official documentation.

Credit by Internal Examination
(Title 5, 55050, Ed Code Section 70901 and 70902, Board Policy 4235, Administrator Procedure 4235)

Credit by examination allows students to use acquired knowledge, abilities and competencies to challenge certain courses for units. Credit will be granted to any student who
meets the requirements for credit by exam and who successfully passes an examination approved and conducted by the proper authorities of the college. Grading shall be according to the regular grading scale: except Pass/No Pass Option shall be offered, as an option, if it is ordinarily available for the course. The regulations governing credit by examination are listed below.

A student wishing to challenge a course using credit by examination can obtain a student petition form for Credit by Examination form at missioncollege.edu/admissions/forms.html or from Admissions and Records. The student must file the application with the Admissions and Records department prior to the end of the sixth week in Fall or Spring regular semesters.

If the petition is approved, the student will be notified of the time, place, and manner of the examination. The students will need to enroll in a course created specifically for this purpose and must pay a fee equal to the usual per unit enrollment fees for the course but will be exempted from paying any material fees for the course. Fees for credit by examination are non-refundable.

Students are cautioned that any credits obtained by any of the methods listed below, while accepted by Mission College, may not be acceptable for credit by any other institution, public or private. It is the student’s responsibility to check with other institutions to determine the acceptability of any credit earned by examination.

Regulations for Credit by Internal Examination
1. The credit by exam status for each course is determined by each department and is noted on the official course outline of record. A master list of all courses eligible for credit by exam can be found on the website: missioncollege.org/admissions/forms.html
2. The student must be registered and in good standing at Mission College.
3. The student can demonstrate that they are especially qualified, through previous training or instruction, to complete such an examination.
4. A maximum of twelve (12) semester units toward an associate degree may be earned by courses for which credit has been earned by examination.
5. A student may take an examination only once and the grade received on the examination will be recorded on the permanent record of the student. The student’s academic record will clearly indicate that the credit was earned by examination.
6. Grading for the examination shall be according to the regular grading system except that students shall be offered a “pass - no pass” option if that option is ordinarily available for the course.
7. The units earned through such examination shall not be used to satisfy the minimum twelve (12) semester hours of credit in residence required for an associate degree.
8. Credit by examination is not applicable to meeting of such load requirements for Selective Service deferment, Veteran’s or Social Security benefits.
9. Examinations are only given during the Fall and Spring regular semesters and requests must be received by the 6th week of the semester to be processed during that semester.

Credit by External Exam
Mission College awards college credit for many external exams. Charts with credit awarded for each exam can be found on pages 36-39. Students must have official scores sent to the Admissions and Records Office for credit to be applied toward MC graduation requirements and CSU GE-B/IGETC certification.

If the student duplicates an external exam with another exam of the same subject content, and/or an exam with a college course, credit may only be awarded once. See individual campus for details. For additional AP, CLEP and IB policies, visit calstate.edu/apply/transfer/Pages/upper-division-transfer.aspx for CSU and admission.universityofcalifornia.edu/counselors/preparing-transfer-students/transfer-credit-practice.html for UC.

College Credit for Advanced Placement Exams
Mission College recognizes high achievements by students who have successfully completed one or more Advanced Placement Examinations as authorized by the College Entrance Examination Board. Students who have successfully completed exams in the Advanced Placement Program with a score of 3, 4, or 5 may be granted credit for purposes of general education, graduation, and/or advanced placement in the College’s sequence of courses.

All campuses will accept the minimum units shown if the exam is included in full or subject area certification; however, individual campuses may choose to accept more units than those specified towards completion of general education requirements.

Each AP exam may be applied to one GE area satisfying one course requirement, with the exception of the IGETC Language Other Than English (LOTE) requirement.

The CSU and UC Minimum Admissions Semester Units columns reflect the number of units all CSU and UC campuses will accept toward admission.

Visit the appropriate website to determine use of Advanced Placement for program requirements at other colleges and universities.

College Credit for College Level Examination Program (CLEP)
Mission College awards credit for the College Level Examination Program exams with a minimum score of 50. CLEP credit can be used to meet AA/AS General Education requirements, CSU GE-B requirements and CSU elective credit. CLEP cannot be used to satisfy IGETC requirements.

If a student passes more than one CLEP exam in the same language other than English (French, German, and Spanish), only one exam may be applied to the baccalaureate degree. For each of these tests, a passing score of 50 is considered “Level I” and earns 6 units of admissions credit; the higher scores are considered “Level II” and earn additional admissions units and clear Area C2 of CSU GE-breadth.

College Credit for International Baccalaureate (IB) Program Exams
The International Baccalaureate (IB) exam assesses student work and measures students’ academic, intercultural and basic skills. Students may earn credit for IB tests with scores of 4 or 5 and can be used to meet elective as well as AA/AS, CSU GE-B and IGETC general education requirements.

Assigning Academic Credit for the Defense Language Proficiency Test (DLPT)
Using the American Council on Education (ACE) recommendations as described below, three lower division semester hours for language shall equate to three semester units (or their quarter equivalent) in CSU GE Breadth Area C2. When assigning academic credit using the DLPT, campus articulation officers and credit transfer evaluators should refer to the ACE National Guide to College Credit for Workforce Training. This ACE online guide organizes foreign language test scores and credit recommendations by language, version of test and modality of language. The Guide then provides lower and upper division credit recommendations based on the DLPT test score in the following modalities: listening, reading, and oral. Campuses may continue to award additional GE and/or major course credit as they have done in the past.

The following documents may be accepted to award DLPT GE:
- Official Defense Language Institute Foreign Language (DLIFLC) Transcripts
- Official Joint Services Transcripts (JST)
- Defense Manpower Data Center (DMDC) DLPT Examinee Results
- DA Form 330 Language Proficiency Questionnaire
### College Credit for Advanced Placement Exam (AP)

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<th>Exam</th>
<th>AA (major and/or GE) for Mission College</th>
<th>CSU GE-B</th>
<th>Units earned toward AA and CSU transfer</th>
<th>IGETC and UC subject area</th>
<th>Units earned toward UC transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>ART 001A and 001B</td>
<td>Area C1 or C2</td>
<td>6 semester units</td>
<td>Area 3A or 3B UC-H</td>
<td>5.3 semester</td>
</tr>
<tr>
<td>Biology</td>
<td>BIO 101+101L</td>
<td>Area B2 and B3</td>
<td>6 semester units</td>
<td>Area 5B and 5C UC-S</td>
<td>5.3 semester</td>
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<tr>
<td>Calculus AB</td>
<td>MAT 003A</td>
<td>Area B4</td>
<td>3 semester units</td>
<td>Area 2A UC-M</td>
<td>2.6 semester</td>
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<tr>
<td>Calculus BC</td>
<td>MAT 003A (score of 3)</td>
<td>Area B4</td>
<td>6 semester units</td>
<td>Area 2A UC-M</td>
<td>5.3 semester</td>
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<td>Calculus BC/AB Subscore</td>
<td>MAT 003A and MAT 003B (score of 4 or 5 only)</td>
<td>Area B4</td>
<td>3 semester units</td>
<td>Area 2A UC-M</td>
<td>2.6 semester</td>
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<td><strong>AP CALCULUS EXAM LIMITATIONS:</strong></td>
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<tr>
<td>Chemistry</td>
<td>CHM 001A</td>
<td>Areas B1 and B3</td>
<td>6 semester units</td>
<td>Area 5A and 5C UC-S</td>
<td>5.3 semester</td>
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<tr>
<td>Chinese Language and Culture</td>
<td>Area C</td>
<td>Area C2</td>
<td>6 semester units</td>
<td>Area 3B and 6A UC-H</td>
<td>5.3 semester</td>
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<tr>
<td>Computer Science A</td>
<td>CIS 037A</td>
<td>N/A</td>
<td>3 semester units</td>
<td>N/A</td>
<td>5.3 semester (EFF FA18)***</td>
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<tr>
<td>Computer Science AB</td>
<td>CIS 037A</td>
<td>N/A</td>
<td>6 semester units</td>
<td>N/A</td>
<td>5.3 semester**</td>
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<td>Computer Science Principles</td>
<td>Department Approval Needed</td>
<td>Area B4</td>
<td>6 semester units</td>
<td>N/A</td>
<td>5.3 semester</td>
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<tr>
<td><strong>AP CS EXAM LIMITATIONS:</strong></td>
<td></td>
<td></td>
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<tr>
<td>Economics - Macroeconomics</td>
<td>ECN 001A</td>
<td>Area D</td>
<td>3 semester units</td>
<td>Area 4 UC-B</td>
<td>2.6 semester</td>
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<td>Economics - Microeconomics</td>
<td>ECN 001B</td>
<td>Area D</td>
<td>3 semester units</td>
<td>Area 4 UC-B</td>
<td>2.6 semester</td>
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<tr>
<td>English - Language and Composition</td>
<td>ENG 001A</td>
<td>Area A2</td>
<td>6 semester units</td>
<td>Area 1A UC-E</td>
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<tr>
<td>English - Literature and Composition</td>
<td>ENG 001A and Area C</td>
<td>Area A2 and C2</td>
<td>6 semester units</td>
<td>Area 1A or 3B UC-E or UC-H</td>
<td>5.3 semester***</td>
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<td>Environmental Science</td>
<td>BIO 025</td>
<td>Area B1 and B3</td>
<td>4 semester units</td>
<td>Area 5A and 5C UC-S</td>
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<td>Area 3B and 6A UC-H</td>
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<td>German Language and Culture</td>
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<td>Area C2</td>
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<td>Government and Politics - Comparative</td>
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<td>Area D</td>
<td>3 semester units</td>
<td>Area 4 UC-B</td>
<td>2.6 semester</td>
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<td>CSU GE-B</td>
<td>Units earned toward AA and CSU transfer</td>
<td>IGETC and UC subject area</td>
<td>Units earned toward UC transfer</td>
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<td>Government and Politics - U.S.</td>
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<td>3 semester units</td>
<td>Area 4 UC-B</td>
<td>2.6 semester</td>
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<td>Physics C - Electricity and Magnetism</td>
<td>PHY 004B</td>
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<td>2.6 semester***</td>
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<td>Studio Art - 2D Design</td>
<td>Department Approval Needed</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
<td>5.3 semester units***</td>
</tr>
<tr>
<td>Studio Art - 3D Design</td>
<td>Department Approval Needed</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
<td>5.3 semester units***</td>
</tr>
<tr>
<td>Studio Art - Drawing</td>
<td>Department Approval Needed</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
<td>5.3 semester units***</td>
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<td><strong>AP STUDIO ART EXAM LIMITATIONS:</strong></td>
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</table>

**AP CALCULUS EXAM LIMITATIONS:**
- Calculus BC/AB Subscore MAT 003A and MAT 003B
- Maximum 5.3 semester units

**Environmental Science BIO 025 Area B1 and B3**
- Maximum 5.3 semester units

**Computer Science Principles Department Approval**
- Computer Science AB CIS 037A N/A 6 semester units*** N/A 5.3 semester**

**Economics – Microeconomics ECN 001B Area D**
- 4 semester units (EFF 3 semester units)

**English - Language and Composition ENG 001A Area A2**
- 3 semester units

**AP PHYSICS EXAM LIMITATIONS:**
- Maximum 4 semester units toward GE and 6 semester units toward transfer
- Maximum 5.3 semester units for all

**CSU GE-B Units earned**
- Area 1A, 2A, 3A, 3B, 3C, 4, 5A, 5B, 5C
- 3 semester units
- 4 semester units
- 6 semester units

**CSU transfer exam toward AA and/or GE**
- Does not fulfill AHI requirement.
- Student must satisfy the AHI requirement after transfer.

**IGETC and UC subject area**
- Area B1, B2, B3, B4, C1, C2, D1, D2, D3, D4
- 2.6 semester units
- 3 semester units
- 4 semester units
- 5.3 semester units

**Max 5.3 semester units**
- Does not fulfill AHI requirement.
- Student can satisfy the AHI requirement after transfer.

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**2023-2024 MISSION COLLEGE CATALOG**
## College Credit for College Level Examination Program (CLEP)

<table>
<thead>
<tr>
<th>CLEP Exam</th>
<th>Minimum CLEP score</th>
<th>AA/AS GE for Mission College (3 units each)</th>
<th>Minimum CSU units allowed</th>
<th>IGETC and UC subject area</th>
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</thead>
<tbody>
<tr>
<td>CLEP American Government</td>
<td>50</td>
<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
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<tr>
<td>CLEP American Literature</td>
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<td>Area C</td>
<td>3 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Analyzing and Interpreting Literature</td>
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<td>Area C</td>
<td>3 semester units</td>
<td>Area C2, 3 semester units</td>
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<td>CLEP Biology</td>
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<td>Area B</td>
<td>3 semester units</td>
<td>Area B2, 3 semester units</td>
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<tr>
<td>CLEP Calculus</td>
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<td>Math Competency and Area A2</td>
<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
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<tr>
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<td>Area B</td>
<td>3 semester units</td>
<td>Area B1, 3 semester units</td>
</tr>
<tr>
<td>CLEP College Algebra</td>
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<td>Math Competency and Area A2</td>
<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
</tr>
<tr>
<td>CLEP College Algebra – Trigonometry</td>
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<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
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<td>CLEP Financial Accounting</td>
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<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
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<td>CLEP French Level I*</td>
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<td>NA</td>
<td>6 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP French Level II*</td>
<td>50</td>
<td>Area C</td>
<td>9 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
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<td>CLEP English, Freshman College Composition</td>
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<td>NA</td>
<td>NA</td>
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<tr>
<td>CLEP German Level I*</td>
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<td>6 semester units</td>
<td>NA</td>
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<tr>
<td>CLEP German Level II*</td>
<td>60</td>
<td>Area C</td>
<td>9 semester units</td>
<td>Area C2, 3 semester units</td>
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<tr>
<td>CLEP History, United States I</td>
<td>50</td>
<td>Area D1 or Area D2</td>
<td>3 semester units</td>
<td>Area D + US-1, 3 semester units</td>
</tr>
<tr>
<td>CLEP History, United States II</td>
<td>50</td>
<td>Area D1 or Area D2</td>
<td>3 semester units</td>
<td>Area D + US-1, 3 semester units</td>
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<tr>
<td>CLEP Human Growth and Development</td>
<td>50</td>
<td>Area D1 or Area E</td>
<td>3 semester units</td>
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<tr>
<td>CLEP Humanities</td>
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<td>Area C</td>
<td>3 semester units</td>
<td>Area C2, 3 semester units</td>
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<td>CLEP Information Systems and Computer Applications</td>
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<td>NA</td>
<td>3 semester units</td>
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<td>CLEP Introduction to Educational Psychology</td>
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<td>3 semester units</td>
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<tr>
<td>CLEP Introduction to Business Law</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
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<tr>
<td>CLEP Introductory Psychology</td>
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<td>3 semester units</td>
<td>Area D, 3 semester units</td>
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<td>Area D1</td>
<td>3 semester units</td>
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<tr>
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<td>3 semester units</td>
<td>Area B1 or Area B2, 3 semester units</td>
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<td>CLEP Pre-Calculus</td>
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<td>Area B4, 3 semester units</td>
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<td>CLEP Principles of Accounting</td>
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<tr>
<td>CLEP Principles of Macroeconomics</td>
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<td>Area D, 3 semester units</td>
</tr>
<tr>
<td>CLEP Principles of Microeconomics</td>
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<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
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<td>CLEP Principles of Marketing</td>
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<tr>
<td>CLEP Spanish Level I*</td>
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<td>CLEP Spanish Level II*</td>
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<td>CLEP Western Civilization I</td>
<td>50</td>
<td>Area C or Area D1</td>
<td>3 semester units</td>
<td>Area C2 or Area D, 3 semester units</td>
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<tr>
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<td>50</td>
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<td>3 semester units</td>
<td>Area D, 3 semester units</td>
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### College Credit for International Baccalaureate Program Exams (IB)

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<th>Exam</th>
<th>Minimum score for Mission College and CSU</th>
<th>AA/AS GE for Mission College (3 units each)</th>
<th>CSU GE-B area (3 units)</th>
<th>Minimum score for UC</th>
<th>IGETC area (3 units)</th>
<th>Semester Credits earned toward MC, CSU AND UC</th>
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<td>5</td>
<td>Area B</td>
<td>Area B2</td>
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<td>5B</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
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<td>IB Chemistry HL</td>
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<td>Area B</td>
<td>Area B1</td>
<td>5</td>
<td>5A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
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<td>Area D1</td>
<td>Area D</td>
<td>5</td>
<td>4</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
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<td>IB Language A - Language and Literature (except English)</td>
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<td>Area C2</td>
<td>5</td>
<td>3B and 6A</td>
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<td>IB Language B (any language) HL</td>
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<td>NA</td>
<td>5</td>
<td>6A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
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<td>IB Mathematics HL</td>
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<td>Math Competency and Area A2</td>
<td>Area B4</td>
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<td>2A</td>
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<td>Area B1</td>
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<td>3 MC, 3 CSU, 5.3 UC</td>
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<td>3A</td>
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Major and Career Pathways

**ACADEMIC PROGRAMS**

**DISCLAIMER:** Mission College has made reasonable efforts to ensure the accuracy of information at the time of publication. However, all programs are subject to change without prior notice. Students are encouraged to consult with a counselor.

**ART AND DESIGN**

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<td>Creative Arts</td>
<td>AA</td>
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<tr>
<td>Digital Illustration</td>
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<td>Digital Music</td>
<td>AA</td>
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<tr>
<td>Graphic Design</td>
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<td>Liberal Arts: Arts &amp; Humanities</td>
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<td>Three-Dimensional Arts</td>
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<td>User Experience &amp; Interface Design</td>
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<td>Virtual Production Fundamentals</td>
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**BUSINESS AND HOSPITALITY**

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<tr>
<td>Administrative Specialist</td>
<td>AS</td>
</tr>
<tr>
<td>Baking and Pastry</td>
<td>AS</td>
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<td>Beginning Computer Skills</td>
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<tr>
<td>Business</td>
<td>AS</td>
</tr>
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<td>Business Administration 2.0</td>
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<td>Business Information Professional</td>
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<td>Business Computing</td>
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<td>CPA Exam Preparation 1: Auditing &amp; Attestation</td>
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<tr>
<td>CPA Exam Preparation 2: Business Environment and Concepts (BEC)</td>
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<tr>
<td>CPA Exam Preparation 3: Financial Accounting and Reporting (FAR)</td>
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<td>CPA Exam Preparation 4: Regulation (REG)</td>
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<td>Culinary Arts</td>
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<td>Digital Media Marketing</td>
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<td>Economics</td>
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<td>Food Service &amp; Restaurant Management</td>
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<tr>
<td>Fundamental Food Service Skills</td>
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<tr>
<td>Hospitality Management</td>
<td>AS</td>
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<tr>
<td>Management and Leadership</td>
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<tr>
<td>Project Coordinator</td>
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<tr>
<td>Project Management</td>
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**ENGLISH AS A SECOND LANGUAGE PROGRAMS**

<table>
<thead>
<tr>
<th>Subject</th>
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<tbody>
<tr>
<td>Low- Beginning ESL</td>
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<tr>
<td>Beginning ESL</td>
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<tr>
<td>High- Beginning ESL</td>
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<tr>
<td>Low Intermediate ESL</td>
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<tr>
<td>Preparation for Academic Success in ESL</td>
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<tr>
<td>English For Careers in Food Service</td>
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<tr>
<td>English for Child Development</td>
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<tr>
<td>English for Childcare</td>
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**EXPLORATORY & GENERAL STUDIES**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Liberal Arts: Arts &amp; Humanities</td>
<td>AA</td>
</tr>
<tr>
<td>Liberal Arts: Communication in English and Critical Thinking</td>
<td>AA</td>
</tr>
<tr>
<td>Liberal Arts: Natural Science and Mathematics</td>
<td>AA</td>
</tr>
<tr>
<td>Liberal Arts: Social and Behavioral Science</td>
<td>AA</td>
</tr>
<tr>
<td>Transfer Studies CSU GE-B</td>
<td></td>
</tr>
<tr>
<td>Transfer Studies IGETC for CSU</td>
<td></td>
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<tr>
<td>Transfer Studies IGETC for UC</td>
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**HEALTH SCIENCE**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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</thead>
<tbody>
<tr>
<td>Community Health Worker</td>
<td></td>
</tr>
<tr>
<td>Fitness &amp; Health</td>
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</tr>
<tr>
<td>Human Biology</td>
<td>AS</td>
</tr>
<tr>
<td>Kinesiology</td>
<td>AA-T</td>
</tr>
<tr>
<td>Nursing Assistant</td>
<td>X</td>
</tr>
<tr>
<td>Nutrition and Dietetics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Pharmacy Technician (Not for Credit)</td>
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</tr>
<tr>
<td>Public Health Science</td>
<td>AS-T</td>
</tr>
<tr>
<td>Registered Nursing (LVN to RN)</td>
<td>AS</td>
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<tr>
<td>Vocational Nursing</td>
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**LANGUAGE AND LIBERAL ARTS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Communication Studies</td>
<td>AA-T</td>
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<tr>
<td>English</td>
<td>AA-T</td>
</tr>
<tr>
<td>Liberal Arts: Communication in English and Critical Thinking</td>
<td>AA</td>
</tr>
<tr>
<td>Spanish</td>
<td>AA-T</td>
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**PUBLIC SERVICE AND SOCIAL SCIENCE**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>AS-T</td>
</tr>
<tr>
<td>Anthropology</td>
<td>AA-T</td>
</tr>
<tr>
<td>Child Development, Associate Teacher</td>
<td></td>
</tr>
<tr>
<td>Child Development, Early Intervention Assistant</td>
<td></td>
</tr>
<tr>
<td>Child Development, Master Teacher</td>
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</tr>
<tr>
<td>Early Childhood Education</td>
<td>AS-T</td>
</tr>
<tr>
<td>Economics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Fire Fighter/EMT Academy</td>
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<tr>
<td>Fire Technology</td>
<td>AS</td>
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<tr>
<td>Fire Prevention Internship Certification</td>
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</tr>
<tr>
<td>History</td>
<td>AA-T</td>
</tr>
<tr>
<td>Liberal Arts: Social and Behavioral Science</td>
<td>AA</td>
</tr>
<tr>
<td>Political Science</td>
<td>AA-T</td>
</tr>
<tr>
<td>Psychology</td>
<td>AA-T</td>
</tr>
<tr>
<td>Social Justice Studies</td>
<td>AA-T</td>
</tr>
<tr>
<td>Sociology</td>
<td>AA-T</td>
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**SCIENCE TECHNOLOGY ENGINEERING & MATH**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Biology</td>
<td>AS-T</td>
</tr>
<tr>
<td>Biological Science</td>
<td>AS</td>
</tr>
<tr>
<td>Cisco Certified Network Administration (CCNA)</td>
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</tr>
<tr>
<td>Computer Information Systems</td>
<td>AS</td>
</tr>
<tr>
<td>Computer Network Technology</td>
<td>AS</td>
</tr>
<tr>
<td>Data Analyst Associate</td>
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</tr>
<tr>
<td>Engineering</td>
<td>AS</td>
</tr>
<tr>
<td>Human Biology</td>
<td>AS</td>
</tr>
<tr>
<td>IT Helpdesk Technician</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts: Natural Science and Mathematics</td>
<td>AA</td>
</tr>
<tr>
<td>Mathematics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Mechatronic Technology</td>
<td>AS</td>
</tr>
<tr>
<td>Nutrition and Dietetics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Physics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Web Design</td>
<td></td>
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<tr>
<td>Web Development</td>
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</tbody>
</table>

**VTA APPRENTICESHIP PROGRAMS**

<table>
<thead>
<tr>
<th>Subject</th>
<th>Degree</th>
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<tbody>
<tr>
<td>Coach Operator</td>
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<tr>
<td>Light Rail Operator</td>
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<tr>
<td>Overhead Line Worker</td>
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<tr>
<td>Public Transit Leadership</td>
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<tr>
<td>Service Mechanic</td>
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<tr>
<td>Track Worker</td>
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</tbody>
</table>

AA-T = Associate of Art Degree for Transfer
AS-T = Associate of Science Degree for Transfer
AA= Associate of Art Degree
AS= Associate of Science Degree
= For Credit Certificate of Proficiency
ø = Non Credit Certificate of Competency or Certificate of Completion
** = Transfer Degrees are the best way to get guaranteed admission to the California State University System, when all requirement are met.

**2023-2024 MISSION COLLEGE CATALOG**
Mission College offers a wide variety of degree and certificate programs to help students achieve their educational goals.

**Degrees**

**Associate in Arts and Associate in Science**
These degrees may be sought as either a final educational goal or preparation for direct entry into an occupation. In addition to the individual program requirements, which can be found beginning on page 55, students seeking an Associate in Arts or Associate in Science degree must fulfill the Mission College competency and general education requirements found on pages 45-54. Potential transfer students may choose to fulfill the more comprehensive CSU GE-B (pages 48-50) or IGETC (pages 51-54) general education requirements while earning the A.A. or A.S. Completion of general education requirements for A.A. and A.S. Degrees may be completed through reciprocity agreements or prior degree completion (see page 33 for details). The A.A. in Liberal Arts, with four general concentration areas, may also be a good option for students still deciding upon a program of study.

**Associate Degrees for Transfer**
These associate degrees are fully transferable to the CSU and require no more than 60 semester units. Students who meet the CSU’s minimum eligibility requirements are guaranteed priority admission to a CSU campus, though not necessarily to a particular campus or major. General education requirements for the Associate Degree for Transfer and for those wishing to transfer to the California State University system or the University of California system can be fulfilled by completion of the CSU GE-B or IGETC general education requirements. These are found beginning on page 44. Individual requirements for Associate Degrees for Transfer programs can be found beginning on page 51.

**Earning Multiple Majors or Additional Degrees**

**Multiple Majors**
Multiple majors may be earned at the same time provided that the following provisions are met:

1. Completion of all requirements for the additional major(s). Double-counting is allowable.
2. Completion of General Education and Competency Requirements
3. Completion of 12 units in residence at Mission College.

**Additional Associate Degrees**
A student who has already earned an AA, AS, AA-T, AS-T, BA or BS degree from a US regionally accredited institution, may apply for additional AA or AS degrees once all program requirements for the additional degree(s) (per Title 5 55063) have been complete. No additional general education will be required. AA/AS holders wishing to pursue an AA-T or AS-T will be held to the major requirements as well as any remaining CSU GE-B or IGETC requirements. NOTE: Per Title 5 55063, degrees awarded prior to Fall 2009 may be subject to a full evaluation.

**Certificates**
Multiple certificate programs are also offered. In many cases the certificate coursework can be applied toward completion of the degree. Certificate programs are listed in this catalog in the Degree and Certificate Program Requirements section.

**Credit Certificates**
Mission College offers two types of for-credit certificates. The Certificate of Achievement is typically designed to provide students with the necessary skills to compete successfully in related job markets. They will be noted on a student’s transcript. The Certificate of Proficiency is a department awarded certificate which is not noted on the student transcript, nor is it eligible for financial aid. At least 1/3 of the program requirements must be completed at Mission College.

**Noncredit Certificates**
Mission College offers a limited number of noncredit Certificate of Competency programs. Noncredit coursework is not applicable to degrees or credit certificates. However, the noncredit coursework and certificates may offer valuable and documented academic or vocational skill building opportunities.

**Preparation for Transfer**
Mission College provides students the opportunity to complete the general education and most of the lower division major requirements before transferring to the University of California (UC), the California State University (CSU), independent and out-of-state colleges and universities. Many students who wish to transfer to CSU will pursue the Associate in Arts for Transfer or Associate in Science for Transfer, however that may not be the best option for all students. Students who are planning to transfer should meet with a counselor to develop an educational plan which will identify the courses needed to transfer to the student’s institution of choice.
General Requirements for Transfer Students
Mission College students can transfer to a four-year college or university with junior or upper division standing by completing the following requirements:

Lower-Division Preparatory Major Courses
Lower division courses normally taught in the first or second year of college are described as lower division courses. Articulation agreements which list detailed information concerning specific majors and which describe course transferability are available at assist.org.

General Education Requirements
General Education (GE) reflects the belief that a portion of a student’s education should be devoted to broadening a student’s awareness. Courses in writing, critical thinking, mathematics, sciences, arts and humanities and the social sciences are included in the GE patterns and can be used to fulfill the lower division GE requirements at a university.

Those patterns include: the Intersegmental General Education Transfer Curriculum (IGETC) and the CSU General Education-Breadth Requirements (CSU GE-B), as well as UC, CSU and independent campus-specific patterns.

Electives
Electives are courses that do not meet a specific general education or major requirement. The number of elective units required for transfer, if any, depends on a student’s major and transfer university.

Scholarship Requirement (Grade Point Average)
Most colleges and universities have minimum grade point averages for admission. 3.0 is the minimum GPA for the UC system and 2.0 is the minimum for the CSU system (3.4 and 2.4 for non-residents respectively). The minimum GPA for private colleges and universities varies. Please note that there may be higher GPAs required for specific majors at specific campuses.

Transfer to California State University
California State University has 23 campuses located throughout the state. The CSU offers more than 1,400 baccalaureate degrees, and Master’s degrees in over 200 subject areas. The campuses are as follows: CSU Bakersfield, CSU San Bernadino, CSU Chico, CSU Channel Island, CSU Dominguez Hills, CSU East Bay, CSU Fullerton, CSU Long Beach, CSU Los Angeles, CSU Monterey Bay, CSU Northridge, CSU Sacramento, CSU San Marcos, CSU Stanislaus, California Maritime Academy, Cal Poly Humbolt (formally Humbolt State University), Cal Poly Pomona, Cal Poly San Luis Obispo, Fresno State University, San Diego State University, San Francisco State University, San Jose State University and Sonoma State University.

Admission Requirements for Transfer to CSU
Students who are undergraduate transfer applicants in good standing at the last institution attended, or students who were not eligible for admission after high school, are eligible for admission to the California State University if they meet the following standards:

1. Complete a minimum of 60 semester units of CSU transferable college credit with a grade point average of at least 2.0 on a 4.0 scale.
2. Complete one of the following:
   • Minimum general education requirements
   • California State University General Education Breadth Requirements (CSU GE-B)
   • California State University General Education Breadth for STEM Requirements (CSU GE-B for STEM)
   • Intersegmental General Education Transfer Curriculum (IGETC for CSU)

Minimum GE requirements for the CSU
Complete at least 30 semester units of general education coursework with a C average or better. The 30 units must include the following GE Areas earned with a grade of C- or P or better:

• English Language (3.0 units)
• Critical Thinking (3.0 units)
• Oral Communications (3.0 units)
• Mathematics and/or Quantitative Reasoning (3.0 - 5.0 units)

California State University General Education-Breadth (CSU GE-B)
The Board of Trustees of the California State University allows community colleges to certify the completion or partial completion of general education breadth requirements for students transferring to a California State University. Proper planning should enable students to satisfy the university lower division breadth requirements concurrently with the requirements for graduation with an associate degree from Mission College.

Thirty-nine (39) units must be completed in the five areas outlined below, for certification. A course used to satisfy a requirement in one area may not be used to satisfy a requirement in another area. Some courses will double count for Major and GE. Visit the Counseling Office or assist.org for updated information.

Complete requirements for the CSU GE-B can be found in this catalog on page 48.

CSU GE-B for STEM
Students earning an Associate Degree for Transfer in a high-unit STEM major where the GE Breadth for STEM pattern is indicated by the Transfer Model Curriculum, are eligible to defer up to two lower-division GE courses until after the transfer. At this time, at Mission College, the CSU GE-B for STEM requirements can only be used with the Biology AS-T

IGETC for CSU
Students transferring to CSU may also complete the IGETC. Complete requirements for the IGETC can be found in this catalog on page 51. Advanced Placement, International Baccalaureate and CLEP scores can be used to satisfy CSU requirements (see Examination Charts starting on page 32). Visit the Counseling Office or assist.org for a complete listing of requirements and courses.

Note: Completing courses that satisfy CSU’s U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.

Associate Degrees for Transfer
Mission College offers Associate Degrees for Transfer (AA-Ts/AS-Ts) designed to support transfer to the California State University system. Students who complete the requirements for an AA-T or AS-T are eligible for an associate degree AND meet minimum admissions requirements for junior standing at a CSU campus. Although earning an Associate Degree for Transfer does not guarantee a student admission to all CSU campuses or majors, it does secure priority admission consideration to the student’s local campus.

To enhance a student’s competitiveness and success as a CSU applicant, in addition to completing the requirements for the AA-T/AS-T, it is strongly recommended that students utilize assist.org to see if there are additional courses suggested or required for a particular major at a specific campus.

At the time of printing this catalog, Mission Colleges offers Associate Degrees for Transfer in 20 majors: Administration of Justice, Anthropology, Art History, Business Administration 2.0, Communication Studies, Early Childhood Education, Economics, English, History, Kinesiology, Mathematics, Nutrition and Dietetics, Physics, Political Science, Psychology, Sociology, Social Justice Studies, Spanish, and Studio Arts. For a current list of
degrees, visit the Counseling Office (counseling.missioncollege.edu) or the Transfer Center (transfer.missioncollege.edu). Major requirements for individual Associate Degree for Transfer programs can be found in this catalog in the Degree and Certificate Program Requirements section beginning on page 55.

Requirements for an Associate Degree for Transfer

1. Completion of the AA-T or AS-T major courses with grades of C or P or better
2. Completion of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B or CSU GE-B for STEM) or the CSU Intersegmental General Education Transfer Curriculum for CSU (IGETC CSU).

Transfer to the University of California

The University of California (UC) has 10 campuses, each with its own unique geographic and academic character. The University of California offers bachelor’s, master’s and doctoral degrees in a variety of subject areas. The campuses are as follows: UC Berkeley, UC Davis, UC Irvine, UC Los Angeles, UC Merced, UC Riverside, UC Santa Cruz, UC San Francisco (graduate programs only), UC Santa Barbara and UC San Diego.

Admission Requirements for Transfer to UC

All campuses of the University of California have the same undergraduate admission requirements. The summary of admission requirements and procedures that follows is designed to assist you in the application process. For a more detailed description of the courses required for admission, consult a counselor or a university representative. The university has defined freshman and transfer applicants as follows:

Freshman Applicant - A freshman applicant is a student who has graduated from high school but has not enrolled since then in a regular session in any college or university. (This does not include attending a summer session immediately after high school graduation.)

Transfer Applicant - A transfer applicant is a student who has completed high school (or a GED) and who has been an enrolled student at another college or university, or in college-level extension courses. (This does not include attending a summer session immediately after high school graduation.)

Students who are undergraduate transfer applicants in good standing at the last institution attended or students who were not eligible for admission after high school, are eligible for admission to the University of California if they meet the following standards:

1. Completion of 60 semester units of UC transferable college credit with a grade point average of at least 3.0 on a 4.0 scale. Non-residents must have a minimum 3.4 grade point average. (No more than 14 semester units may be taken Pass/No Pass) and
2. Complete one of the following General Education Patterns:
   - UC Seven Course Pattern
   - Intersegmental General Education Transfer Curriculum (IGETC UC or IGETC for STEM)

UC Seven Course Pattern

Completion of this pattern satisfies UC admissions requirements but does not guarantee admission to any UC campus. This pattern is strongly recommended for high unit math, science, and engineering majors. Students must complete the following pattern, earning a grade of "C" or "P" or better in each course:

- Two transferable college courses in English composition (6.0 units) and
- One transferable college course in mathematical concepts and quantitative reasoning (3.0 units) and
- Four transferable college courses chosen from at least two of the following subject areas: the arts and humanities, the social and behavioral sciences, and the physical and biological sciences (12.0 units)

Intersegmental General Education Transfer Curriculum (IGETC)

The Intersegmental General Education Transfer Curriculum (IGETC) is a series of courses prospective transfer students may complete to satisfy the lower division breadth/general education requirements at both the University of California and the California State University. The IGETC is most helpful to students who want to keep their options open - those who know they want to transfer, but who have not yet decided upon a particular institution, campus, or major. Students who intend to transfer into a high unit major or one that requires extensive lower division preparation, such as engineering, should concentrate on completing the many major preparation courses.

IGETC for UC must be completed in its entirety before transfer; otherwise students may be required to fulfill additional lower division general education requirements at the UC.

All IGETC courses must be completed with a grade of C or P or better. Complete requirements for the IGETC can be found in this catalog on pages 51-54.

IGETC for STEM

IGETC for STEM is a separate IGETC track available for students planning to major in science, technology, engineering, or mathematics. The IGETC for STEM allows students to defer two course requirements, one in Arts and Humanities, and one in Social and Behavioral Sciences, until after transfer. UC will accept IGETC for STEM only if: you’re earning an associate degree for transfer (ADT) at a California community college that offers IGETC for STEM as an option for those degrees* AND the UC major program or college you’re applying to accepts partial IGETC certification. Although IGETC for STEM is an option, you should prioritize completing major-preparation courses for the specific campuses and programs you’re considering.

* At this time, at Mission College, the IGETC for STEM requirements can only be used with the Biology AS-T.

Advanced Placement and International Baccalaureate scores can be used to satisfy IGETC requirements (see Examination Charts on pages 34,36). Visit the Counseling Office or assist.org for a complete listing of requirements and courses.

Additional Transfer Information

Transfer Admission Guarantees (TAGs)

A TAG is a formal, written agreement between Mission College, a participating four-year college or university, and the Mission College student. Students who comply with the agreement and apply for admission during the appropriate filing period are guaranteed admission. For qualifications, visit the Counseling Office (counseling.missioncollege.edu) or the Transfer Center (transfer.missioncollege.edu).

Independent and Out of State Colleges and Universities

Mission College has articulated general education requirements with a number of independent institutions such as Notre Dame de Namur University, University of Pacific, and University of Southern California. In addition, many independent institutions will accept completion of the California State University General Education-Breadth and/or the General Education Transfer Curriculum in place of their own lower-division general education
requirements. Students transferring to independent or out-of-state institutions should meet with a Counselor in order to determine appropriate general education requirements.

**Santa Clara University**
Santa Clara University accepts a number of transfer students. Since applicants exceed the number of students who can be accommodated, no specific statement can be made about the quality of work (GPA) which will enable a transfer applicant to be accepted. During committee deliberations, consistency of performance and course selections are considered along with the quality of work.

The Scholastic Aptitude Test is required of all SCU transfer applicants who have completed fewer than 30 semester units. All foreign applicants must present scores for both the Scholastic Aptitude Test and Test of English as a Foreign Language (TOEFL) regardless of the amount of college level work completed. Transfer students may apply for admission to any quarter.

For more information about transfer requirements, visit the Counseling Office (counseling.missioncollege.edu) or the Transfer Center (transfer.missioncollege.edu).

**ASSIST**
ASSIST is a state-wide database specifically designed to provide course comparability information between the California Community College system (CCC) and the University of California (UC) and the California State University (CSU). ASSIST displays major preparation agreements between the CCC and many of the UC and CSU transfer schools; complete lists of courses acceptable for transfer to the UC and CSU; and IGETC and CSU GE - Breadth lists for all the CCCs. At this time, ASSIST does not contain information regarding independent and out-of-state colleges and universities.

ASSIST is an excellent tool to use in conjunction with regular Counseling appointments to provide proper transfer planning. ASSIST information can be accessed via the worldwide web at assist.org.

**Fully Online Programs**
Students wishing to complete course requirements online will find many courses, from a variety of disciplines, offered in this format. Students may choose to incorporate varying amounts of online instruction as they complete their program of study. Currently there are only five programs which the college guarantees students can complete in a fully online format. These programs are:

- Accounting: Certificate of Achievement
- Business: Associate in Science Degree
- Administrative Specialist: Certificate of Achievement
- Communications Studies: Certificate of Achievement
- User Experience and Interface Design: Certificate of Achievement
Graduation Requirements 2023-2024
Associate in Arts and Associate in Science Degrees

Mission College will confer the Associate in Arts (A.A.) or Associate in Science (A.S.) degree upon a student who successfully completes requirements listed below in accordance with WVMCCD Board Policy 4025 and Title 5 § 55063. Graduation requirements (Major, Competency, and General Education) are listed in the College Catalog at the time studies begin. Those requirements may be followed throughout the course of study as long as the student remains in continuous enrollment which is defined as enrollment for at least one regular semester, summer session or winter session each academic year. If a break in attendance occurs, the graduation requirements shall become those listed in the College Catalog which is current at the time studies are resumed.

Reciprocity Agreement: Students completing all of the general education and graduation competency requirements at a participating college will be given full credit for having completed the Mission College general education graduation requirements, including reading, writing, oral communication, and mathematics.

1. Residency Requirement: A minimum of 12 degree-applicable units must be completed at Mission College.
2. Scholarship Requirements: An overall grade point average of 2.0 in 60 units of work reflected on all college transcripts.
3. Major Requirement: Fulfill a specialized major as listed in the college catalog with a grade of C (or “P”) or better in each major requirement.
4. Basic Competency Requirements: Proficiency in the following areas is required for an Associate in Arts and Associate in Science degrees:

Reading (grade of C or P or better):
- Completion of ENG 001A or ENG 001AX or REA 054 or
- Completion of a transfer-level course approved to satisfy the First-Year Composition requirement at a college or university.

Writing (grade of C or P or better):
- Completion of ENG 001A or ENG 001AX or
- Completion of a transfer-level course approved to satisfy the First-Year Composition requirement at a college or university.

Oral Communication (grade of C or better):
- Completion of one of the following: COM 001, 001H, 015, 020, 020H for the A.A. Degree or
- Completion of one of the following: COM 001, 001H, 004, 015, 020, 020H for the A.S. Degree or
- Competency determined by Communication Studies Department committee evaluation process.

Mathematics (grade of C or P or better):
- Completion of a high school or college Intermediate Algebra course or another math course at or above the same level or
- Completion of a transfer-level course approved to satisfy the Quantitative Reasoning requirement at a college or university or

5. Area Requirements (General Education): Complete a minimum of 24 units from Areas A – F, plus additional courses to meet unit requirements. All courses are three (3) semester units unless otherwise noted.

Area A – Language and Rationality - 6 semester units / 9 quarter units minimum
1. English Composition course
   - ENG 001A: English Composition I or ENG 001AX: English Composition with Additional Support

2. One additional course:
   ACC 046 Personal Finance
   COM 001 001H: Public Speaking
   COM 004 Small Group Communications
   COM 015 Fundamentals of Oral Communication
   COM 020 020H Argumentation and Debate
   CIS 001 Introduction to Computer Science and Technology (4)
   ENG 001B English Composition
   ENG 001C Clear Thinking in Writing
   EGR 030 Intro to Computing for Engineers
   FRN 003,004 Intermediate Language (5 ea)
   PHI 002 Logic
   PHI 003 Introduction to Ethics
   POL 020 Controversial Legal Issues
   REA 054 Critical College Reading and Thinking
   SPA 003,004 Intermediate Language (5 ea)
   SOC 016 Introduction to Statistics in Social and Behavioral Sciences
   Intermediate Algebra or equivalent or an approved Quantitative Reasoning course (3-6 units)
Area B - Natural Sciences - 3 semester units / 4.5 quarter units minimum

These courses examine the physical universe, its life forms and its natural phenomena. Courses with a lab are underlined.

- ANT 001 Biological Anthropology
- ANT 001L Biological Anthropology Laboratory
- AST 001 Astronomy
- AST 003, 003H Astronomy with Lab (4)
- AST 004 Astrobiology
- BIO 001A, 001AH, 001B General Biology (5 ea)
- BIO 004 Microbiology (5)
- BIO 010 Introduction to Biology
- BIO 010L Introduction to Biology Lab (1)
- BIO 011 Human Biology (4)
- BIO 012, 012H Emerging Infectious Disease
- BIO 014, 014H Introductory Neuroscience
- BIO 016 Marine Biology (4)
- BIO 017, 017H Genetics and Society
- BIO 018, 018H The Biology of Cancer
- BIO 019 Oceans Life in the Sea
- BIO 022 Anat. & Physiology for Allied Health Workers (4)
- BIO 025, 025H Environmental Biology
- BIO 030 Tropical Ecology (3)
- BIO 030L Tropical Ecology Field Studies (1)
- BIO 032 California Plants and Animal (4)
- BIO 047, 048, 048H Human Anatomy, Physiology (5 ea)
- CHM 001A, 001AH, 001B, 001BH General Chemistry (5 ea)
- CHM 002 Introductory Chemistry
- CHM 002L Introduction to Chemistry Lab (1)
- CHM 012A, 012AH, 012B, 012BH Organic Chemistry (5 ea)
- CHM 030A Fundamentals of Chemistry (4)
- CHM 060 Survey of General, Organic and Biological Chemistry (4)
- GEO 001 Introduction to Physical Geography
- NTR 015 Human Nutrition
- NTR 040, 040H Nutrition and Disease
- PHY 002A, 002B General Physics (Sea)
- PHY 004A, 004B, 004C Engineering Physics (Sea)
- PHY 004D Engineering Physics - Atomic (2)
- PHY 010 Introduction to Physics (4)

Area C - Humanities - 3 semester units / 4-5 quarter units minimum

These courses develop an awareness of the ways in which people throughout the ages and in different cultures have responded to themselves and the world around them in artistic and cultural creation. NOTE: Three 1-unit classes alone may not be used to satisfy this category.

- ARB 001, 002 First/Second Semester Arabic (5 ea)
- ART 001 Survey of Western Art I
- ART 001B Survey of Western Art II
- ART 001D Survey of Modern Art
- ART 004 Art Appreciation
- ART 007 Survey of Asian Art
- ART 011 The History of Modern Design
- ART 031A, B Drawing
- ART 033A Basic Design Two-Dimensional
- ART 033B Basic Design Three-Dimensional
- ART 034A, B Introduction to/Advanced Digital Art
- ART 035A, B Life Drawing
- ART 039A Survey of Printmaking
- ART 047A, B Watercolor
- ART 048A, B Airbrush Painting
- ART 049A, B Painting
- ART 065A, B Ceramics-Handbuilding
- ART 067A, B Ceramics-Potter’s Wheel
- ART 075A, B Metalsmithing
- ART 078A, B Furniture Design and Construction
- ART 085A, B Sculpture
- ART 088A, B Metal Sculpture Casting
- Chi 001, 002 First/Second Semester Chinese
- COM 012 Intercultural Communication#
- ENG 001B English Composition
- ENG 005A, 005B English Literature
- ENGL 006B World Literature
- ENG 007A, 007B American Literature
- ENG 012 African American Literature#
- ENG 013 Chicana/o-Latina/o Literature#
- ENG 015 Introduction to Film Analysis
- ENG 043 Classical Mythology
- ENG 048 Introduction to Shakespeare
- ENG 070 Writing
- ETH 012 African American Literature#
- ETH 013 Chicana/o-Latina/o Literature
- ETH 016A Chicana/o-Latina/o Literature
- ETH 018, 018H African American Culture and Humanities#
- ETH 024 The American Experience#
- FRN 001, 002 First/Second Semester French - Elementary (5 ea)
- FRN 003, 004 Third/Forth Semester French - Intermediate (5 ea)
- FRN 001L, 2L French Lab (.5 ea)
- GDS 011 History of Modern Design
- GDS 012 History of Photography
- GDS 015 Photo-media and Social Change
- GDS 073 Digital Photography
- HIS 004A, 004AH History of Western Civilization
- HIS 004B, 004BH History of Western Civilization
- HIS 015, 015H World History to 1500
- HIS 016, 016H World History since 1500
- HIS 017A, 017AH History of the United States to 1877
- HIS 017B, 017BH History of the United States since 1877
- HIS 033, 033H Women's Issues Past and Present#
- HUM 001A, 001B Human Values in and from the Arts
- HUM 007 International Films
- HUM 015 Introduction to Film Analysis
- HUM 016A Chicana/o-Latina/o Literature#
- HUM 018, 018H African American Culture/Humanities#
- HUM 020 Asian Roots and Culture#
- HUM 022 Introduction to Islam#
- HUM 024 The Asian American Experience#
- HUM 030 Cultural Studies#
- JPN 001, 002 First/Second Semester Japanese - Elementary (5 ea)
- KIN 041 - 048 All Dance Classes see catalog for complete course titles and units (1 ea)
- KIN 080 Dance Appreciation
- LING 001 Introduction to Language and Linguistics
- MUS 005 Fundamentals of Music Theory
- MUS 006 Commercial Music Theory I
- MUS 007 Commercial Music Theory II
- MUS 009 Jazz Music History
- MUS 010 Music Appreciation
- MUS 016 Survey of Rock and Popular Music
- MUS 017 Musics of the World
- MUS 030A, B/031A, B Beginning/Intermediate Piano (1 ea)
- MUS 032A, B/033A, B Beginning/Intermediate Voice (1 ea)
- MUS 036A, B Beginning Guitar (1 ea)
- MUS 041A, B Mission Chorus (1 ea)
- MUS 048A, B Symphony Orchestra (1 ea)
- PHI 001 Introduction to Philosophy
- PHI 002 Logic
- PHI 003 Introduction to Problems in Ethics
- PHI 005 Introduction to Social and Political Philosophy
- SPA 001, 002 First/Second Semester Spanish - Elementary (5 ea)
- SPA 001L, 2L Spanish Lab (.5 ea)
- SPA 003, 004 Third/Forth Semester Spanish - Intermediate (5 ea)
- SPA 050A, B Basic Conversational Spanish
- VIE 001, 002 First/Second Semester Vietnamese - Elementary (5 ea)
- VIE 049A, 049B Vietnamese Language & Culture for Fluent Speakers
Area D – Social & Behavioral Sciences

Series 1: Social and Behavioral Sciences (3 sem units / 4.5 qtr units): These courses deal with human, social, psychological, political, and economic institutions and behavior and their historical background, selected from among the following:

- ANT 002 Introduction to Archaeology
- ANT 003 Cultural Anthropology#
- ANT 055 Magic, Witchcraft, & Religion#
- BUS 061 Business and Society
- CHD 001 Child Growth & Development
- CHD 002 Child, Family and Community
- CHD 013 Teaching Children in a Diverse Society#
- COU 055 Valuing Diversity#
- ECN 001A Principles of Macroeconomics
- ECN 001B Principles of Microeconomics
- ECN 006 The Global Economy
- ETH 001A Introduction to Ethnic Studies
- ETH 016A Hispanic Roots and Culture#
- ETH 018, 018H African American Culture and Humanities#
- ETH 024 The Asian American Experience
- ETH 044, 044H African American History#
- HIS 004A, 004AH, 004B, 004BH History of Western Civilization
- HIS 015, 015H World History to 1500
- HIS 016, 016H World History since 1500
- HIS 017A, 017AH United States History to 1877
- HIS 017B, 017BH United States History since 1877
- HIS 020 History and Geography of California
- HIS 033, 033H Women's Issues Past and Present#
- HIS 044, 044H African American History#
- HUM 016A Hispanic Roots and Culture#
- HUM 018, 018H African American Roots and Culture#
- HUM 024 The Asian American Experience#

Series 2: American History and Institutions (3 sem/4-5 qtr units): Demonstrate proficiency in American history or American government on a departmental examination Or complete a course with a grade of C (or “P”) or better from one of the following:

- ETH 044, 044H African American History History of United States since 1877
- HIS 020 History and Geography of California
- HIS 017A, 017AH History of United States to 1877

Area E - Lifelong Learning - 3 semester/4-5 quarter units minimum: The Lifelong Learning requirement will be completed by the selection of either:

Option 1: Three (3) units from Area A-2, B, C or D; or

Option 2: Three (3) units from courses listed below which cultivate self-understanding and development of the student as an integrated individual capable of coping with life in our modern society, assist students to acquiring the skills necessary to adapt to change, gain self-understanding, and set achievable goals.

NOTE: All Kinesiology (KIN/WHP/PE) courses are accepted in Area E (except Theory courses). However, only one unit from this area will count for General Education.

- BIO 025, 025H Environmental Biology
- BUS 061 Business and Society
- CHD 002 Child, Family and Community
- CHD 013 Teaching in a Diverse Society
- CHD 017 Child Health and Safety
- COM 004 Small Group Communication
- COM 008 Interpersonal Communication
- COM 012 Introduction to Intercultural Communication
- COU 005 Strategies for Success
- COU 012 Careers and Lifestyles
- COU 012A Careers and Lifestyles (1)
- COU 017 Transfer Success and Life Transitions
- COU 055 Valuing Diversity
- HOC 006 Personal Health and Lifestyle
- HOC 008 Community Health Problems
- KIN 068 Sport Psychology
- KIN 078 Introduction to Kinesiology
- KIN 079 Lifetime Fitness
- NTR 006 Personal Health and Wellness
- NTR 015, 015H Nutrition and Human Nutrition
- NTR 040, 040H Nutrition and Disease
- PSY 012 Human Growth and Development
- PSY 025 Introduction to Abnormal Psychology
- PSY 030 Psychology of Addiction and Substance Abuse
- PSY 045 Human Sexuality
- SOC 001, 001H General Sociology
- SOC 002, 002H Social Problems
- SOC 010 Social Psychology
- SOC 021 Sociology of Minorities in the U.S.#
- SOC 040 Marriage and Family
- SOC 045 Human Sexuality
- SOC 047 Sociology of Criminology
- SOC 050 Introduction to Criminal Justice
- SOC 054 Concepts of Criminal Law
- SOC 060 Community and the Justice System

Area F - Culture, Diversity and Equity - 0-3 semester/0-4 quarter units (FOR STUDENTS WHO BEGIN FALL 2019 OR LATER)

These courses are designed to provide students with the analytical skills needed to develop critical, reflective and equitable perspectives on similarities and differences within cultures and societies, and to prepare them to function, thrive and provide leadership in today’s multicultural and multiethnic world.

Select one course from any of the above areas that is marked with the # sign. Courses in this area will “double-count” to meet other AA/AS GE requirements.

NOTE: Not all AA/AS Area F courses satisfy the CSU GE-B Area F Ethnic Studies requirement. See assist.org for transfer information.
California State University General Education-Breadth Certification and Certificate of Achievement Requirements

The CSU General Education Breadth (CSU GE-B) is a 40-unit general education program that allows California Community College students to fulfill lower-division GE requirements for the CSU. At least 60 transferable units of Major and General Education courses are required for transfer with junior standing. Transfer students should: (1) meet with a counselor to create an Educational Plan that will assist in identifying appropriate major and GE requirements; (2) request an CSU GE-B Certification (when final transcripts are requested) to be sent to the transfer institution; and (3) with a counselor's assistance, determine eligibility for an Associates Degree and/or an Associates Degree for Transfer. Full certification (completion of all areas), partial certification and CSU GE-B for STEM Certification (for BIO AS-T only) are available. Completion of this pattern may also satisfy requirements for a Certificate of Achievement. All courses are three (3) units unless otherwise noted.

**Area A - English Language Communication and Critical Thinking (9 semester units /12-15 quarter units)**
Complete one course from each section (3 courses total). All courses from Area A must be complete with a C (or P) or better.

**A1. Oral Communication:**
- COM 001, 001H Public Speaking
- COM 015 Fundamentals of Oral Communication
- COM 020, 020H Argumentation and Debate

**A2. Written Communication:**
- ENG 001A English Composition I (3) or ENG 001AX English Composition with Additional Support (5)
- PHI 003 Introduction to Problems in Ethics*
- POL 020 Controversial Legal Issues
- REA 054 Critical College Reading & Thinking
  (*also fulfills some CSU's 2nd composition graduation requirement)

**A3. Critical Thinking**
- COM 020, 020H Argumentation and Debate
- ENG 001B English Composition II*
- ENG 001C Clear Thinking in Writing*
- PHI 002 Introduction to Logic
- PHI 003 Introduction to Problems in Ethics*
- POL 020 Controversial Legal Issues
- REA 054 Critical College Reading & Thinking

**Area B - Scientific Inquiry and Quantitative Reasoning (9 semester/12-15 quarter units)**
Complete at least one course from the Biological Science area, the Physical Science area and the Mathematics area.

**B1. Physical Sciences**
- AST 001 Astronomy
- AST 003, 003H Astronomy with Lab (4 ea)
- AST 004 Astrobiology
- CHM 001A, 001AH, 001B, 001BH General Chemistry (5 ea)
- CHM 002 Introductory Chemistry (4)
- CHM 002L Introductory Chemistry Lab (1)
- CHM 012A, 012AH, 012B, 012BH Organic Chemistry I (5 ea)
- CHM 030A Fundamentals of Chemistry (4)
- CHM 060 Survey of General, Organic, and Biological Chemistry (4)
- GEO 001 Introduction to Physical Geography
- PHY 002A,B General Physics (5 ea)
- PHY 004A,B,C Engineering Physics (5,4,4)
- PHY 004D Atomic Physics (2)
- PHY 010 Introduction to Physics (4)

**B2. Biological Sciences**
- ANT 001 Biological Anthropology
- ANT 001L Biological Anthropology Lab (1)
- BIO 001A, 001AH General Biology Cells (5 ea)
- BIO 001B General Biology Organisms (5)
- BIO 004 Microbiology (5)
- BIO 010 Introduction to Biology (4)
- BIO 010L Introduction to Biology Lab (1)
- BIO 011 Human Biology (4)
- BIO 012, 012H Emerging Infectious Disease
- BIO 014, 014H Introductory Neuroscience
- BIO 016 Marine Biology (4)
- BIO 017, 017H Genetics and Society
- BIO 018, 018H The Biology of Cancer
- BIO 019 Oceans Life in the Sea
- BIO 022 Anatomy & Physiology for Allied Health Workers (4)
- BIO 025, 025H Environmental Biology
- BIO 030 Tropical Ecology
- BIO 030L Tropical Ecology Field Studies (1)
- BIO 032 California Plants and Animals (4)
- BIO 047 Human Anatomy (5)
- BIO 048, 048H Human Physiology (5,5)

**B3. Laboratory Requirement**
One of the selected science courses from above must contain a laboratory component. Lab courses are underlined.
B4. Mathematics/Quantitative Reasoning
Courses from Area B4 must be complete with a “C” (or P) better.
ACC 046 Personal Finance
MAT 000D Trigonometry
MAT 000G Math for the Liberal Arts Students (4)
MAT 001 College Algebra (4)
MAT 001X College Algebra with Additional Support (6)
MAT 002 Pre-Calculus and Trigonometry (6)
MAT 003A,003AH, 003B Analytic Geometry and Calculus (5 ea)
MAT 004A Intermediate Calculus (5)
MAT 004B Differential Equations (4)
MAT 004C Linear Algebra (4)
MAT 010, 010H Elementary Statistics (4)
MAT 010X Elementary Statistics with Additional Support (6)
MAT 012 Calculus for Business (4)
MAT 019 Discrete Mathematics (4)
SOC 016 Introduction to Statistics in Social and Behavioral Sciences

Area C - Arts and Humanities (9 semester/12-15 quarter units)
Complete three (3) courses or 9 semester/12-15 quarter units with at least one course in Arts and one course in Humanities.

C1. Arts
ART 001A Survey of Western Art I
ART 001B Survey of Western Art
ART 001D Survey of Modern Art
ART 004 Art Appreciation
ART 007 Survey of Asian Art
ART 011 History of Modern Design
ART 031A Drawing
ART 033A Basic Design Two-Dimensional
ART 034A Introduction to Digital Art
ART 035A Life Drawing
GDS 011 History of Modern Design
GDS 012 History of Photography
GDS 015 Photo-media and Social Change
KIN 080 Dance Appreciation
MUS 005 Fundamentals of Music
MUS 009 Jazz Music History
MUS 010 Music Appreciation
MUS 016 Survey of Rock and Popular Music
MUS 017 Music of the World

C2. Humanities
ARB 001, 002 First/Second Semester Arabic (5 ea)
CHI 001, 002 First/Semester Chinese (5 ea)
COM 012 Intercultural Communication
ENG 001B English Composition II (SP07)
ENG 005A,B English Literature
ENG 006B World Literature
ENG 007A,B American Literature
ENG 012 African American Literature
ENG 013 Chicana/o-Latina/o Literature
ENG 015 Introduction to Film Analysis
ENG 043 Classical Mythology
ENG 048a Introduction to Shakespeare
ENG 070 Creative Writing
ETH 012 African American Literature
ETH 013 Chicana/o-Latina/o Literature
ETH 016A Hispanic Roots and Culture
ETH 018, 018H African American Culture and Humanities
ETH 024 The Asian American Experience
FRN 001, 002 First/Second Semester French (5 ea)
FRN 003, 004 Third/Fourth Semester French (5 ea)
FRN 001L,002L French Laboratory (.5 ea)
HIS 004A, 004B History of Western Civilization (FA14)
HIS 004AH, 004BH History of Western Civilization (FA15)
HIS 015, 015H World History to 1500 (FA15)
HIS 016, 016H World History since 1500 (FA15)
HIS 017A, 017AH History of the United States to 1877 (FA15)
HIS 017B, 017BH History of the United States since 1877 (FA15)
HIS 033, 033H Women’s Issues Past and Present (FA15)
HUM 001A,001B Human Values in and from the Arts
HUM 007 International Films
HUM 015 Introduction to Film Analysis (Also ENG 15)
HUM 016A Hispanic Roots and Culture
HUM 018, 018H African American Culture and Humanities
HUM 020 Introduction to Asian Roots and Culture
HUM 022 Introduction to Islam
HUM 024 The Asian American Experience
JPN 001,002 First/Second Semester Japanese (5,5)
LIN 001 Introduction to Language and Linguistics
PHI 001 Introduction to Philosophy
PHI 003 Introduction to Problems in Ethics
POL 007 International Films
SPA 001, 002 First/Second Semester Spanish (5 ea)
SPA 003, 004 Third/Fourth Semester Spanish (5 ea)
SPA 001L, 002L Spanish Laboratory (.5 ea)
SPA 050A,050B Basic Conversational Spanish
VIE 001, 002 First/Second Semester Vietnamese - Elementary (5 ea)
VIE 049A,049B Vietnamese Language/Culture for Fluent Speakers

C3. One additional course from either C1 or C2. (Biology AS-T majors can defer Area C3 until after transfer).
**Area D - Social Sciences (6 semester/9 quarter units)**
Complete two (2) courses. Biology AS-T majors can defer 1 course until after transfer.

- ANT 002 Introduction to Archaeology
- ANT 003 Cultural Anthropology
- ANT 055 Magic, Witchcraft and Religion
- BUS 061 Business and Society
- CHD 001 Child Growth and Development
- CHD 002 Child, Family and Community (FA11)
- CHD 013 Teaching in a Diverse Society (FA15)
- COU 055 Valuing Diversity
- ECN 001A Principles of Macroeconomics (4)
- ECN 001B Principles of Microeconomics (4)
- ECN 006 The Global Economy
- ETH 001A Introduction to Ethnic Studies
- ETH 016A Hispanic Roots and Culture
- ETH 018, 018H African American Culture & Humanities
- ETH 024 The Asian American Experience
- ETH 044, 044H African American History
- HIS 004A, 004AH, 004B, 004BH History of Western Civilization
- HIS 015, 015H World History to 1500
- HIS 016, 016H World History since 1500
- HIS 017A, 017AH, 017B, 017BH United States History
- HIS 020 History and Geography of California
- HIS 031 History of East Asia
- HIS 033, 33H Women's Issues Past and Present
- HIS 044, 044H African American History
- HUM 007 International Films
- HUM 016A Hispanic Roots and Cultures
- HUM 018, 018H African American Culture & Humanities (FA14)
- HUM 024 The Asian American Experience

**Area E - Lifelong Learning and Self-Development (3 semester/4-5 quarter units)**
Choose a course or courses from the following to total at least three (3) semester units.

- BIO 025, 025H Environmental Biology
- CHD 002 Child, Family and Community (FA11)
- CHD 013 Teaching in a Diverse Society (FA15)
- CHD 017 Child Health and Safety (FA15)
- COM 004 Small Group Communication
- COM 008 Interpersonal Communication
- COM 012 Introduction to Intercultural Communication
- COU 005 Strategies for Success
- COU 012 Careers and Lifestyles
- COU 017 Transfer Success and Life Transitions
- COU 055 Valuing Diversity (FA15)
- HOC 006 Personal Health and Lifestyle
- KIN 081 Sport in Society
- POL 001, 001H American Government
- POL 002 Comparative Government
- POL 004 International Relations
- POL 006 Politics of Race, Class and Gender
- POL 007 International Films
- POL 020 Controversial Legal Issues
- PSY 001, 001H General Psychology
- PSY 007 Biological Psychology
- PSY 010 Social Psychology
- PSY 012 Human Growth and Development
- PSY 015 015H Introduction to Research Methods
- PSY 025 Introduction to Abnormal Psychology
- PSY 030 Psychology of Addiction and Substance Abuse
- PSY 045 Human Sexuality (Also SOC 045)
- SJS 001 Social Justice
- SJS 002 Introduction to Gender Studies
- SJS 003 Introduction to LGBTQ Studies
- SOC 001, 001H Introduction to Sociology
- SOC 002, 002H Social Problems
- SOC 021 Sociology of Minorities in the U.S.
- SOC 040 Marriage and Family
- SOC 045 Human Sexuality (Also PSY 045)
- SOC 047 Sociology of Criminology
- SOC 050 Introduction to Criminal Law
- SOC 060 Community and Justice System (FA15)

**Physical Education:**
One (1) unit of KIN activity courses can be applied toward Area E. See assist.org for complete listing of approved courses.

Two (2) units of KIN activity courses satisfy a graduation requirement for some majors at SJSU and CSUEB.

**Area F - Ethnic Studies (3 semester/4 quarter units) ***FOR STUDENTS WHO BEGIN FALL 2021 OR LATER***

- ENG/ETH 013 Chicana/o-Latina/o Literature
- HIS/ETH 044, 044H African American History

It is strongly recommended that students complete the following courses prior to transfer (courses in Areas C or D can be used to meet this requirement):

- POL 001, 001H American Government
- HIS 017A, 017AH, HIS 017B, 018H United States History
- HIS 044, 044H, ETH 044, 044H African American History

Courses may be taken to satisfy only one area requirement. Visit assist.org for specific limitations.

Requirements are subject to change after catalog publication.
The Intersegmental General Education Transfer Curriculum for CSU (IGETC for CSU) is a general education program which allows California Community College students to fulfill lower-division general education (GE) requirements for the CSU system without the need, after transfer, to take additional lower-division GE requirements. At least 60 transferable units of Major and General Education courses are required for transfer with junior standing. Transfer students should: (1) meet with a counselor to create an Educational Plan that will assist in identifying appropriate major and GE requirements; (2) request an IGETC Certification (when final transcripts are requested) to be sent to the transfer institution; and (3) with a counselor’s determination, determine eligibility for an Associates Degree and/or an Associates Degree for Transfer. Full Certification (completion of all areas), Partial Certification (completion of all but 2 courses), and IGETC CSU for STEM Certification (for BIO AS-T only) are available. All courses are 3 units unless otherwise noted. Completion of the pattern also satisfies requirements for Certificate of Achievement in Transfer Studies - IGETC CSU.

Area 1 - English Communication (3 courses, 9 semester/15 quarter units)
Complete one course from each section (3 courses total). All courses from Area A must be completed with a C (or P) or better. Complete one course from each group.

1A: English Composition
ENG 001A English Composition I
*ENG 001AX Intensive English Composition (5)
*UC credit limited to 3 units.

1B: Critical Thinking
ENG 001B English Composition II (SP07)
ENG 001C Clear Thinking in Writing
PHI 003 Introduction to Problems in Ethics

1C: Oral Communication
COM 001, 001H Public Speaking
COM 020, 020H Argumentation and Debate

*UC Transfer credit is limited for most MATH courses. See assist.org

Area 2 - Mathematical Concepts and Quantitative Reasoning (1 course, 3 semester/4-5 quarter units)
Complete at least one course from the Biological Science area, the Physical Science area and the Mathematics area.

MAT 004B Differential Equations (4)
MAT 004A Intermediate Calculus (4)
MAT 003A, 003AH, 003B Analytic Geometry and Calculus (5)

*MAT 001 College Algebra (4)
*MAT 001X College Algebra with Additional Support (6, 4 for UC transfer)
*MAT 002 Pre-Calculus and Trigonometry (6, 5 for UC transfer)

Area 3 - Arts and Humanities (3 courses, 9 semester/12-15 quarter units)
One course must be selected from Arts and one from Humanities. Biology AS-T majors can defer the third course until after transfer.

3A: Arts
ART 001A Survey of Western Art I
ART 001B Survey of Western Art II
ART 001D Survey of Modern Art
ART 001A Survey of Western Art I
ART 101 The History of Modern Design
GDS 011 History of Photography (FA14)

3B: Humanities
ARB 002 Second Semester Arabic (5)
CHI 002 Second Semester Chinese (5)
COM 012 Intercultural Communication
ENG 005A, 005B English Literature
ENG 006B World Literature
ENG 007A, 007B American Literature
ENG 012 African American Literature
ENG 013 Chicana/o-Latina/o Literature
ENG 015 Introduction to Film Analysis
ENG 043 Classical Mythology
ENG 048 Introduction to Shakespeare
ETH 012 African American Literature
ETH 013 Chicana/o-Latina/o Literature
ETH 016A Hispanic Roots and Culture
ETH 018, 018H African American Culture and Humanities
ETH 020 Asian Roots and Culture
ETH 024 The Asian-American Experience (FA23)
FRN 002, 003, 004 French - Elementary, Intermediate (Sea)
HIS 004A, 004AH, 004B, 004BH History of Western Civilization
HIS 015, 015H World History to 1500 (FA15)

*UC Transfer credit is limited for most MATH courses. See assist.org

Area 4 - Biological Science (3 courses, 9 semester/12-15 quarter units)
Complete one course from each of the Biological Science and Physical Science areas.

*UC Transfer credit is limited for most MATH courses. See assist.org
### Area 4: Social and Behavioral Sciences (2 courses, 6 semester/9 quarter units)
Complete two courses from two different disciplines. Biology AS-T majors can defer 1 course until after transfer.

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<th>Course Code</th>
<th>Course Title</th>
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<tbody>
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<td>ANT 002</td>
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<td>ANT 003</td>
<td>Cultural Anthropology</td>
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<td>ANT 055</td>
<td>Magic, Witchcraft and Religion</td>
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<td>CHD 001</td>
<td>Child Growth and Development (FA17)</td>
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<td>ECN 001A, 001B</td>
<td>Principles of Microeconomics (4)</td>
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<td>ETH 024</td>
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<tr>
<td>HIS 004A, 004AH</td>
<td>History of Western Civilization</td>
</tr>
<tr>
<td>HIS 015, 015H</td>
<td>World History to 1500</td>
</tr>
<tr>
<td>HIS 044</td>
<td>Human Sexuality (Also SOC 045)</td>
</tr>
<tr>
<td>PHI 005</td>
<td>Introduction to Social and Political Philosophy</td>
</tr>
<tr>
<td>POL 001, 001H</td>
<td>American Government</td>
</tr>
<tr>
<td>POL 004</td>
<td>International Relations</td>
</tr>
<tr>
<td>POL 006</td>
<td>Politics of Race, Class and Gender</td>
</tr>
<tr>
<td>POL 020</td>
<td>Controversial Legal Issues</td>
</tr>
<tr>
<td>PSY 001, 001H</td>
<td>General Psychology</td>
</tr>
<tr>
<td>PSY 010</td>
<td>Social Psychology</td>
</tr>
<tr>
<td>PSY 012</td>
<td>Human Growth and Development</td>
</tr>
<tr>
<td>PSY 015, 015H</td>
<td>Introduction to Research Methods</td>
</tr>
<tr>
<td>PSY 025</td>
<td>Introduction to Abnormal Psychology</td>
</tr>
<tr>
<td>SJS 001</td>
<td>Social Justice</td>
</tr>
<tr>
<td>SJS 002</td>
<td>Introduction to Gender Studies</td>
</tr>
<tr>
<td>SJS 003</td>
<td>Introduction to LGBTQ Studies</td>
</tr>
<tr>
<td>SOC 001, 001H</td>
<td>Introduction to Sociology</td>
</tr>
<tr>
<td>SOC 002, 002H</td>
<td>Social Problems</td>
</tr>
<tr>
<td>SOC 021</td>
<td>Sociology of Minorities in the U.S.</td>
</tr>
<tr>
<td>SOC 025</td>
<td>Sociology of Criminology</td>
</tr>
<tr>
<td>SOC 040</td>
<td>Marriage and Family</td>
</tr>
<tr>
<td>SOC 045</td>
<td>Human Sexuality</td>
</tr>
<tr>
<td>SOC 050</td>
<td>Introduction to Criminal Justice</td>
</tr>
<tr>
<td>SOC 060</td>
<td>Community and Justice System (FA15)</td>
</tr>
</tbody>
</table>

### Area 5: Physical and Biological Sciences (2 courses, 7-9 semester/9-12 quarter units)
Complete one course from the Biological Sciences and one from the Physical Sciences. One of the two must have a lab (labs are underlined).

#### 5A: Physical Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 001</td>
<td>Astronomy</td>
</tr>
<tr>
<td>AST 003, 003H</td>
<td>Astronomy with Lab (4)</td>
</tr>
<tr>
<td>AST 004</td>
<td>Astronomy</td>
</tr>
<tr>
<td>CHM 001A, 001AH, 001B, 001BH</td>
<td>General Chemistry (Sea)</td>
</tr>
<tr>
<td>CHM 002</td>
<td>Introductory Chemistry Lab</td>
</tr>
<tr>
<td>CHM 012A, 012AH, 012B, 012BH</td>
<td>Organic Chemistry (Sea)</td>
</tr>
</tbody>
</table>

#### 5B: Biological Sciences

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001</td>
<td>Biological Anthropology</td>
</tr>
<tr>
<td>ANT 001L, Biological Anthropology Lab</td>
<td></td>
</tr>
<tr>
<td>BIO 001A, 001AH</td>
<td>General Biology Cells (Sea)</td>
</tr>
<tr>
<td>BIO 001B</td>
<td>General Biology Organisms (5)</td>
</tr>
<tr>
<td>BIO 004</td>
<td>Microbiology</td>
</tr>
<tr>
<td>BIO 010L</td>
<td>Introduction to Biology Lab (1)</td>
</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology (4)</td>
</tr>
<tr>
<td>BIO 012, 012H</td>
<td>Emerging Infectious Disease</td>
</tr>
<tr>
<td>BIO 014, 014H</td>
<td>Introduction to Neuroscience</td>
</tr>
<tr>
<td>BIO 015</td>
<td>Human Genetics</td>
</tr>
</tbody>
</table>

#### 5C: Laboratory Requirement
One of the selected science courses from above must be a laboratory course. Lab courses are underlined.

### Area 6: Language other than English for UC ONLY (see IGETC UC for details)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG/ETH 013</td>
<td>Chicana/o-Latina/o Literature</td>
</tr>
<tr>
<td>HIS/ETH 044, 044H</td>
<td>African American History</td>
</tr>
</tbody>
</table>

### Area 7: Ethnic Studies (1 course, 3 semester/4-5 quarter units)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG/ETH 013</td>
<td>Chicana/o-Latina/o Literature</td>
</tr>
<tr>
<td>HIS/ETH 044, 044H</td>
<td>African American History</td>
</tr>
</tbody>
</table>

### CSU Graduation Requirement - U.S. History, Constitution and American Ideals (2 courses)
Depending on the CSU campus, courses used to meet this requirement may also be used to satisfy requirements for IGETC CSU.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 001, 001H</td>
<td>American Government</td>
</tr>
<tr>
<td>HIS 017A, 017AH or HIS 017B, 017BH or HIS 044, 044H or ETH 044, 044H</td>
<td></td>
</tr>
</tbody>
</table>

*Courses may be taken to satisfy only one Area Requirement. Transfer credit may be limited by either the UC or CSU or both.*

Visit assist.org for specific limitations.

Requirements are subject to change after catalog publication.
Intersegmental General Education Transfer Curriculum for University of California
Certification and Certificate of Achievement Requirements

The Intersegmental General Education Transfer Curriculum for UC (IGETC UC) is a general education program which allows California Community College students to fulfill lower-division general education (GE) requirements for the UC system without the need, after transfer, to take additional lower-division GE requirements. At least 60 transferable units of Major and General Education courses are required for transfer with junior standing. Transfer students should: (1) meet with a counselor to create an Educational Plan that will assist in identifying appropriate major and GE requirements; (2) request an IGETC Certification (when final transcripts are requested) to be sent to the transfer institution; and (3) with a counselor’s assistance, determine eligibility for an Associates Degree and/or an Associates Degree for Transfer. Full Certification (completion of all areas), Partial Certification (completion of all but 2 courses), and IGETC for STEM Certification (for BIO AS-T only) are available. All courses are 3 units unless otherwise noted. Completion of the pattern also satisfies requirements for Certificate of Achievement in Transfer Studies - IGETC UC.

Area 1 - English Communication (2 courses, 6 semester/9 quarter units)
Complete one course from both Groups.

**Area A: English Composition**
- ENG 001A English Composition I
- *ENG 001AX Intensive English Composition (5, 3 for UC transfer)

**Area B: Critical Thinking**
- ENG 001B English Composition II (SP07)
- ENG 001C Clear Thinking in Writing
- PHI 003 Introduction to Problems in Ethics

Area 2 - Mathematical Concepts and Quantitative Reasoning (1 course, 3 semester/4-5 quarter units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 000G Math for Liberal Arts Students (4)</td>
<td>MAT 004C Linear Algebra (4)</td>
</tr>
<tr>
<td>*MAT 001 College Algebra (4)</td>
<td>*MAT 010, 010H Elementary Statistics (4)</td>
</tr>
<tr>
<td>*MAT 001X College Algebra with Additional Support (6, 4 for UC transfer)</td>
<td>*MAT 010X Elementary Statistics with Additional Support (6)</td>
</tr>
<tr>
<td>*MAT 002 Pre-Calculus and Trigonometry (6, 5 for UC transfer)</td>
<td>*MAT 012 Calculus for Business (4)</td>
</tr>
<tr>
<td>*MAT 003A, 003AH, 003B Analytic Geometry and Calculus (5)</td>
<td>MAT 019 Discrete Mathematics (4)</td>
</tr>
<tr>
<td>MAT 004A Intermediate Calculus (4)</td>
<td>*SOC 016 Introduction to Statistics Social and Behavioral Sciences</td>
</tr>
<tr>
<td>MAT 004B Differential Equations (4)</td>
<td></td>
</tr>
</tbody>
</table>

*UC Transfer credit is limited for most MATH courses. See assist.org

Area 3 - Arts and Humanities (3 courses, 9 semester/12-15 quarter units)
One course must be selected from Arts, and one from Humanities. Biology AS-T majors can defer the third course until after transfer.

**3A: Arts**
- ART 001A Survey of Western Art I
- ART 001B Survey of Western Art II
- ART 001D Survey of Modern Art
- ART 004 Art Appreciation
- ART 007 Survey of Asian Art
- ART 011 The History of Modern Design
- GDS 011 The History of Modern Design
- GDS 015 Photo-media and Social Change
- KIN 080 Dance Appreciation
- MUS 005 Fundamentals of Music Theory I
- MUS 010 Music Appreciation
- MUS 009 Jazz Music History
- MUS 016 Survey of Rock and Popular Music
- MUS 017 Musics of the World

**3B: Humanities**
- ARB 002 Second Semester Arabic (5)
- CHI 002 Second Semester Chinese (5)
- COM 012 Intercultural Communication
- ENG 005A, 005B English Literature
- ENG 006B World Literature
- ENG 007A, 007B American Literature
- ENG 012 African American Literature
- ENG 013 Chicana/o/Latina/o Literature
- ENG 015 Introduction to Film Analysis
- ENG 043 Classical Mythology
- ENG 048 Introduction to Shakespeare
- ETH 012 African American Literature
- ETH 013 Chicana/o/Latina/o Literature
- ETH 016A Hispanic Roots and Culture
- ETH 018, 018H African American Culture and Humanities
- ETH 020 Asian Roots and Culture
- ETH 024 The Asian-American Experience (FA23)
- FRN 002, 003, 004 French - Elementary, Intermediate (Sea)
- HIS 004A, 004AH, 004B, 004BH History of Western Civilization
- HIS 015, 015H World History to 1500 (FA15)
- HIS 016, 016H World History since 1500 (FA15)
- HIS 017A, 017AH History of the United States to 1877 (FA15)
- HIS 017B, 017BH History of the United States since 1877 (FA15)
- HIS 033, 033H Women’s Issues Past and Present (FA16)
- HUM 001A.001B Human Values in and from the Arts
- HUM 007 International Film
- HUM 015 Introduction to Film Analysis
- HUM 016A Hispanic Roots and Culture
- HUM 018 African American Culture & Humanities
- HUM 018H African American Culture & Humanities-Honors (FA17)
- HUM 020 Asian Roots and Culture
- HUM 022 Introduction to Islam
- HUM 024 The Asian American Experience (FA23)
- JPN 002 Second Semester Japanese - Elementary (5)
- LNG 001 Introduction to Language and Linguistics
- PHI 001 Introduction to Philosophy
- PHI 005 Introduction to Social and Political Philosophy
- POL 007 International Films
- SPA 002, 003, 004 Spanish - Elementary, Intermediate (Sea)
- VIE 002 Second Semester Vietnamese - Elementary (5)
- VIE 049A,049B Vietnamese Language & Culture for Fluent Speakers
Area 4 - Social and Behavioral Sciences (2 courses, 6 semester/9 quarter units)
Complete two courses from two different disciplines. Biology AS-T majors can defer 1 course until after transfer.

ANT 002 Introduction to Archaeology
ANT 003 Cultural Anthropology
ANT 055 Magic, Witchcraft and Religion
CHD 001 Child Growth and Development (FA17)
ECN 001A Principles of Macroeconomics (4)
ECN 001B Principles of Microeconomics (4)
ECN 006 The Global Economy
ETH 001A Introduction to Ethnic Studies
ETH 016A Hispanic Roots and Culture
ETH 018, 018H United States History
ETH 024 The Asian-American Experience (FA23)
ETH 044, 044H African American History
HIS 004A, 004AH, 004B, 004BH History of Western Civilization
HIS 015, 015H World History to 1500
HIS 016, 016H World History since 1500
HIS 017A, 017AH, 017B, 017BH United States History
HIS 020 History and Geography of California
HIS 031 History of East Asia
HIS 033, 033H Women’s Issues Past and Present (FA17)
HIS 044, 044H African American History
HUM 016A Hispanic Roots and Culture
HUM 024 The Asian-American Experience (FA23)
KIN 081 Sport in Society
PHI 005 Introduction to Social and Political Philosophy
POI 001, 001H American Government
POI 002 Comparative Government
POI 004 International Relations
POI 006 Politics of Race, Class and Gender
POI 020 Controversial Legal Issues
PSY 001, 001H General Psychology
PSY 007 Biological Psychology
PSY 010 Social Psychology
PSY 012 Human Growth and Development
PSY 015, 015H Introduction to Research Methods
PSY 025 Introduction to Abnormal Psychology
PSY 045 Human Sexuality (Also SOC 045)
SJS 001 Social Justice
SJS 002 Introduction to Gender Studies
SJS 003 Introduction to LGBTQ Studies
SOC 001, 001H Introduction to Sociology
SOC 002, 002H Social Problems
SOC 021 Sociology of Minorities in the U.S.
SOC 040 Marriage and Family
SOC 045 Human Sexuality
SOC 047 Sociology of Criminology
SOC 050 Introduction to Criminal Justice
SOC 060 Community and Justice System (FA15)

Area 5 - Physical and Biological Sciences (2 courses, 7-9 semester/9-12 quarter units)
Complete one course from the Biological Sciences and one from the Physical Sciences. One of the two must have a lab (labs are underlined).

5A: Physical Sciences
AST 001 Astronomy
AST 003, 003H Astronomy with Lab (4)
AST 004 Astrobiology
*CHM 001A, 001AH, 001B, 001BH General Chemistry (5ea)
*CHM 002 Introductory Chemistry
*CHM 002L Introductory Chemistry Lab (1)
CHM 012A, 012AH, 012B, 012BH Organic Chemistry (5ea)
GEO 001 Introduction to Physical Geography
*PHY 002A, 002B General Physics (Sea)
*PHY 004A Engineering Physics - Mechanics (5)
*PHY 004B Engineering Physics - Electricity and Magnetism (4)
*PHY 004C Engineering Physics - Light and Heat (4)
*PHY 010 Introduction to Physics (4)

5B Biological Sciences
ANT 001 Biological Anthropology
ANT 001L Biological Anthropology Lab.
BIO 001A, 001AH General Biology Cells (Sea).
BIO 001B General Biology Organisms (5).
BIO 004 Microbiology (5)
*BIO 010 Introduction to Biology
BIO 010L Introduction to Biology Lab (1)
BIO 011 Human Biology (4)
BIO 012, 012H Emerging Infectious Disease
BIO 014, 014H Introduction to Neuroscience
BIO 015 Human Genetics

5C. Laboratory Requirement:
One of the selected science courses from above must be a laboratory course. Lab courses are underlined.

Area 6 - Language other than English (0-5 semester/0-7.5 quarter units) Biology AS-T majors can defer until after transfer.
Proficiency equivalent to two years of high school study in the same language with a “C” or better OR completion of one of the following:
1. ARB 001, CHI 001, FRN 001, JPN 001, SPA 001, VIE 001, or other first level language course or higher
2. A score of 3 or higher on the Foreign Language AP Exam or 5 or higher on the IB HL Exam
3. Satisfactory score on the SAT II: Subject Test in languages other than English
4. Satisfactory completion of two years of formal schooling at the sixth-grade level or higher in an institution where the language of instruction is not English.
5. Verified competency by a CCC, CSU or UC faculty member. IGETC LOTE Certification Form required.

Area 7 - Ethnic Studies (1 course, 3 semester/4-5 quarter units)
ENG/ETH 013 Chicana/o-Latina/o Literature
HIS/ETH 044, 044H African American History

Courses may be taken to satisfy only one Area Requirement. Transfer credit may be limited by either the UC or CSU or both
Visit assist.org for specific limitations | Requirements are subject to change after catalog

2023-2024 MISSION COLLEGE CATALOG
Art and Design

The Art & Design major and career pathway focuses on creativity and self-expression. Students in this pathway learn how to express their ideas visually through technique, design and problem solving. Career pathways include being an entrepreneur or freelancer, designer, teacher, web design, and more.

Programs of Study

- Art (AA Degree)
- Art History (AA-T Degree)
- Creative Arts (AA Degree)
- Digital Illustration (Certificate)
- Digital Media Marketing (Certificate)
- Digital Music (Certificate)
- Graphic Design (AA Degree, Certificate)
- Liberal Arts: Arts and Humanities (AA Degree)
- Studio Arts (AA-T Degree)
- Three-Dimensional Arts (Certificate)
- User Experience and Interface Design (Certificate)
- Virtual Production Fundamentals (Certificate)
- Web Design (Certificate)
- Web Development (Certificate)
Art: Associate in Arts (AA)
The Associate in Arts in Art is designed to provide students with a comprehensive foundation in the areas of drawing, painting, design, digital art, and art history. Students acquire the necessary skills and experience to demonstrate an extensive understanding of materials, technique, philosophy, and aesthetics in the creative process.

Program Learning Outcomes:
• Create and critique works of art in a supportive environment using traditional and new art media according to established principles of art and communicate orally and in writing about art and design related topics.
• Develop their vision to devise innovative solutions to creative and technical problems.
• Present to the instructor a portfolio of work which will be evaluated according to the criteria of technical mastery, creativity, solving problems with original solutions, and meets the stated goals of the assignment.
• Develop critical thinking skills as they analyze, compare and contrast, and trace the development of art forms from different parts of the world from ancient to modern times.

Career/Transfer Opportunities:
The Associate in Arts in Art transfers to most four-year institutions. Career opportunities include the following: education/teaching, studio artist, arts administration, commercial art, digital artist, designer, museum/gallery professional, and art conservator.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units): Complete six units from each category below.

Category A: Survey of Art - 6 units selected from

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001D</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category B: Drawing - 6 units selected from

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 031A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 035A</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Category C: Design - 6 units selected from:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 033A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033C</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective (3 units): Complete three units, not previously taken, from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 033A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033C</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 21.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Art History: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Art History for Transfer (AA-T in Art History) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Art History. California Community College students who are awarded an Associate in Arts in Art History for Transfer (AA-T in Art History) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

The Associate in Arts in Art History for Transfer provide students the basics of art historical analysis, and completion of the program enhances students’ reading, writing, and critical thinking skills.

Program Learning Outcomes:
- Identify major, monuments, and styles in art and architecture from ancient through modern times.
- Use critical thinking to analyze and compare and contrast world cultures and belief systems through a study of anthropology, philosophy, history, languages, and/or the humanities.
- Analyze, compare, and contrast works of art according to subject matter, symbolism, style, and artistic influences.
- Identify the various media and techniques associated with the creation of art and architecture.

Career/Transfer Opportunities:
Career opportunities include the following: arts administration, art librarian, education/teaching, museum/gallery professional, visual resources curator, art conservator, art therapist, and publishing/journalism.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

<table>
<thead>
<tr>
<th>Core Requirement Courses (9 units)</th>
<th>Curriculum Courses Required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001A</td>
<td>Survey of Western Art I 3.0</td>
</tr>
<tr>
<td>ART 001B</td>
<td>Survey of Western Art II 3.0</td>
</tr>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing 3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List A. (3 units)</th>
<th>Complete one (1) course from the following Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 007</td>
<td>Survey of Asian Art 3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List B. Complete one (1) course from the following (3 units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional 3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional 3.0</td>
</tr>
<tr>
<td>ART 034A</td>
<td>Introduction to Digital Art 3.0</td>
</tr>
<tr>
<td>ART 035A</td>
<td>Life Drawing 3.0</td>
</tr>
<tr>
<td>ART 065A</td>
<td>Ceramics-Handbuilding 3.0</td>
</tr>
<tr>
<td>ART 085A</td>
<td>Sculpture 3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List C. (3 units)</th>
<th>Complete 1 option:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Option 1:</td>
<td>Any LIST A or B course not already used. Any CSU transferable Art History course (Except ARTH 100 Art Appreciation - ART 004 (C-ID ARTH 100 Art Appreciation).</td>
</tr>
<tr>
<td>ART 001D</td>
<td>Art of the 20th Century Art OR 3.0</td>
</tr>
<tr>
<td>ART 011</td>
<td>The History of Modern Design 3.0</td>
</tr>
<tr>
<td>Option 2:</td>
<td>Any Art or Humanities course articulated as CSU GE Area C1 or IGETC Area 3A.</td>
</tr>
<tr>
<td>ART 011</td>
<td>Art of the 20th Century Art OR 3.0</td>
</tr>
<tr>
<td>ART 001D</td>
<td>The History of Modern Design 3.0</td>
</tr>
<tr>
<td>Option 3:</td>
<td>Any course articulated as CSU GE Area C2 or IGETC Area 3B in: a language other than English, (except ASL); Art, History, humanities, Philosophy, Religion/Religious Studies, or the History of Costume.</td>
</tr>
<tr>
<td>ANT 003</td>
<td>Introduction to Cultural Anthropology 3.0</td>
</tr>
<tr>
<td>ANT 055</td>
<td>Magic, Witchcraft and Religion 3.0</td>
</tr>
<tr>
<td>ART 001D</td>
<td>Art of the 20th Century Art OR 3.0</td>
</tr>
<tr>
<td>COU 055</td>
<td>Valuing Diversity 3.0</td>
</tr>
<tr>
<td>HIS 004A</td>
<td>History of Western Civilization -OR- 3.0</td>
</tr>
<tr>
<td>HIS 004AH</td>
<td>History of Western Civilization - Honors 3.0</td>
</tr>
<tr>
<td>HIS 004B</td>
<td>History of Western Civilization -OR- 3.0</td>
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</tr>
<tr>
<td>HIS 017A</td>
<td>History of the United States to 1877 -OR- 3.0</td>
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<tr>
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</tr>
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<td>History of the United States Since 1877 -OR- 3.0</td>
</tr>
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<td>HIS 017BH</td>
<td>History of the United States Since 1877 - Honors 3.0</td>
</tr>
<tr>
<td>HIS 020</td>
<td>History and Geography of California 3.0</td>
</tr>
<tr>
<td>HIS 031</td>
<td>History of East Asia 3.0</td>
</tr>
<tr>
<td>HUM 001A</td>
<td>Human Values in and From the Arts 3.0</td>
</tr>
<tr>
<td>HUM 001B</td>
<td>Human Values in and From the Arts 3.0</td>
</tr>
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<td>HUM 007</td>
<td>International Films 3.0</td>
</tr>
<tr>
<td>HUM 015</td>
<td>Introduction to Film Analysis 3.0</td>
</tr>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots &amp; Culture 3.0</td>
</tr>
<tr>
<td>HUM 018</td>
<td>African American Culture and Humanities -OR- 3.0</td>
</tr>
<tr>
<td>HUM 018H</td>
<td>African American Culture and Humanities – Honors 3.0</td>
</tr>
<tr>
<td>PHI 001</td>
<td>Introduction to Philosophy 3.0</td>
</tr>
<tr>
<td>PHI 003</td>
<td>Introduction to Problems in Ethics 3.0</td>
</tr>
<tr>
<td>SPA 050A</td>
<td>Basic Conversational Spanish and Culture 3.0</td>
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<tr>
<td>SPA 050B</td>
<td>Basic Conversational Spanish and Culture 3.0</td>
</tr>
<tr>
<td>VIE 049A</td>
<td>Vietnamese for the Vietnamese-Speaking 3.0</td>
</tr>
<tr>
<td>VIE 049B</td>
<td>Vietnamese Language and Culture for Fluent Speakers 3.0</td>
</tr>
</tbody>
</table>

| Option 4: | Any course articulated as CSU GE Area D1, D3, D4, D6 or IGETC Area 4. |

Required Units for the Major: 18.0
Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Creative Arts: Associate in Arts (AA)
The Associate in Arts in Creative Arts is designed for students who seek a broad background in the visual and performing arts, such as drawing, painting, singing, instrumental performance, creative writing, dancing, and oral interpretation.

Program Learning Outcomes:
• Create and critique works of art in a supportive environment using traditional and new art media according to established principles of art and design. Students will be able to communicate orally and in writing about art and design related topics.
• Analyze, compare and contrast world cultures and belief systems through a study of anthropology, philosophy, history, languages, and/or the humanities.
• Analyze, compare and contrast, and trace the development of art forms from different parts of the world, from ancient to modern times.

Career/Transfer Opportunities
The Associate in Creative Arts in Art transfers to most four-year colleges. Students who complete the Associate in Arts in Creative Arts at Mission College may wish to complete a four-year Creative Arts major leading to a Bachelor of Arts Degree at San Jose State University, to which all units completed in this program at Mission College will transfer.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (6 units): Applied Arts:
Complete 6 units from Creative Arts courses in which the student participates in the arts, such as drawing, painting, singing, instrumental performance, creative writing, dancing, and oral interpretation. *Work with a counselor for specific course selections.

Core Requirements (12 units): History or Theory
Complete three units from each discipline below. The courses below are recommended in this area (relevant courses not on this list may also be approved on a course-by-course basis):

Discipline: Art
- ART 001A Survey of Western Art I 3.0
- ART 001B Survey of Western Art II 3.0
- ART 004 Art Appreciation 3.0

Discipline: English
- ENG 006B Survey of World Literature 3.0

Discipline: Humanities
- HUM 015 Introduction to Film Analysis 3.0
- HUM 018 African American Culture and Humanities -OR- 3.0
- HUM 018H African American Culture and Humanities – Honors 3.0

Discipline: Music
- MUS 005 Fundamentals of Music Theory 3.0
- MUS 010 Music Appreciation 3.0

Required Units for the Major: 18.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Digital Illustration: Certificate of Achievement (CA)

The Certificate of Achievement in “Digital Illustration” is designed to provide the necessary creative and technical skills for students interested in the field of digital illustration. Students in the program will develop an ability to conceptualize, create and critique various graphic solutions. They will build a strong technical background and an ability to work with industry-standard vector, bitmap and 3D graphic software. Graduates will leave the program with an understanding of available career pathways as well as the skills, experience, and portfolio necessary to enter the workforce.

The program prepares students to work as self-employed independent contractors, fine artists, or within a company, e.g., as graphic artists, technical illustrators, and graphic designers. Though this certificate is designed as a standalone program it is also an excellent complement to other related programs including Graphic Design, Web Design, User Experience Design, Game Design, and Fine Art.

The program is designed so that students completing the program will have the technical skills, creative skills, and communication skills required for a career in digital illustration.

Program Learning Outcomes:
- Apply technical illustration skills, using vector, bitmap, and 3D software, to solve creative problems.
- Design visual compositions, using the principles of art and design.
- Demonstrate, orally and in writing, the principles of constructive criticism to analyze and evaluate creative solutions.

Career/Transfer Opportunities: This program will prepare creative individuals with many career opportunities related to Art, Design, Illustration, Multimedia and Animation.

Some specific examples of related job titles:
- Artist (graphic artist, technical artist, commercial artist, production artist, fine artist etc.)
- Illustrator (technical illustrator, commercial illustrator, graphic illustrator, etc.)
- Designers (graphic designer, multimedia designer, animation designer, etc.)

The program is also designed to complement other existing programs, such as the Graphic Design, Web Design, User Experience Design and Fine Art. Students in these related programs will greatly benefit from building these complementary digital illustration skills.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (24 units): Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Two Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 032</td>
<td>Digital Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 062</td>
<td>Introduction to Adobe Illustrator</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 064</td>
<td>Introduction to Adobe Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 069</td>
<td>3D for Designers and Illustrators</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 084</td>
<td>Portfolio Production Studio</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 085</td>
<td>Professional Portfolio and Design Career Preparation</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 24.0
Digital Media Marketing: Certificate of Achievement (CA)

This interdisciplinary Program at Mission College combines courses from the Business Department and the Graphic Design and Multimedia Department. The pairing provides unique training for students interested in modern digital marketing principles and strategies, as well as skills related to the production of digital marketing materials. This Program is valuable to small business owners and entrepreneurs who want to leverage current marketing channels and tools.

Program Learning Outcomes

- Conduct market research and apply marketing concepts to business cases.
- Develop a comprehensive Internet marketing plan that includes the 4P strategies of marketing: price, product, place, promotion.
- Determine the essential elements of different creative approaches to the design, layout and production of communication materials and media.
- Plan and execute the development of digital marketing materials appropriate to the delivery platform and marketing plan.

Career/Transfer Opportunities:

Advertising, promotions, and marketing managers and sales agents; communications specialist, content creators and strategists, digital marketing and community managers, growth and performance marketing specialists, email marketing specialists, media planners, public relations specialists, social media managers

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Digital Music: Certificate of Achievement (CA)

The Digital Music Certificate is designed to provide a foundation in digital music production for students with backgrounds in music, music technology, and/or multimedia design. The curriculum is based on recent advancements in the development of digital music systems and their widespread applications in both music and multimedia productions. It also provides students with hands-on experience and a working knowledge of the creative and technical issues surrounding the production of digital audio content and its application and synchronization with other media such as film, video game design and social media platforms. The certificate prepares students for career opportunities, professional development, and personal enrichment in the fields of digital music production and distribution, multimedia audio design, content for social media platforms, and music/multimedia software design. In addition, students receive information and resources to help them prepare for an entrepreneurial career in a creative field that requires self-motivation, small business acumen, social and networking skills in order to succeed.

Program Learning Outcomes:

- Operate the MIDI (Musical Instrument Digital Instrument) and audio functions of a Digital Audio Workstation (DAW).
- Construct an original piece of music using a DAW while applying music theory and knowledge of various musical genres to the creative process.
- Use software and hardware to capture, edit, mix and master audio recordings for commercial use.

Career/Transfer Opportunities:

Music Producer, Recording Engineer/Mixer, Assistant Engineer, Production Assistant, Studio Manager/Owner, Sound Technician, Acoustic Consultant, Audio Engineer for Video, Digital Remastering Engineer, Live Sound Engineer, Recording Equipment Manufacturer’s Representative, Music Technology Sales Customer Service (audio and multimedia related companies)
Mastering Engineer (postproduction engineer), Interactive and Mixed Media Specialist, Recording Mixer (film and video), Record Company Staff, Recording Room Setup Worker, Studio Designer, Studio Technician/Maintenance, Music Editor, Music/Sound Programmer, Sound Designer, DJ/remixer, Audio Developer

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (18 units): Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 006</td>
<td>Commercial Music Theory I</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 016</td>
<td>Survey of Rock and Popular Music</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 080</td>
<td>MIDI and Music Production I</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 081</td>
<td>Audio Production I</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 082</td>
<td>MIDI and Music Production II</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 083</td>
<td>Audio Music Production II</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Graphic Design: Associate in Science (AS)

The Associate of Science in Graphic Design provides opportunities for the student to develop fluency in contemporary graphic design issues and techniques. The emphasis of the program is on increasing the students' creative problem-solving abilities along with an introduction to design techniques and principles to provide the basic skills necessary to enter many growing, professional fields. The student also learns software skills used in the production of graphic design deliverables for clients. Opportunities exist in advertising, print publishing, web publishing, mobile and desktop application design, and corporate communication. The classes in the core requirements should be taken in the general order that they are listed. Program Learning Outcomes: Students will be proficient in creating graphic design deliverables. Students will be proficient in current software packages used in graphic design production. Students will produce communication materials for clients that are appropriate and effective.

Career/Transfer Opportunities: Career opportunities include the following: graphic design, commercial art production, packaging design, visual design, interaction design, interface design, advertising, print design, web production, mobile design, marketing communication, display design, brand identity, logo design, and photo editing.

Program Learning Outcomes:
- Proficiently create graphic design deliverables.
- Proficiently use current software packages used in graphic design production.
- Produce communication materials for clients that are appropriate and effective.

Career/Transfer Opportunities:
Career opportunities include the following: graphic design, commercial art production, packaging design, visual design, interaction design, interface design, advertising, print design, web production, mobile design, marketing communication, display design, brand identity, logo design, and photo editing.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (30 units): Complete thirty units from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
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</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 035 Graphic Design I</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 045 Web Design and Development 1</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 055A Design Agency &amp; Branding</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 061 Page Layout</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 062 Digital Illustration with Adobe Illustrator</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064 Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 065 Typography</td>
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<tr>
<td>3.0</td>
<td>GDS 070 User Experience, Interface, and Multimedia Design</td>
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<td>3.0</td>
<td>GDS 085 Professional Portfolio and Design Career Preparation</td>
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<tr>
<td>3.0</td>
<td>GDS 067 Graphic Design II -OR-</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 084 Portfolio Production Studio</td>
</tr>
</tbody>
</table>

Elective (3 units): Complete three units, not previously taken, from the following:

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ART 031A Beginning Drawing</td>
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<tr>
<td>3.0</td>
<td>ART 031B Intermediate Drawing</td>
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<td>ART 033A Basic Design: Two-Dimensional</td>
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<td>ART 033B Basic Design: Three-Dimensional</td>
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<tr>
<td>3.0</td>
<td>ART 034A Introduction to Digital Art</td>
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<tr>
<td>3.0</td>
<td>GDS 011 The History of Modern Design</td>
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<tr>
<td>3.0</td>
<td>GDS 012 History of Photography</td>
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<tr>
<td>3.0</td>
<td>GDS 015 Photo-media and Social Change</td>
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<tr>
<td>3.0</td>
<td>GDS 039A 3D Animation and Modeling</td>
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<tr>
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<td>GDS 046 Web Design and Development 2</td>
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<td>3.0</td>
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<td>GDS 077 Interactive Projects and Explorations in UXD</td>
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<td>GDS 080 Packaging Design</td>
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<td>GDS 081 Motion Graphic</td>
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<tr>
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<td>GDS 084 Portfolio Production Studio</td>
</tr>
</tbody>
</table>

Required Units for the Major: 33.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Graphic Design: Certificate of Achievement (CA)

The Certificate of Achievement in Graphic Design provides opportunities for the student to develop fluency in contemporary graphic design issues and techniques. The emphasis of the program is on increasing the students creative problem-solving abilities along with an introduction to design techniques and principles to provide the basic skills necessary to enter many growing professional fields. The student also learns software skills used in the production of graphic design deliverables for clients. Opportunities exist in advertising, print publishing, mobile and desktop application design, and corporate communication. The classes in the core requirements should be taken in the general order that they are listed. Program Learning Outcomes: Students will be proficient in creating graphic design deliverables. Students will be proficient in current software packages used in graphic design production. Students will produce communication materials for clients that are appropriate and effective.

Career/Transfer Opportunities: Career opportunities include the following: graphic design, commercial art production, packaging design, visual design, interaction design, interface design, advertising, print design, web production, mobile design, marketing communication, display design, brand identity, logo design, and photo editing.

Program Learning Outcomes:
- Proficiently create graphic design deliverables.
- Use current software packages used in graphic design production proficiently.
- Produce communication materials for clients that are appropriate and effective.

Career/Transfer Opportunities:
Career opportunities include the following: graphic design, commercial art production, packaging design, visual design, interaction design, interface design, advertising, print design, web production, mobile design, marketing communication, display design, brand identity, logo design, and photo editing.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (30 units): Complete thirty units from following

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<thead>
<tr>
<th>Units</th>
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<tbody>
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<td>GDS 064</td>
<td>Introduction to Adobe Photoshop</td>
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<tr>
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<td>GDS 067</td>
<td>Graphic Design II -OR-</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 084</td>
<td>Portfolio Production Studio</td>
</tr>
</tbody>
</table>

Elective (3 units): Complete three units, not previously taken, from the following

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<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
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<td>Beginning Drawing</td>
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<td>ART 031B</td>
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<td>ART 033A</td>
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<tr>
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<td>GDS 046</td>
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<td>Digital Photography</td>
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<td>Digital Video Production</td>
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<td>Emerging Trends in Interaction Design</td>
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<tr>
<td>3.0</td>
<td>GDS 077</td>
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<td>GDS 080</td>
<td>Packaging Design</td>
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<tr>
<td>3.0</td>
<td>GDS 081</td>
<td>Motion Graphics</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 084</td>
<td>Portfolio Production Studio</td>
</tr>
</tbody>
</table>

Total Required Units: 33.0
Liberal Arts: Arts and Humanities: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Arts and Humanities provides students the opportunity to study cultural, literary, humanistic activities and artistic expression of human beings. Students evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. Program Learning Outcomes: Identify artwork from various periods and styles and recognize the way art can affect or reflect cultural, political and humanistic issues. Describe western and/or non-western works of philosophical, historical, literary, aesthetic and their cultural importance. Career/Transfer Opportunities: The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

Program Learning Outcomes:
- Identify artwork from various periods and styles, and recognize the way art can affect or reflect cultural, political and humanistic issues.
- Describe western and/or non-western works of philosophical, historical, literary, aesthetic and their cultural importance.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units): Complete a minimum of eighteen units from the following

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area C.

Must include courses from at least two different disciplines.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Studio Arts: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Studio Arts for Transfer (AA-T in Studio Arts) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Studio Arts. California Community College students who are awarded an Associate in Arts in Studio Arts for Transfer (AA-T in Studio Arts) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

The combination of a liberal arts background with studio arts proficiency skills and practical experience will help students investigate and integrate their knowledge and perspectives in modern technologically changing world and will give them the background needed for careers in the visual arts, design, and related fields. Students who complete this program successfully will be able to demonstrate an understanding of the formal principles and elements of art making. Students will learn skills through the use of tools, techniques, theoretical, and historical aspects of visual art, culture, and critical analysis.

Program Learning Outcomes

- Students will create and critique works of art in a supportive environment using traditional and new art media according to established principles of art and design, and will be able to communicate orally and in writing about art and design related topics.
- Students will develop their vision to devise innovative solutions to creative and technical problems.
- Students will present to the instructor a portfolio of work which will be evaluated according to the criteria of technical mastery, creativity, solving problems with original solutions, and meeting the stated goals of the assignment.
- Students will develop critical thinking skills as they analyze, compare and contrast, and trace the development of art forms from different parts of the world from ancient to modern times.

Career/Transfer Opportunities:

Career opportunities include the following: studio artist, art conservator, art director, art teacher, art administrator, art curator, muralist, and animator.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (12 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A. (3 units) Complete One (1):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001D</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 007</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B. (9 units) Complete three (3) Courses from the following Curricular Areas:

<table>
<thead>
<tr>
<th>Drawing:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 035A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B</td>
<td>3.0</td>
</tr>
<tr>
<td>Painting:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 049A</td>
<td>3.0</td>
</tr>
<tr>
<td>Printmaking:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 039A</td>
<td>3.0</td>
</tr>
<tr>
<td>Ceramics:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 065A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067A</td>
<td>3.0</td>
</tr>
<tr>
<td>Sculpture:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 085A</td>
<td>3.0</td>
</tr>
<tr>
<td>Digital Art:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 034A</td>
<td>3.0</td>
</tr>
<tr>
<td>Photography:</td>
<td>Units</td>
</tr>
<tr>
<td>GDS 073</td>
<td>3.0</td>
</tr>
<tr>
<td>Color:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 033C</td>
<td>3.0</td>
</tr>
<tr>
<td>Applied Design:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 075A</td>
<td>3.0</td>
</tr>
<tr>
<td>Other Media:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 088A</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 078A</td>
<td>3.0</td>
</tr>
<tr>
<td>Second Semester Level:</td>
<td>Units</td>
</tr>
<tr>
<td>ART 035B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 049B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 065B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067B</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 085B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 24.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Three-Dimensional Arts: Certificate of Achievement (CA)

The Certificate of Achievement in Three-Dimensional Arts is designed to direct students who seek to concentrate in the arts with a focus on three-dimensional applications, which include, design, sculpture, ceramics, metalsmithing, and metal sculpture casting.

Program Learning Outcomes:

- Create and critique works of three-dimensional art in a supportive environment using traditional and new art media according to established principles of art and design. Communicate orally and in writing about art and design related topics.
- Develop their vision to devise innovative solutions to creative and technical problems.
- Present to the instructor a portfolio of three-dimensional artwork which will be evaluated according to the criteria of technical mastery, creativity, solving problems with original solutions, and meeting the stated goals of the assignment.
- Analyze, compare and contrast, and trace the development of art forms from different parts of the world, from ancient to modern times.

Career/Transfer Opportunities:

Career opportunities include the following: education/teaching, furniture designer, jewelry design, museum/gallery professional, and arts administrator.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (15 units):
Complete fifteen units from following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 065A</td>
<td>Ceramics-Handbuilding</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 065B</td>
<td>Ceramics-Handbuilding</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067A</td>
<td>Ceramics-Potter's Wheel</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067B</td>
<td>Ceramics-Potter's Wheel</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 075A</td>
<td>Metalsmithing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 075B</td>
<td>Metalsmithing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 085A</td>
<td>Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 085B</td>
<td>Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 088A</td>
<td>Metal Sculpture Casting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 088B</td>
<td>Metal Sculpture Casting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 15.0

Department Chair: Mark Engel
408-855-5280 | GC-337C
mark.engel@missioncollege.edu
Dean: Brian Miller
User Experience and Interface Design: Certification of Achievement (CA)

The Certificate of Achievement in User Experience and Interaction Design is intended to provide the necessary basic technical and creative skills for those planning to enter this growing field of user experience, interaction, and/or user interface design. The program will prepare students for positions in web and mobile application and interactive media design fields such as entry level user experience designers, user interface and interaction designers, user researchers, information architects, digital media designers, and content developers. Other examples where students might find employment using their creative problem-solving and UX/IxD design skills might include website design and development, the creation of interactive media such as digital publications, marketing presentation design, interactive learning product design, virtual & augmented reality design, user research and usability testing. By the end of the program students will understand and apply the basic principles of user experience and interaction design as applied to digital media, web, and mobile application design.

Program Learning Outcomes:

- Identify, explain, and apply advanced User Experience and Interaction Design principles such as universal design, user research, heuristic analysis, personas, information architecture, storyboarding, user task flows, journey maps, prototyping, principles of interface design, and common UI design patterns.
- Generate comprehensive documentation related to a UX business strategy and goals, user research, personas, application features and specifications, site and journey maps, wireframes, and storyboards.
- Apply the technical concepts and best practices used in user experience design, interaction design, and interface design to develop designs, assets, and functional prototype(s) for web, mobile, and other applications at an intermediate level.

Career/Transfer Opportunities:

Career opportunities include the following: web design, user experience design, interaction design, interface design, information architecture, visual design, content strategy, and mobile design.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

This program can be completed entirely online.

Core Requirements (9 units): Complete nine units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 070 User Experience, Interface, and Multimedia Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 077 Interactive Projects and Explorations in UXD</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 072 Digital Imaging and User Interface Design -OR-</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076 Emerging Trends in Interaction Design</td>
</tr>
</tbody>
</table>

Electives (9 units): Complete nine units, not previously taken, from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ART 031A Beginning Drawing</td>
</tr>
<tr>
<td>3.0</td>
<td>ART 033A Basic Design: Two-Dimensional</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 011 The History of Modern Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 035 Graphic Design I</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 047 Web Animation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 049 WordPress and Content Management Systems</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 055A Design Agency and Branding</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 061 Page Layout</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 062 Digital Illustration with Adobe Illustrator</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064 Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 065 Typography</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 072 Digital Imaging and User Interface Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076 Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 081 Motion Graphics</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 084 Portfolio Production Studio</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 085 Professional Portfolio and Design Career Preparation</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Virtual Production Fundamentals: Certificate of Achievement (CA)
The Virtual Production Fundamentals Certificate of Achievement, offered as a part of the Regional Virtual Production Academy (RPVA) collaborative, prepares students for entry-level careers in virtual production. Students will apply the skills from film production, computer graphics, digital imaging, visual effects and game engines to the virtual production process. Students may select courses from the participating colleges to complete the certificate.

Program Learning Outcomes:
- Analyze, describe, and apply the fundamental technology requirements of the virtual production workflow
- Demonstrate proficiency with game engines, 3D computer graphics, visual effects, and film production
- Demonstrate the ability to work as a member of a production team and take responsibility for one's role
- Create a project using the virtual production process

Career/Transfer Opportunities:
Special Effects Artists and Animators, Producers and Directors, and Camera operators for film, television, and video.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (15 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 039A</td>
<td>3D Animation and Modeling</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 040</td>
<td>Game Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 064</td>
<td>Introduction to Adobe Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 074</td>
<td>Digital Video Production</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 086</td>
<td>Visual Effects I</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 087</td>
<td>Virtual Production I</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective (minimum 1 unit):
Complete a minimum of one unit from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 081</td>
<td>Motion Graphics</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 069</td>
<td>3D for Designers and Illustrators</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK 300GS</td>
<td>General Work Experience</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 19.0-22.0
# Web Design: Certificate of Achievement (CA)

Certificate of Achievement in Web Design The Certificate of Achievement in Web Design is intended to provide the necessary basic technical and creative skills for those planning to enter this growing field of visual communication. The program will prepare students for positions in the web design field such as entry level web designers, user experience designers, content developers, and information architects. Other examples where students might find employment using their creative problem-solving and design skills might include website development, interaction design, and the creation of interactive media such as digital publications, marketing presentations, or interactive learning products. The students, by the end of the program, are expected to understand and apply the basic principles of visual communication as applied to Interactive and Web Design, along with the basic coding skills and software skills used in web design and related fields. The certificate includes training in basic front-end coding. This program differs from the Web Development Certificate in its emphasis on the design and strategy aspects of web production, whereas the Web Development includes more training on back-end (server-side) coding. The classes in the core requirements should be taken in the general order that they are listed.

**Program Learning Outcomes:**
- Identify, explain and apply design principles such as typography, color and layout to the creation and evaluation of web designs.
- Generate documents related to User Experience Design such as wireframes and personas.
- Apply basic front end coding skills, technical concepts and best practices used in web design and development at an intermediate level.

**Career/Transfer Opportunities:**
Career opportunities include the following: web design, user experience design, interaction design, web production, interface design, information architecture, visual design, application design, and mobile design.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

## Core Requirements (15 units): Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 035</td>
<td>Beginning Graphic Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 045</td>
<td>Web Design and Development 1</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 046</td>
<td>Web Design and Development 2</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 070</td>
<td>User Experience, Interface, and Multimedia Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 072</td>
<td>Digital Imaging and User Interface Design</td>
</tr>
</tbody>
</table>

## Electives List A (6 units): Complete six units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 047</td>
<td>Web Animation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 049</td>
<td>WordPress and Content Management Systems</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 051</td>
<td>Mobile Application and Web Development with Web Standards</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064</td>
<td>Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076</td>
<td>Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 077</td>
<td>Interactive Projects &amp; Explorations in UXD</td>
</tr>
</tbody>
</table>

## Electives List B. (3 units): Complete three units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ART 031A</td>
<td>Beginning Drawing</td>
</tr>
<tr>
<td>3.0</td>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 084</td>
<td>Internet Marketing</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 012</td>
<td>History of Photography</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 022</td>
<td>Digital Media for Marketing</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 047</td>
<td>Web Animation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 049</td>
<td>WordPress and Content Management Systems</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 051</td>
<td>Mobile Application and Web Development with Web Standards</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 055A</td>
<td>Design Agency and Branding</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 062</td>
<td>Digital Illustration with Adobe Illustrator</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064</td>
<td>Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 069</td>
<td>3D for Designers and Illustrators</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 073</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 074</td>
<td>Digital Video Production 1</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076</td>
<td>Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 077</td>
<td>Interactive Projects &amp; Explorations in UXD</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 085</td>
<td>Professional Portfolio and Design Career Preparation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 089</td>
<td>JavaScript 1</td>
</tr>
</tbody>
</table>

**Total Required Units:** 24.0
Web Development: Certificate of Achievement (CA)

Web Development Businesses, schools, community groups and other organizations all need a presence on the web, and the need for skilled web developers continues with the increasing volume of online content. Web developers are critical to creating and maintaining this online content. This certificate focuses on the scripting and programming used on the web. A web developer may focus on the back end or server-side of web delivery to ensure that a website functions correctly and efficiently, or on the front end helping to create interactions for users.

Program Learning Outcomes:
• Develop front end code for interactive websites using technologies and languages including HTML, CSS, JavaScript and related front-end frameworks.
• Identify, explain, and apply current technologies in back-end web development such as SQL, CMS Systems, and back-end frameworks as applied to the creation of websites.

Career/Transfer Opportunities:
Career opportunities include the following: front-end web development, back-end web development, content management, web production, information architecture, application development, and mobile development.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (12 units): Complete all of the following.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 045</td>
<td>Web Design and Development 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046</td>
<td>Web Design and Development 2</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089</td>
<td>JavaScript 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089B</td>
<td>JavaScript 2 and Web Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 9 units): Complete a minimum of nine units from the following.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 047</td>
<td>Web Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 049</td>
<td>WordPress and Content Management Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 051</td>
<td>Mobile Application and Web Development with Web Standards</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 001</td>
<td>Introduction to Computer Science and Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 008</td>
<td>Advanced Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 037A</td>
<td>Introduction to C Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 040</td>
<td>C++ Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 044</td>
<td>Introduction to Data Structures Using Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 045</td>
<td>Linux Essentials I</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 047</td>
<td>Linux System Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043</td>
<td>Software Development with Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Database Management Systems I</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 056</td>
<td>Database Management Systems II</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 063</td>
<td>Mobile Apps Programming - Android</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 21.0-22.0
The Business & Hospitality major and career pathway is focused on leadership, planning, problem solving, and entrepreneurial skills. Students in this pathway can choose to focus on specific industries such as tourism, restaurant/bakery, accounting, office administration, project management and more. Career pathways include starting a business, sales, advertising, tax preparation, government, non-profit, and private industry.

**Programs of Study**
- Accounting (AS Degree, Certificate)
- Administrative Specialist (AS Degree, Certificate)
- Baking and Pastry (AS Degree, Certificate)
- Beginning Computer Skills (Non Credit)
- Business (AS Degree)
- Business Administration 2.0 (AST Degree)
- Business Computing (Certificate)
- Business Information Professional (Certificate)
- CPA Exam Preparation 1: Auditing & Attestation (AUD) (Certificate)
- CPA Exam Preparation 3: Financial Accounting & Reporting (FAR) (Certificate)
- CPA Exam Preparation 4: Regulation (REG) (Certificate)
- Culinary Arts (AS Degree, Certificate)
- Economics (AST Degree)
- Entrepreneurship & Small Business (Certificate)
- Food Service & Restaurant Management (Certificate)
- Fundamental Food Service Skills (Certificate)
- Hospitality Management (AS Degree)
- Management and Leadership (Certificate)
- Project Coordinator (Certificate)
- Project Management (Certificate)
Accounting: Associate in Science (AS)

Accounting is the language of business. Accountants measure business activities, process that data into reports and use the results to make business decisions. The Accounting Program prepares students for a number of goals including transfer to a four-year institution, career advancement for those already employed, self-employment, and completion of many courses needed to take the CPA or CMA exam. Areas of study include accounting for decision making, accounting for internal and external use, financial statement preparation and analysis, review of financial accounting standards, individual taxation, payroll and business taxes, computerized accounting software, financial auditing, and ethics in accounting. Accrediting/Licensing Requirements: The program offers many courses needed to take the CPA (Certified Public Accountant) and CMA (Certified Management Accountant) exams.

Program Learning Outcomes
- Perform transaction analysis, process accounting information, prepare and analyze reports.
- Prepare and interpret the four basic financial statements.
- Apply various methods, including cost-volume-profit analysis and flexible budgets, for decision-making in both manufacturing and service environments.
- Use various methods, including net present value and the time value of money to make capital budgeting decisions.

Career/Transfer Opportunities
The Accounting Program prepares students for careers as accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (minimum 17 units)

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>ACC 001A   Financial Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 001B   Managerial Accounting</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 028A   Business Law I</td>
</tr>
<tr>
<td>1.5</td>
<td>ACC 033    Forecasting Financial Statements Using Excel</td>
</tr>
<tr>
<td>1.5</td>
<td>ACC 034    Business Financial Planning Using Excel</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 075    Cloud Computing and Analytics in Accounting</td>
</tr>
</tbody>
</table>

Complete ACC 033 and ACC 034 or complete ACC 075

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>ACC 033    Forecasting Financial Statements Using Excel</td>
</tr>
<tr>
<td>1.5</td>
<td>ACC 034    Business Financial Planning Using Excel</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 075    Cloud Computing and Analytics in Accounting</td>
</tr>
</tbody>
</table>

Complete one course from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ACC 061    QuickBooks: Online Software</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 073    Accounting Information Systems</td>
</tr>
</tbody>
</table>

Electives List A (minimum 11 units): Complete a minimum of eleven units, not previously taken, from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ACC 023    Small Business Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 051A   Taxation of Individuals</td>
</tr>
<tr>
<td>3.0</td>
<td>ACC 051B   Taxation of Business Entities</td>
</tr>
<tr>
<td>3.0</td>
<td>ACC 052    Payroll and Business Tax Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 057A   Cost Accounting OR</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 058A   Intermediate Accounting I</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 058B   Intermediate Accounting II</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 059A   Financial Auditing</td>
</tr>
<tr>
<td>3.0</td>
<td>ACC 066    Accounting for Governmental and Nonprofit Entities</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 067    Advanced Accounting</td>
</tr>
<tr>
<td>3.0</td>
<td>ACC 070    Ethics in Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 073    Accounting Information Systems</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 075    Cloud Computing and Analytics in Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 077    Business Processes and Enterprise Resource Planning Systems</td>
</tr>
</tbody>
</table>

Electives List B. (minimum 3 units): Complete a minimum of three units, not previously taken, from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ACC 046    Personal Finance</td>
</tr>
<tr>
<td>3.0</td>
<td>ACC 070    Ethics in Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 073    Accounting Information Systems</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 075    Cloud Computing and Analytics in Accounting</td>
</tr>
<tr>
<td>4.0</td>
<td>ACC 077    Business Processes and Enterprise Resource Planning Systems</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 021    Introduction to Business Computing</td>
</tr>
<tr>
<td>1.0</td>
<td>BUS 021L   Introduction to Business Computing Lab</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 051    Introduction to American Business</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 056A   Marketing Principles</td>
</tr>
<tr>
<td>4.0</td>
<td>BUS 064B   Business Math</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 078B   Business Communications</td>
</tr>
</tbody>
</table>

Required Units for the Major: 31.0-35.0
Accounting: Certificate of Achievement (CA)

The Certificate of Achievement in Accounting offers a large selection of courses including first-year college accounting as well as more advanced and specialized courses. Courses in the program provide skills which lead to a number of goals, including career advancement for those already employed, self-employment as a bookkeeper or tax preparer, and completion of many courses needed to take the CPA exam.

Program Learning Outcomes
- Perform transaction analysis, process accounting information and prepare and analyze reports.
- Prepare and interpret the four basic financial statements.
- Use various methods, including cost-volume-profit analysis and flexible budgets, for decision-making in both manufacturing and service environments.
- Use various methods, including net present value and the time value of money to make capital budgeting decisions.

Career/Transfer Opportunities
Career opportunities include the following: accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

This program can be completed entirely online.
Administrative Specialist: Associate in Science (AS)

The Associate in Science in Administrative Specialist is designed to prepare students to work in an office environment using computers and software applications that are in demand for the 21st Century workplace. The program also prepares students to work at various levels of office support such as an office assistant, business information professional, administrative specialist, and executive secretary.

Program Learning Outcome:
- Apply effective business communication and presentation skills to satisfy customers’ needs.
- Create a variety of business documents using Microsoft Office software.

Career/Transfer Opportunities:
Career opportunities include the following: business information professional, executive secretary, administrative specialists, office managers, and administrative assistants.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (17 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP033A</td>
<td>Microsoft Word - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP046D</td>
<td>Introduction to Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP062B</td>
<td>Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP071E</td>
<td>Microsoft Outlook</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP092B</td>
<td>Google Apps for Personal Productivity</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS107</td>
<td>Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
<tr>
<td>ACC023</td>
<td>Small Business Accounting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 9 units): Complete a minimum of nine units from the following.

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>US051</td>
<td>Introduction to American Business</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP046E</td>
<td>Intermediate Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP063B</td>
<td>Intermediate Microsoft Excel</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP033B</td>
<td>Microsoft Word - Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP048</td>
<td>Microsoft Project</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP081B</td>
<td>Introduction to Microsoft Access</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP111</td>
<td>Collaborate and Integrate with SharePoint and MS Office 365</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 26-28 units

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Administrative Specialist: Certificate of Achievement (CA)

The Certificate of Achievement in Administrative Specialist is designed for students seeking to acquire the technical skills to effectively work in a business office environment using computers and software applications that are in demand for the 21st Century workplace. The program also prepares students to work at various levels of office support such as an office assistant, business information professional, and administrative specialist.

Program Learning Outcome:
- Create a variety of business documents using Microsoft Office software.

Career/Transfer Opportunities:
Career opportunities include the following: business information professional, office assistant, administrative specialists, and administrative assistants.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

This program can be completed entirely online.

Core Requirements (9 units):
Complete all of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 033A</td>
<td>Microsoft Word - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>Introduction to Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 071E</td>
<td>Microsoft Outlook</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 092B</td>
<td>Google Apps for Personal Productivity</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives (minimum 9 units):
Complete a minimum of nine units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 033B</td>
<td>Microsoft Word - Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 046E</td>
<td>Intermediate Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 048</td>
<td>Microsoft Project</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 070</td>
<td>Using MS Windows</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 081B</td>
<td>Introduction to Microsoft Access</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 111</td>
<td>Collaborate and Integrate with SharePoint and MS Office 365</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Associate in Science in Baking and Pastry (AS)
The Associate Degree in Baking and Pastry provides marketable skills necessary for advanced success in the baking and restaurant industry. Graduates learn management theory, business operations, and baking and pastry skills necessary to start their own pastry operations or assume management positions in existing pastry, catering, and restaurant firms. Core classes should be taken in the recommended order for maximum success.

Program Learning Outcomes:
- Demonstrate mastery of all basic baking formulas necessary to manage a pastry operation or department.
- Demonstrate skills needed to produce finished top tier cakes, wedding and special occasion cakes, pastries, and chocolate and confectionary craftsmanship.
- Plan and operate a successful bakery or pastry department and effectively manage its staff.
- Demonstrate sanitation & safety practices as well as COVID standards as they apply to food service operations.

Career/Transfer Opportunities:
Bakery owner, Pastry Chef, Baking Department Manager, Catering Company Owner or Manager, Chocolatier, Confectioner, and Wholesale Bakery Owner or Manager/Operator.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (31 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050A</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 073</td>
<td>Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 078</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>Introduction to Chocolate and Confectionary</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 086</td>
<td>Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 2 units):
Complete a minimum of two additional units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>An Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>7.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>Procurement for Foodservice Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 072</td>
<td>Intermediate Cuisine</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 079</td>
<td>Introduction to Food and Wine Pairing</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 081</td>
<td>Introduction to Wines and Spirits of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 085</td>
<td>Foundations for Sustainability in Hospitality, Tourism &amp; Leisure Services</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 096</td>
<td>Healthy Cuisine</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 105</td>
<td>Catering Management and Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106A</td>
<td>Starting a Mobile Food Business</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106B</td>
<td>Mobile Food Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management (cannot be double counted with core requirements)</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 33.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Baking and Pastry: Certificate of Achievement (CA)

The Certificate of Achievement in Baking and Pastry is for students interested in entering the field of baking and pastry work in the food service industry. It covers basic skills in making bread, cake, breakfast pastries, pies and tarts, mousses and custards, and chocolates and confections with basic and essential hospitality managerial skills and processes.

Program Learning Outcomes:
- Apply practical knowledge and efficiency of baking and pastry production practices.
- Be proficient in classical as well as modern and trend-based baking and pastry techniques and production methods.
- Demonstrate sanitation & safety practices as well as COVID standards as they apply to food service operations.

Career/Transfer Opportunities:
Baker Prep, Assistant Baker; Baker; Pastry Prep; Assistant Pastry Chef; Pastry Chef; Garde Manger; Kitchen Prep; Restaurant Supervisor; Kitchen Manager.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (31 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 073</td>
<td>Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 078</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>Introduction to Chocolate and Confectionary</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 086</td>
<td>Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>
BEGINNING COMPUTER SKILLS
missioncollege.edu/depts/computer-applications

Department Chair: Christopher Zilg
Christopher.Zilg@missioncollege.edu
Dean: Jackie Escajeda

Beginning Computer Skills: Certificate of Completion (CC) (Noncredit)
Using touch keyboarding, students will use application software and the Internet to search a subject, create a document, and send an email.

Program Learning Outcomes:
- Students will use touch keyboarding, students will use application software and the Internet to search a subject, create a document, and send an email.

Career/Transfer Opportunities:
Students who complete this program will be able to carry out simple computer operations required of many entry-level jobs in business and technology.

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 100</td>
<td>Learning the Keyboard</td>
<td>54.0</td>
</tr>
<tr>
<td>CAP 101</td>
<td>Computers Simplified for Beginning Learners</td>
<td>18.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 72.0
Business Administration 2.0: Associate in Science for Transfer (AS-T)

Associate in Science in Business Administration 2.0 for Transfer (AS-T) The Associate in Science in Business Administration for Transfer 2.0 (AS-T in Business 2.0) offers a challenging and well-balanced distribution of business courses, specially selected to meet the requirements of transfer institutions. The curriculum provides essential knowledge and skills in the accounting, financial, economics, management, and marketing facets of business. Students can pursue their interest in several specialized areas of business (global business, human resources management, project management, marketing, entrepreneurship, and business computing) through their choice of business electives. The AS-T in Business 2.0 is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Business Administration. California Community College students who are awarded an AS-T in Business 2.0 are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

Program Learning Outcomes:

- Evaluate a company’s (or a non-profit organization) and business sector performance with the application of the appropriate statistical, financial, and accounting techniques and methods.
- Identify and describe the major legal, and/or ethical, and/or social issues confronting today’s contemporary organizations.
- Analyze economic models as they apply to market economies and specific product and business sector markets.
- Use well organized and accurate business communication channels, including written research analysis, and/or verbal presentations.

Career/Transfer Opportunities:

Career opportunities include the following: project supervisor, supply chain manager, business owner, marketing manager, operations manager, retail manager, finance executive, and human resource manager. To earn this AS-T degree, students must meet the following requirements: A. Completion of the following major courses with grades of C or better. B. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and C. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0.
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Associate in Science in Business (AS)

The Associate in Science in Business is a two-year program designed for students who intend to seek employment directly after its completion or pursue a 4-Year Degree in Business. The curriculum provides essential knowledge and skills in computer applications, business law, business communications, management, entrepreneurship and marketing. Students can pursue their interest in several specialized areas of business (global business, human resources management, project management, business operations, finance, marketing and entrepreneurship) through their choice of business electives.

Program Learning Outcomes:
• Select the best software application to formulate productive solutions.
• Identify and describe the major legal, and/or ethical, and/or social issues confronting today’s contemporary organizations.
• Use well organized and accurate business communication channels, including: written research analysis, and/or verbal presentations.
• Develop business strategies to create and sustained profitability in a dynamic economy.

Career/Transfer Opportunities:
Career opportunities include the following: project coordinator, buyer, bank teller, business owner, sales representative, operations specialist, retail manager, and human resource specialist.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

This program can be completed entirely online.
Business Computing: Certificate of Achievement (CA)

The Certificate of Achievement in Business Computing is designed to prepare students with the necessary computer and technology knowledge to work in the business field. This certificate has course offerings in four different disciplines including business, computer applications, computer information systems and computer information technology. This program requires the successful completion of 18 or more units of coursework, as outlined below. Upon successful completion, the program is noted on the student’s college transcript in the certificate/honors section, informing future employers, admissions offices to colleges, and professional institutions that the student has received specialized training in business computing. Students will learn the skills and knowledge necessary to work with operating systems and databases to generate reports and manage files.

Program Learning Outcomes:

- Select the best software application to formulate productive solutions.
- Identify and describe networking, and/or basic programming, and/or data manipulation techniques that build the foundation for productivity and efficiency within an organization.

Career/Transfer Opportunities:

Career opportunities include the following: office clerk, administrative assistant, help desk technician, and analyst.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements: (7 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021</td>
<td>Introduction to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L</td>
<td>Introduction to Business Computing</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>Introduction to American Business</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 11 units):

Complete a minimum of eleven units from the following.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 045A</td>
<td>Introductory Microsoft Project</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 045B</td>
<td>Intermediate Microsoft Project</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>Introduction to Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046E</td>
<td>Intermediate Microsoft PowerPoint -OR-</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>An Introduction to Microsoft Excel -OR-</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel -OR-</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 081B</td>
<td>Introduction to Microsoft Access</td>
<td>1.0</td>
</tr>
<tr>
<td>CIS 001</td>
<td>Introduction to Computer Science and Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 051</td>
<td>Introduction to Data Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Database Management Systems I</td>
<td>3.0</td>
</tr>
<tr>
<td>CIT 011</td>
<td>Introduction to Computer Hardware and Software (A+)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 012</td>
<td>Introduction to Networking</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Business Information Professional: Certificate of Achievement (CA)

The Business Information Professional I Certificate of Achievement is a career pathway designed to help students acquire communication, technical, and management skills and knowledge that are in demand for the 21st Century workplace. These include presentation, critical thinking, and oral/written communication skills; proficiency in Microsoft Windows and Microsoft Office (Word, Excel, PowerPoint, and Outlook); and management skills including leadership, collaboration, decision-making, problem solving and human relations. Students who complete the Business Information Professional I Certificate are prepared for entry-level office and administrative support positions in a variety of business environments.

Program Learning Outcomes:
• Apply effective business communication and presentation skills to satisfy customers’ needs.
• Create a variety of business documents using Microsoft Office software.

Career/Transfer Opportunities:
Office administrators, office clerks, office managers, retail salespersons, customer service representatives, receptionists, information clerks, and administrative assistants.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021 Introduction to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 107 Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 118 Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 010A Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 33A Word Processing - Course</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046D Introduction to Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B An Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 070 Using MS Windows</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 071E Microsoft Outlook</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total Required Units: 19.0
CPA Exam Preparation 1: Auditing and Attestation (AUD): Certificate of Achievement (CA)

This certificate is designed for students working toward their Certified Public Accountant (CPA) license. A CPA license is a specialized and highly regarded credential in the field of accounting. Obtaining a CPA license enables individuals to work in public accounting, corporate accounting, business, government, not-for-profit, and education fields. The CPA Exam consists of four segments: (1) Auditing and Attestation, (2) Business Environment & Concepts, (3) Financial Accounting & Reporting, and (4) Regulation. The CPA Exam Preparation 1 Certificate prepares students for the Auditing and Attestation section of the CPA Exam. The classes included in this certificate meet the 150-semester hour requirement for licensure in California.

Program Learning Outcomes

- Analyze the concepts, computations, and reporting requirements needed to pass the Auditing & Attestation part of the CPA exam.
- Evaluate different ethical situations and apply relevant ethical standards.

Career/Transfer Opportunities

The Accounting Program prepares students for careers as public accountants, management accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (19 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058A</td>
<td>Intermediate Accounting I</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058B</td>
<td>Intermediate Accounting II</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 059A</td>
<td>Financial Auditing</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 070</td>
<td>Accounting Ethics</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 19.0

This certificate is designed for students working toward their Certified Public Accountant (CPA) license. A CPA license is a specialized and highly regarded credential in the field of accounting. Obtaining a CPA license enables individuals to work in public accounting, corporate accounting, business, government, not-for-profit, and education fields. The CPA Exam consists of four segments (1) Auditing and Attestation, (2) Business Environment & Concepts, (3) Financial Accounting & Reporting, and (4) Regulation. The CPA Exam Preparation 2 Certificate prepares students for the Business Environment & Concepts (BEC) section of the CPA Exam. The classes included in this certificate meet the 150-semester hour requirement for licensure in California.

Program Learning Outcomes

• Students will analyze the concepts, computations, and reporting requirements needed to pass the Business Environment & Concepts (BEC) part of the CPA exam.
• Students will evaluate different ethical situations and apply relevant ethical standards.

Career/Transfer Opportunities

The Accounting Program prepares students for careers as public accountants, management accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
CPA Exam Preparation 3: Financial Accounting and Reporting (FAR): Certificate of Achievement (CA)

This certificate is designed for students working toward their Certified Public Accountant (CPA) license. A CPA license is a specialized and highly regarded credential in the field of accounting. Obtaining a CPA license enables individuals to work in public accounting, corporate accounting, business, government, not-for-profit, and education fields. The CPA Exam consists of four segments: (1) Auditing and Attestation, (2) Business Environment & Concepts, (3) Financial Accounting & Reporting, and (4) Regulation. The CPA Exam Preparation 3 Certificate prepares students for the Financial Accounting & Reporting (FAR) section of the CPA Exam. The classes included in this certificate meet the 150-semester hour requirement for licensure in California.

Program Learning Outcomes

- Analyze the concepts, computations, and reporting requirements needed to pass the Financial Accounting & Reporting (FAR) part of the CPA exam.
- Evaluate different ethical situations and apply relevant ethical standards.

Career/Transfer Opportunities

The Accounting Program prepares students for careers as public accountants, management accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (19 units):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058A</td>
<td>Intermediate Accounting I</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058B</td>
<td>Intermediate Accounting II</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 066</td>
<td>Accounting for Governmental and Nonprofit Entities</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 067</td>
<td>Advanced Accounting</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 19.0
CPA Exam Preparation 4: Regulation (REG): Certificate of Achievement (CA)

This certificate is designed for students working toward their Certified Public Accountant (CPA) license. A CPA license is a specialized and highly regarded credential in the field of accounting. Obtaining a CPA license enables individuals to work in public accounting, corporate accounting, business, government, not-for-profit, and education fields. The CPA Exam consists of four segments (1) Auditing and Attestation, (2) Business Environment & Concepts, (3) Financial Accounting & Reporting, and (4) Regulation. The CPA Exam Preparation 4 Certificate prepares students for the Regulation (REG) section of the CPA Exam. The classes included in this certificate meet the 150-semester hour requirement for licensure in California.

Program Learning Outcomes

- Analyze the concepts, computations, and reporting requirements needed to pass the Regulation (REG) part of the CPA exam.
- Evaluate different ethical situations and apply relevant ethical standards.

Career/Transfer Opportunities

The Accounting Program prepares students for careers as public accountants, management accountants, accounting clerks, bookkeepers, tax preparers and auditors. Depending on which electives students choose, the program also satisfies many of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Accounting or Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (17 units):

- ACC 001A Financial Accounting 4.0
- ACC 051A Taxation of Individuals 4.0
- ACC 051B Taxation of Business Entities 3.0
- ACC 070 Ethics in Accounting 3.0
- BUS 028A Business Law 3.0

Total Required Units: 17.0
Culinary Arts: Associate in Science (AS)

The Culinary Arts Associates in Science is an intentional and specific expansion of the Hospitality Management program at Mission college. Students gain a solid command of traditional and modern food preparation, presentation, and service practices common throughout the industry. Menu planning, cost control and the maintenance of a safe, fair, and equitable working environment are reinforced. A complete chef’s uniform is required.

Program Learning Outcomes:
- Use forecasting techniques to translate strategic business objectives and financial documents into effective and efficient daily operational processes.
- Demonstrate skillful cooking and basic baking practices to be able to properly create and execute kitchen functions and processes, train and mentor staff, and lead the kitchen in a professional and successful manner.
- Obtain employment in the Hospitality or Food Service Industry.

Career/Transfer Opportunities:
Prep Cook, Line Cook, Short-order Cook, Chef de Partie (station supervisor), Assistant Baker or Pastry, Sous Chef, Chef, Kitchen Supervisor, Food and Beverage Supervisor, Event Supervisor, Catering Supervisor, and Banquet Lead.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (40 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>7.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 072</td>
<td>Intermediate Cuisine</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 073</td>
<td>Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 079</td>
<td>Introduction to Food and Wine Pairing</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 096</td>
<td>Healthy Cuisine</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 6 units):
Complete a minimum of six units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 054</td>
<td>Hotel and Restaurant Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>Procurement for Foodservice Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 060</td>
<td>Food Service Facilities Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 078</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 081</td>
<td>Introduction to Wines and Spirits of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>Introduction to Chocolate and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 085</td>
<td>Foundations for Sustainability in Hospitality, Tourism and Leisure Services.</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 086</td>
<td>Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 105</td>
<td>Catering Management and Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106A</td>
<td>Starting a Mobile Food Business</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106B</td>
<td>Mobile Food Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 46.0

Completion of General Education Requirements and electives as needed to reach units.

Total Required Units: 60.0
Culinary Arts: Certificate of Achievement (CA)

The Culinary Arts Certificate of Achievement is an intentional and specific expansion of the hospitality management program at Mission College. Students gain a solid command of traditional and modern food preparation, presentation, and service practices common throughout the industry. Menu planning, cost control and the maintenance of a safe, fair, and equitable working environment are reinforced. A complete chef’s uniform is required.

Program Learning Outcomes:
- Students will demonstrate command of traditional and contemporary culinary preparation and service practices.
- Students will supervise diverse kitchen team in the execution of complete and effective food production and service.
- Students will demonstrate efficient and proficient utilization of the operating control cycle and related resources.

Career/Transfer Opportunities:
Prep Cook, Line Cook, Short-order Cook, Chef de Partie (station supervisor), Assistant Baker or Pastry, Sous Chef, Chef, Kitchen Supervisor, Food and Beverage Supervisor, Event Supervisor, Catering Supervisor, and Banquet

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (40 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>7.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 072</td>
<td>Intermediate Cuisine</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 073</td>
<td>Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 079</td>
<td>Introduction to Food and Wine Pairing</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 096</td>
<td>Healthy Cuisine</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 096</td>
<td>Introduction to Food and Wine Pairing</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
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<tr>
<td>FDR 078</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 081</td>
<td>Introduction to Wines and Spirits of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>Introduction to Chocolate and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 085</td>
<td>Foundations for Sustainability in Hospitality, Tourism and Leisure Services</td>
<td>3.0</td>
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<tr>
<td>FDR 086</td>
<td>Beginning Bread Making</td>
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<tr>
<td>FDR 105</td>
<td>Catering Management and Operations</td>
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<tr>
<td>FDR 106A</td>
<td>Starting a Mobile Food Business</td>
<td>2.0</td>
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<tr>
<td>FDR 106B</td>
<td>Mobile Food Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Electives (minimum 6 units):
Complete a minimum of six units from the following

<table>
<thead>
<tr>
<th>Course</th>
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</thead>
<tbody>
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<td>Hotel and Restaurant Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>Procurement for Foodservice Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 060</td>
<td>Food Service Facilities Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 078</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 081</td>
<td>Introduction to Wines and Spirits of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>Introduction to Chocolate and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 085</td>
<td>Foundations for Sustainability in Hospitality, Tourism and Leisure Services</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 086</td>
<td>Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 105</td>
<td>Catering Management and Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106A</td>
<td>Starting a Mobile Food Business</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106B</td>
<td>Mobile Food Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 46.0
Economics: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Economics for Transfer (AA-T in Economics) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Economics. California Community College students who are awarded an Associate in Arts in Economics for Transfer (AA-T in Economics) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

Program Learning Outcomes:
• Apply general economic theories and models to describe economic phenomena.
• Analyze and make predictions about the impact of government intervention and changing market conditions on consumer and producer behavior and well-being.
• Generate constructive analysis and creative solutions to real world issues by drawing upon relevant data and utilizing suitable economic theories.

Career Opportunities:
Career Opportunities include the following: economist, loan officer, systems analyst, project administrator, research assistant, sales engineer, state policy analyst, statistician, systems analyst, personal banker, insurance agent, stock broker, investment advisor, financial analyst, financial advisor, economic affairs officer, and many more.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better;
2. Completion of 60 CSU-transferable semester units with a grade point average of at least 2.0 and;
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (16-17 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>Principles of Microeconomics</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics - Honors</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 012</td>
<td>Calculus for Business and Social Sciences -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 003A</td>
<td>Analytic Geometry and Calculus I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A. (3-5 units) Complete One (1) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 001B</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 021</td>
<td>Introduction to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 003B</td>
<td>Analytic Geometry and Calculus II</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List B. (3-5 units) Complete One (1) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any course not selected from List A</td>
<td></td>
<td>3.0-5.0</td>
</tr>
<tr>
<td>ECN 006</td>
<td>The Global Economy</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 004A</td>
<td>Multivariable Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004C</td>
<td>Linear Algebra</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Units Required for the Major: 22.0-26.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Entrepreneurship and Small Business: Certificate of Achievement (CA)

This certificate program will provide students with an opportunity to develop their entrepreneurial skills with an understanding of accounting, marketing, finance, leadership, business law, management and as they relate to business ownership. Graduates of this program will seek employment as business owners, freelancers, and consultants in areas such as the arts, accounting, hospitality, music, information technology and programming. This program requires successful completion of 18 or more units of coursework, as outlined below. This certificate offers students a unique combination of courses that prepares students with the necessary skills required to be a business owner, freelancer or consultant.

Program Learning Outcomes:
- Students will identify and describe the entrepreneurship fundamentals in the various discipline (i.e. Finance, Marketing, Law..)
- Students develop a business plan before launching a business venture.
- Students evaluate the feasibility of a business concept in the current local market along with its strengths and weaknesses.

Career/Transfer Opportunities:

This program requires successful completion of 18 or more units of coursework, as outlined below. This certificate offers students a unique combination of courses that prepares students with the necessary skills required to be a business owner, freelancer or consultant.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (11 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 054</td>
<td>Small Business Startup and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 109</td>
<td>Business Law for Entrepreneurs</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 111</td>
<td>The Entrepreneurial Mindset</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 112</td>
<td>Business Modeling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives List A (2-3 units):
Complete one course from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 114</td>
<td>Entrepreneurship Finance OR</td>
<td>2.0</td>
</tr>
<tr>
<td>ACC 060</td>
<td>Computerized Accounting: QuickBooks</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives List B. (5-6 units):
Complete two courses from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 023</td>
<td>Small Business Accounting OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 022</td>
<td>Principles of E-Business OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 023</td>
<td>Social Media Marketing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 056A</td>
<td>Marketing Principles OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 084</td>
<td>Internet Marketing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 107</td>
<td>Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0 – 20.0
Food Service and Restaurant Management: Certificate of Achievement (CA)

This certificate of achievement is sequenced to provide earners with the foundation to compete immediately and successfully, for supervisory and/or manager level positions within the foodservice and hospitality industries.

Program Learning Outcomes:
- Students will demonstrate proficiency in effectively leading a diverse staff to meet and exceed guest expectations of service.
- Students will clearly communicate and effectively execute the transactional workplace concepts of supervision and management.
- Students will generate and analyze summary operating documents, and be able to make effective operating decisions based upon such.

Career/Transfer Opportunities:
Career opportunities include the following: restaurant supervisor, front desk supervisor, kitchen manager, guest services supervisor, catering and social events manager, housekeeping supervisor, inventory supervisor, and attractions supervisor.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (44 units):

Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>5.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>7.0</td>
</tr>
<tr>
<td>FDR 054</td>
<td>Hotel and Restaurant Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>Procurement for Food Service Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Supervision, Management and Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 060</td>
<td>Food Service Facilities Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>Occupational Work Experience for Culinary Arts</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Elective (2.0 - 3.0 units)

Complete one course from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 096</td>
<td>Healthy Cuisine</td>
<td>2.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 46.0-47.0
Fundamental Food Service Skills: Certificate of Achievement (CA)

The Fundamental Food Service Skills Certificate of Achievement can be completed in one semester. This program enables students to compete successfully for skilled positions (beyond entry-level) within the food services industry. This sequence of courses provides a solid foundation in fundamental food preparation as well as common operational food service practices and in guest services. To complete in one semester the required core courses sequence must be followed.

Program Learning Outcomes:
- Ensure service optimization as it relates to specific operational task.
- Apply practical knowledge of fundamental food service operations.
- Demonstrate sanitation & safety practices as well as COVID standards as they apply to food service operations.

Career/Transfer Opportunities:
Career opportunities include the following: preparation cook, front desk agent, sales and marketing associate, associate event planner, lead cook, shift leader, and catering lead.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (16 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050A</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>6.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Controls</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK 300HM*</td>
<td>Occupational Work Experience for Culinary Arts</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 16.0

*The two (2) units of work experience are composed of 150 hours (minimum) of actual hands-on experience in food service operations.

Department Chair: Daniel Arias
408-855-5434 | HM-116
daniel.arias@missioncollege.edu
Dean: Jackie Escajeda
Associate in Science in Hospitality Management

The Associate in Science degree in Hospitality Management provides the marketable hard and soft skills necessary for rising success in the hospitality industry and its sectors. Graduates will have learned classical and progressive hospitality theory as well as functional hands-on skills required to supervise and coach as a successful manager in this dynamic industry.

Program Learning Outcomes:

- Students will effectively train, motivate, and lead a diverse team toward efficient and effective operational practices through the application of transformational management/leadership concepts.
- Students will reach sound operational conclusions and decisions based on an “audit trail” analysis of source documentation.
- Students will use forecasting techniques to translate strategic business objectives and financial documents into effective and efficient daily operational processes.
- Students will conceptualize the functions of primary departments/work stations within full-service food service, lodging and other hospitality operations.

Career/Transfer Opportunities:

Pathway to supervision and management in the commercial food service industry in both front and back of the house operations; resort and lodging management; private and corporate event planning; management and leadership in managed services.

To earn this degree, students must meet the following requirements:

1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (44 units):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050</td>
<td>Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>Basic Food Preparation</td>
<td>5.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>7.0</td>
</tr>
<tr>
<td>FDR 054</td>
<td>Hotel and Restaurant Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>Procurement for Foodservice Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>Cost Controls in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>Hospitality Supervision and Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 060</td>
<td>Food Service Facilities Planning</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM*</td>
<td>Occupational Work Experience for Hospitality Management</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Elective (Healthy Eating):

Complete one course from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 096</td>
<td>Healthy Cuisine OR</td>
<td>2.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective (Computer Applications):

Complete one course from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard OR</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 46.0-48.0

Completion of General Education Requirements and electives as needed to reach units.

Total Required Units: 60.0
Management and Leadership: Certificate of Achievement (CA)

This certificate program is designed to prepare students interested in the field of management. The electives offered are broad so that a student, depending on their interest, may focus on a subset of management. Graduates of the program will seek management positions in different fields such as Finance, Manufacturing, Information Systems, Marketing, Retail and Human Resources. Students learn skills such as leading cross functional teams, applying employee empowerment, identifying the importance ethical leadership, utilizing electronic communication technology and the impact of organizational staffing. This certificate prepares students for the challenges that managers will face in working in today’s diverse, technology-driven, and continuously changing business environment.

Program Learning Outcomes:
- Analyze and recommend effective business decisions/solutions using a systematic, evaluative, and information-based approach.
- Effectively communicate solutions to business problems, using appropriate language and tools and demonstrating understanding of business terms and concepts.
- Develop and exhibit high standards of professional practice, demonstrating awareness of ethical and social responsibilities in today’s multicultural, team-oriented, rapidly changing global environment.

Career/Transfer Opportunities:
Entry level management positions, marketing and management Trainees and business development associates. Depending on which electives students choose, the program also satisfies some of the lower-division course requirements for transfer to a four-year institution to pursue a degree in Business.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (9 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Fundamentals of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Human Resources Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 7 units):
Complete a minimum of seven units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>Global Business</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>International Financial Management</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Principles of E-Business</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Small Business Start Up and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Supply Chain Management</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>2.0</td>
<td>Project Risk Management</td>
<td>2.0</td>
</tr>
<tr>
<td>2.0</td>
<td>Agile Project Management</td>
<td>2.0</td>
</tr>
<tr>
<td>2.0</td>
<td>Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Operations Management</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Public Speaking -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>3.0</td>
<td>Public Speaking - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-20.0
**PROJECT COORDINATOR**

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**Mission College Catalog**

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**PROJECT COORDINATOR: Certificate of Achievement (CA)**

The Certificate of Achievement - Project Coordinator offers a multi-discipline program of business, computer application and communication courses. Also, this program has a comprehensive internship that provides students with on-the-job training in the field of project management. This certificate will lead students to an entry level position in project management.

**Program Learning Outcomes:**

- Apply the project management techniques, skills and tools to successfully complete a project on schedule, within budget and meet the customer’s objectives.
- Display written and oral communication skills with a variety of audiences.
- Identify, analyze and solve business problems utilizing several different software packages (MS Project, MS Excel).

**Career/Transfer Opportunities:**

Career opportunities include the following: Project Coordinator, Junior Project Manager, Assistant Project Manager and Associate Project Manager.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

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**Core Requirements (22 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021L</td>
<td>Business Computing Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 037</td>
<td>Fundamentals of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>Introduction to American Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Agile Project Management</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 044</td>
<td>Using Project Management Software to Manage Projects</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel</td>
<td>2.0</td>
</tr>
<tr>
<td>COM 008</td>
<td>Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK300GW</td>
<td>General Work Experience</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Total Required Units:**

22.0

---

**Department Chair:** Christopher Zilg
Christopher.Zilg@missioncollege.edu

**Dean:** Jackie Escajeda
Project Management: Certificate of Achievement (CA)

The Project Management Certificate prepares students with the necessary skills required to successfully manage a project and to prepare for the PMP® or CAPM® certification exams. Topics covered include project integration, scope, cost management, software tools, project control, human resource management, risk management, quality management, procurement management, communications management and PMP®/CAPM® test preparation. This certification is noted on the student's college transcript informing future employers, admissions offices to colleges, and professional institutions that the student has received specialized training in project management.

Program Learning Outcomes:

- Students will demonstrate the project life cycles and processes in the application of a project.
- Students identify and describe the 10 Project Management Knowledge areas with key inputs/outputs, tools, and techniques.

Career/Transfer Opportunities:

Project Control Specialist, Business Analyst, Junior Project Manager, Facilities Planner, IT Project Manager, Finance Project Manager, Risk Manager, Assistant Construction Project Manager and Software Project Manager.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (6 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 037</td>
<td>Fundamentals of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 108</td>
<td>PMP &amp; CAPM Exam Prep</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 044</td>
<td>Using Project Management Software to Manage a Project</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Electives (minimum 12 units):

Complete a minimum of twelve units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 041</td>
<td>Beginning Business Analytics</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 104</td>
<td>Project Risk Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 105</td>
<td>Agile Project Management</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 107</td>
<td>Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 115</td>
<td>Operations Management</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 048</td>
<td>Microsoft Project</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
English as a Second Language (ESL)

Programs of Study
- Low Beginning ESL (Non Credit)
- Beginning ESL (Non Credit)
- High Beginning ESL (Non Credit)
- Low Intermediate ESL (Non Credit)
- Intermediate ESL (Non Credit)
- High Intermediate ESL (Non Credit)
- Advanced ESL (Non Credit)
- ESL Grammar and Editing (Non Credit)
- Preparation for Academic Success in ESL (Non Credit)
- English for Careers in Food Service (Non Credit)
- English for Child Development (Non Credit)
- English for Childcare (Non Credit)
LOW-BEGINNING ESL

esl.missioncollege.edu

Department Chair: Amelia Akers-Martin
408-855-5092 | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA

Low-Beginning ESL: Certificate of Competency (CC) (Noncredit)
The program in Low-Beginning ESL offers students the opportunity to gain the English language skills they need for basic communication at home, school, and work. This includes listening, speaking, pronunciation, reading, grammar, writing skills. This program prepares students to enter ESL courses at the high beginning level.

Program Learning Outcomes:
• Demonstrate the reading, vocabulary, grammar, writing, listening, and speaking skills necessary to succeed in the beginning level ESL courses.

Career/Transfer Opportunities:
A familiarity with spoken and written English at the beginning level is required in order to improve employability or to succeed in ESL courses at the beginning level.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 910A</td>
<td>Foundations in ESL I</td>
<td>64.0</td>
</tr>
<tr>
<td>NCE 910B</td>
<td>Foundations in ESL II</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 128

BEGINNING ESL

esl.missioncollege.edu

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408-855-5092 | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA

Beginning ESL: Certificate of Competency (CC) (Noncredit)
The goal of the Beginning ESL program is to offer students a variety of learning opportunities to gain proficiency in the English language, and achieve academic, career, and/or personal goals. Students earn this certificate by successfully completing a sequence of two core courses and one of three electives. The program offers two integrated skills core courses focusing on daily spoken and written communication at the beginning level. Elective courses in pronunciation, grammar, and study skills give students the ability to develop specific skills they find personally challenging. This program provides students with a means to prepare for more academic ESL coursework at the high-beginning level.

Program Learning Outcomes:
• Demonstrate the reading, vocabulary, grammar, writing, listening, pronunciation, and speaking skills necessary to succeed in the ESL high-beginning level courses.

Career/Transfer Opportunities:
A familiarity with spoken and written English at the beginning level is required in order to improve employability or to enter into an ESL credit program at the high beginning level.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 920A</td>
<td>Beginning ESL I</td>
<td>64.0</td>
</tr>
<tr>
<td>NCE 920B</td>
<td>Beginning ESL II</td>
<td>64.0</td>
</tr>
</tbody>
</table>

Elective: Complete one (1) course from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 924</td>
<td>Beginning ESL College Skills OR</td>
<td>32.0</td>
</tr>
<tr>
<td>NCE 920PL</td>
<td>Beginning Pronunciation and Listening OR</td>
<td>54.0</td>
</tr>
<tr>
<td>NCE 920GW</td>
<td>Beginning Grammar and Writing</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 160-182

* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.
### High-Beginning ESL: Certificate of Competency (CC) (Noncredit)

The High-Beginning English as a Second Language Program equips students with listening, speaking, reading, writing, and study skills for success in the first level of the college’s credit ESL program.

**Program Learning Outcomes:**
- Demonstrate the listening, speaking, reading, writing, and study skills necessary for success in the 940-level credit ESL program.

**Career/Transfer Opportunities:**
With the ability to speak and write English at the high-beginning level, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.*

#### Core Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 931</td>
<td>High Beginning ESL Listening and Speaking AND</td>
<td>72.0</td>
</tr>
<tr>
<td>NCE 932</td>
<td>High Beginning Grammar and Writing AND</td>
<td>72.0</td>
</tr>
<tr>
<td>NCE 933</td>
<td>High Beginning Reading and Vocabulary AND</td>
<td>72.0</td>
</tr>
</tbody>
</table>

**Total Required Hours:** 216

---

### Low Intermediate ESL: Certificate of Completion (CC) (Noncredit)

The Low-Intermediate English as a Second Language Program equips students with listening, speaking, reading, and writing skills for success in the intermediate level credit ESL program.

**Program Learning Outcomes:**
- Demonstrate the reading, vocabulary, grammar, writing, listening, pronunciation, and speaking skills necessary to succeed in the ESL intermediate level courses.

**Career/Transfer Opportunities:**
A familiarity with spoken and written English at the beginning level is required in order to improve employability or to succeed in ESL courses at the intermediate level.

#### Core Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 940LS</td>
<td>Low Intermediate Listening and Speaking AND</td>
<td>54</td>
</tr>
<tr>
<td>NCE 940GW</td>
<td>Low Intermediate Grammar and Writing AND</td>
<td>90</td>
</tr>
<tr>
<td>NCE 940RV</td>
<td>Low Intermediate Reading and Vocabulary AND</td>
<td>54</td>
</tr>
</tbody>
</table>

**Total Required Hours:** 198
INTERMEDIATE ESL

esl.missioncollege.edu

Intermediate ESL: Certificate of Competency (CC) (Noncredit)

The Intermediate English as a Second Language Program equips students with listening, speaking, reading, writing, and grammar skills needed for success at the high intermediate level of the college’s ESL program. Program Learning Outcome: Demonstrate the listening, speaking, reading, writing, and grammar skills necessary for success in the 960-level ESL program. Career/Transfer Opportunities: With the ability to speak and write English at the intermediate level, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

Program Learning Outcome:
- Demonstrate the listening, speaking, reading, writing, and grammar skills necessary for success in the 960-level ESL program.

Career/Transfer Opportunities:
With the ability to speak and write English at the intermediate level, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

Department Chair: Amelia Akers-Martin
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Dean: TBA

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 950LS</td>
<td>Intermediate Listening and Speaking</td>
<td>54.0</td>
</tr>
<tr>
<td>NCE 950RW</td>
<td>Intermediate Reading and Writing</td>
<td>108.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 162 hours

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.

HIGH-INTERMEDIATE ESL

esl.missioncollege.edu

Intermediate ESL: Certificate of Competency (CC) (Noncredit)

The High Intermediate English as a Second Language Program equips students with listening, speaking, reading, writing, and grammar skills for success in the advanced level of the college’s ESL program. Program Learning Outcome: Demonstrate the listening, speaking, reading, writing, and grammar skills necessary for success in the 970-level ESL program. Career/Transfer Opportunities: With the ability to speak and write English at the high intermediate level, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

Program Learning Outcome:
- Demonstrate the listening, speaking, reading, writing, and grammar skills necessary for success in the 970-level ESL program.

Career/Transfer Opportunities:
With the ability to speak and write English at the high intermediate level, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

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Dean: TBA

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 960LS</td>
<td>High Intermediate Listening and Speaking</td>
<td>54.0</td>
</tr>
<tr>
<td>NCE 950RW</td>
<td>High Intermediate Reading and Writing</td>
<td>108.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 162 hours

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.
Advanced ESL: Certificate of Competency (CC) (Noncredit)

This program in Advanced-level English as a Second Language equips students with language skills needed for success in transfer-level oral and written communication courses in a college setting. Program Learning Outcomes: Demonstrate the listening and speaking skills necessary for success in college-level courses taught in English. Demonstrate the reading and writing skills necessary for success for college-level courses taught in English. Career/Transfer Opportunities: With the ability to speak and write English at the advanced level, students can improve their employability, prepare for Mission College transfer level courses in English and Communication Studies, and explore pathways to higher education.

Program Learning Outcome:
- Demonstrate the listening and speaking skills necessary for success in college-level courses taught in English
- Demonstrate the reading and writing skills necessary for success for college-level courses taught in English

Career/Transfer Opportunities:
With the ability to speak and write English at the advanced level, students can improve their employability, prepare for Mission College transfer level courses in English and Communication Studies, and explore pathways to higher education.

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 970LS</td>
<td>Advanced Listening and Speaking</td>
<td>54.0</td>
</tr>
<tr>
<td>NCE 970RW</td>
<td>Advanced Reading and Writing</td>
<td>108.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 162 hours

Department Chair: Amelia Akers-Martin
408-855-5092  | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA
ESL Grammar and Editing: Certificate of Competency (CC) (Noncredit)

The English as a Second Language Grammar & Editing Program equips students with grammar, writing and editing skills for success at the high intermediate to advanced levels of the college’s credit ESL program and other educational pathways. Program Learning Outcomes: Demonstrate grammar, writing and editing skills necessary for success in the 960-970 level credit ESL program. Career/Transfer Opportunities: With the ability to speak and write English at the high-intermediate to advanced levels, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

Program Learning Outcome:
- Demonstrate grammar, writing and editing skills necessary for success in the 960-970 level credit ESL program.

Career/Transfer Opportunities:
With the ability to speak and write English at the high-intermediate to advanced levels, students can improve their employability, enter the Mission College credit ESL courses, and explore pathways to higher education.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 945GE</td>
<td>Intermediate Grammar and Editing</td>
<td>36</td>
</tr>
<tr>
<td>NCE 965GE</td>
<td>Advanced Grammar and Editing</td>
<td>36</td>
</tr>
</tbody>
</table>

Total Required Hours: 72 hours

*Federal Financial aid may not apply to this certificate program. Consult financial aid office for more information.
PREPARATION FOR ACADEMIC SUCCESS IN ESL

esl.missioncollege.edu

Preparation for Academic Success in ESL: Certificate of Competency (CC) (Noncredit)
The Low-Intermediate English as a Second Language Program equips students with listening, speaking, reading, and writing skills for success in the intermediate level credit ESL program.

Program Learning Outcomes:
- Demonstrate the English language skills, study skills, college success skills, and the computer skills needed to access 21st century learning materials and to succeed in an academic ESL program at the intermediate level.

Career/Transfer Opportunities:
The goal of the Preparation for Academic Success in ESL program is to offer students a variety of learning opportunities to gain proficiency in the English language, and achieve academic, career, and/or personal goals. Students earn this certificate by successfully completing a sequence of two courses. The program offers two integrated skills core courses, one at the beginning level and one at the high-beginning level. The courses are sequenced to focus on increasing proficiency in the academic reading, writing, speaking, listening, critical thinking, study skills, and computer skills needed to be successful in a college setting. This program provides students with a means to prepare for more academic ESL coursework at the intermediate level.

Core Requirements:
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE924</td>
<td>Beginning ESL College Skills</td>
<td>32</td>
</tr>
<tr>
<td>NCE934</td>
<td>Bridge to ESL College Success</td>
<td>32</td>
</tr>
</tbody>
</table>

Total Required Hours: 64
English for Careers in Food Service: Certificate of Competency (CC) (Noncredit)

The Certificate of Competency in English for Careers in Food Service Program equips students with a foundation in the English language skills necessary for communication in the food service or culinary industry.

Program Learning Outcomes:
- Students will respond adequately to spoken language appropriate for intermediate level learners and use common vocabulary to communicate about topics related to food preparation, workplace safety, and food service.
- Students will read dialogs and short texts suitable for the level and will write simple sentences and paragraphs using language structures common in the food-related context.

Career/Transfer Opportunities:
Students completing this certificate will acquire contextualized listening, speaking, vocabulary, reading, and writing skills at the low intermediate level that will prepare them for the educational and career pathways in the ESL and CTE programs as well as in the food service workplace.

Core Requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 930FD</td>
<td>English for Food Preparation</td>
<td>72.0</td>
</tr>
<tr>
<td>NCE 940FD</td>
<td>English for Food Service</td>
<td>72.0</td>
</tr>
</tbody>
</table>

Total Required Hours: 144

Department Chair: Amelia Akers-Martin
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Dean: TBA
**ENGLISH FOR CHILD DEVELOPMENT**

**English for Child Development: Certificate of Competency (CC) (Noncredit)**

This program in English for Child Development equips students with essential English language skills to communicate at the high-intermediate level with and about children. Students develop listening, speaking, reading, and writing skills as well as competencies in the areas of parenting and child development.

**Program Learning Outcomes:**
- Respond adequately to spoken language appropriate for intermediate level to high intermediate learners and use common and academic vocabulary and structures to listen and speak with and about young children, focusing on their needs and development.
- Read and write in English at an intermediate to high-intermediate level to communicate effectively about children's needs and development.

**Career/Transfer Opportunities:**
A familiarity with spoken and written English at the high-intermediate level is required to improve employability or to succeed in English for Child Development courses.

**ENGLISH FOR CHILDCARE**

**English for Childcare: Certificate of Competency (CC) (Noncredit)**

This program in English for Childcare equips students with essential English language skills they need in order to communicate at the low-intermediate level with and about children. This includes listening, speaking, reading, and writing skills as well as parenting and childcare skills.

**Program Learning Outcomes:**
- Respond adequately to spoken language appropriate for mid-beginning to intermediate level learners and use common concrete vocabulary to speak about and understand topics related to young children and their care.
- Read dialogs, stories, and articles suitable for the level and will write simple sentences and paragraphs using vocabulary common in this context.

**Career/Transfer Opportunities:**
A familiarity with spoken and written English at the low-intermediate level is required in order to improve employability or to enter into English for Child Development courses.
The Exploratory and General studies major and career pathway allows for students who are unsure of which major to choose to explore various paths or as a flexible path towards a transfer major. Students in this pathway learn creative thinking, critical analytical skills and writing through a broad range of subjects.

**Programs of Study**

- Liberal Arts: Arts & Humanities (AA Degree)
- Liberal Arts: Communication in English & Critical Thinking (AA Degree)
- Liberal Arts: Natural Science and Mathematics (AA Degree)
- Liberal Arts: Social and Behavioral Science (AA Degree)
- Transfer Studies: California State University General Education-Breadth (CSUGE-B)
- Transfer Studies: IGETC for California State University (CSU)
- Transfer Studies: IGETC for University of California (UC)
Liberal Arts: Arts and Humanities: Associate in Arts (AA)
The Associate in Arts in Liberal Arts with an emphasis in Arts and Humanities provides students the opportunity to study cultural, literary, humanistic activities and artistic expression of human beings. Students evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments. Program Learning Outcomes: Identify artwork from various periods and styles and recognize the way art can affect or reflect cultural, political and humanistic issues. Describe western and/or non-western works of philosophical, historical, literary, aesthetic and their cultural importance Career/Transfer Opportunities: The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

Program Learning Outcomes:
- Identify artwork from various periods and styles, and recognize the way art can affect or reflect cultural, political and humanistic issues.
- Describe western and/or non-western works of philosophical, historical, literary, aesthetic and their cultural importance.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.
Liberal Arts: Communication in the English Language and Critical Thinking: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Communication in the English Language and Critical Thinking provides students the opportunity to develop knowledge and understanding of the form, content, context, and effectiveness of communication. Students will develop proficiency in oral and written communication in English, examining communication from the rhetorical perspective and practicing reasoning and advocacy, organization, and accuracy. Critical thinking skills and self-understanding through these courses provide a framework for lifelong learning in written and oral communication and offers students a breadth of knowledge that could be focused into single discipline degrees as well as applied to an interdisciplinary degree.

Program Learning Outcomes:
- Analyze written and oral information effectively.
- Use language as a tool for logical thought, clear and precise expression, and critical evaluation of communication.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units):
Complete a minimum of eighteen units from the following:

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area A.

Must include courses from at least two different disciplines.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Liberal Arts: Natural Science and Mathematics: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Science and Math provides students an opportunity to develop knowledge of scientific theories, concepts and data about both living and non-living systems. The courses in this area also emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. In addition, these courses emphasize experimental methodology, testing hypotheses, and the power of systematic questioning. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of elementary algebra.

Program Learning Outcomes:
- Demonstrate an ability to think logically and critically in solving problems.
- Demonstrate an understanding of experimental methodology, testing of hypothesis, the power of systematic questioning, and influence of the scientific method in society.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.
Liberal Arts: Social and Behavioral Sciences: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Social and Behavioral Sciences provides students an opportunity to develop a broad perspective on concepts, theories and methodologies of the disciplines typically found in the variety of disciplines that comprise the study in the social and behavioral sciences. Students study about themselves and others as a member of a larger society in order to gain a basic knowledge of the cultural and social organizations in which they exist as well as the behavioral and social organizations of other human societies.

Program Learning Outcomes:
• Evaluate human behavior in relation to human, social, political, and economic institutions.
• Evaluate and critique past, present, and future issues from a historical, cultural, psychological, and social perspective.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units):
Complete a minimum of eighteen units from the following

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area D.

Must include courses from at least two different disciplines.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units 60.0
Transfer Studies: Certificate of Achievement (CA)

Students may receive a certificate of achievement in Transfer Studies for completion of any of the three general education pathways for transfer.

- California State University General Education-Breadth (CSU GE-B)
- IGETC for California State University (CSU)
- IGETC for University of California (UC)

The Certificate of Achievement in Transfer Studies is designed to provide students the knowledge, skills, experiences, and perspectives that will enable them to expand their capacities to take part in a wide range of human interests and activities; to confront personal, cultural, moral, and social problems that are an inevitable part of human life; and to cultivate both the requisite skills and enthusiasm for lifelong learning. These courses offer the opportunity for students to develop knowledge of, or skills related to, quantitative reasoning, information literacy, intellectual inquiry, global awareness and understanding, human diversity, civic engagement, communication competence, ethical decision-making, environmental systems, technology, lifelong learning and self-development, and physical and emotional health throughout a lifetime. The variety of different subjects provide a well-rounded or "liberal" education and develop the knowledge, skills, and attitudes that together help create an educated person.

Program Learning Outcomes:

- Engage in meaningful verbal and nonverbal expression through written, oral, signed, and/or artistic communication of ideas and concepts.
- Apply principles of scientific and critical inquiry, including quantitative and qualitative techniques, to the analysis of relevant questions, problems, or issues.
- Analyze the interconnectivity between social, political, economic, and ecological systems to effectively live and work in diverse communities.
- Apply techniques for physical and mental development that include the application of ethical principles to personal, academic, and professional matters.

Career/Transfer Opportunities:

These certificates are designed for students who intend to complete university general education requirements prior to transfer to a California State University (CSU) or University of California campus. Completion will permit a student to transfer from a California Community College to a CSU or UC campus generally without the need, after transfer, to take additional lower-division, general education courses to satisfy campus general education requirements.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Health Sciences

The Health Sciences major and career pathway is focused on patient and client care in a healthcare setting. Students in this pathway learn how to improve the lives of others through human biology, health care, nutrition, and wellbeing. Career pathways include nursing, nutrition, food science, physical training, and physical education.

Programs of Study
- Community Health Worker (Noncredit)
- Fitness & Health (Certificate)
- Human Biology (AS Degree)
- Kinesiology (AA-T Degree)
- Nursing Assistant (Certificate)
- Nutrition and Dietetics (AST Degree)
- Pharmacy Technician (Not for Credit)
- Public Health Science (AS-T Degree)
- Registered Nursing (LVN to RN) (AS Degree)
- Vocational Nursing (AS Degree, Certificate)
Community Health Worker: Certificate of Completion (CC) (Noncredit)
The Community Health Worker Certificate of Completion provides students with health education, care management, and client advocacy in both community-based and health care settings. CHWs serve a two-way bridge between communities and key health and social resources. They play a vital role in reducing health inequalities among under-served communities by reducing barriers to access in a culturally appropriate way.

Program Learning Outcomes:
- Describe public health concepts and information for health promotion.
- Assess and integrate professional skills necessary for employment in the CHW field.
- Evaluate and implement entry-level proficiency in CHW core competencies for working effectively with diverse individuals’ groups and communities.

Career/Transfer Opportunities:
Students who complete the program are eligible for immediate employment as entry-level community-health workers in a variety of home-care and agency settings.

Core Requirements: Complete all of the following
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCH 001CW</td>
<td>Introduction to Community Health Work</td>
<td>54.0</td>
</tr>
<tr>
<td>NCH 002CW</td>
<td>Introduction to Chronic Disease Management</td>
<td>54.0</td>
</tr>
<tr>
<td>NCH003CW</td>
<td>Externship for Community Health Worker</td>
<td>54.0</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 162
Fitness and Health: Certificate of Achievement (CA)

The Fitness and Health Certificate at Mission College is designed to provide an in-depth study and practical application of the current standards and foundational skills of assessment, fitness testing, program design, implementation and evaluation of fitness and exercise programs as well as nutrition, mental health management and behavior modification techniques. This certificate is aimed at helping students who are seeking careers or additional training in the fitness and health industry. Therefore, in addition to learning the academic, foundational principles of fitness and health in the traditional classroom, students will also engage in hands-on learning and teaching techniques, which will aid them in being prepared to work in the field. This program also helps to prepare students to sit for nationally recognized fitness and health certification exams from organizations such as: American Council on Exercise (ACE), National Academy of Sports Medicine (NASM), Aerobics and Fitness Association of America (AFAA), and National Strength and Conditioning Association (NSCA).

Program Learning Outcomes:

- Exhibit an understanding of the impact of training on the major systems of the human body and apply industry best practices to develop safe and effective training programs.
- Demonstrate the ability to conduct safe, motivational, and effective individual and group exercise training programs.
- Demonstrate knowledge of learned content by successfully passing exams from certifying agencies.

Career/Transfer Opportunities:

Students will enroll in UC and CSU transferable courses and have the skills and knowledge to pursue a career in the following: personal training, group fitness instructing, health or wellness coaching, weight management consulting, and fitness entrepreneurship.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
## Fitness and Health: Certificate of Achievement (CA)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 037C</td>
<td>Cardio-Cross Training - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 037D</td>
<td>Cardio-Cross Training - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038A</td>
<td>Lower Body Conditioning Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038B</td>
<td>Lower Body Conditioning Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038C</td>
<td>Lower Body Conditioning - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038D</td>
<td>Lower Body Conditioning - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038E</td>
<td>Lower Body Conditioning - Endurance Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038F</td>
<td>Lower Body Conditioning - Speed Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038G</td>
<td>Lower Body Conditioning - Agility Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 038J</td>
<td>Lower Body Conditioning - Plyometric Training</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 039A</td>
<td>Fire Agility - Introduction</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN 039B</td>
<td>Fire Agility - Beginning</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN 039C</td>
<td>Fire Agility - Intermediate</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN 039D</td>
<td>Fire Agility - Advanced</td>
<td>2.0</td>
</tr>
<tr>
<td>KIN 040A</td>
<td>Modern Dance - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 040B</td>
<td>Modern Dance - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 040C</td>
<td>Modern Dance - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 040D</td>
<td>Modern Dance - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 041A</td>
<td>Ballet - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 041B</td>
<td>Ballet - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 041C</td>
<td>Ballet - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 041D</td>
<td>Ballet - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 042A</td>
<td>Jazz Dance - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 042B</td>
<td>Jazz Dance - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 042C</td>
<td>Jazz Dance - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 046A</td>
<td>Ballroom Dancing - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 046B</td>
<td>Ballroom Dancing - Beginning</td>
<td>1.0</td>
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<tr>
<td>KIN 046C</td>
<td>Ballroom Dance - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 046D</td>
<td>Ballroom Dance - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 047A</td>
<td>Hip Hop - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 047B</td>
<td>Hip Hop - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 047C</td>
<td>Hip Hop - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 047D</td>
<td>Hip Hop - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 048A</td>
<td>Latin Dance/Salsa - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 048B</td>
<td>Latin Dance/Salsa - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 050A</td>
<td>Tai Chi - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 050B</td>
<td>Tai Chi - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 050C</td>
<td>Tai Chi - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 051A</td>
<td>Aikido - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 051B</td>
<td>Aikido - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 051C</td>
<td>Aikido - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 053A</td>
<td>Karate - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 053B</td>
<td>Karate - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 053C</td>
<td>Karate - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 055A</td>
<td>Self-Defense - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 055B</td>
<td>Self-Defense - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 061A</td>
<td>Hatha Yoga - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 061B</td>
<td>Hatha Yoga - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 061C</td>
<td>Hatha Yoga - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 061D</td>
<td>Hatha Yoga - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 063A</td>
<td>Hiking - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 063B</td>
<td>Hiking - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 063C</td>
<td>Walk/Jog for Fitness - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 063D</td>
<td>Walk/Jog for Fitness - Beginning</td>
<td>1.0</td>
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</tbody>
</table>

**Total Required Units:** 17.5
Human Biology: Associate in Science (AS)

The Human Biology Associate in Science degree provides a solid foundation in the biological sciences for students who are seeking entry to nursing and related health occupations. Completion of this degree meets all Biology and Chemistry prerequisites for admission to the LVN and LVN-RN programs, and fulfills many of the lower-division requirements for a variety of baccalaureate degrees in Health Sciences. This degree is not intended for pre-medical, pre-dental, or pre-pharmacy students (see A.S. or AS-T in Biological Sciences instead).

Program Learning Outcomes:
• Students will describe the gross and microscopic structure of the major organs of the human body.
• Students will describe homeostatic control mechanisms of the different body systems, and how they relate to the maintenance of good health.
• Students will compare and contrast commensurable, opportunistic, and pathological relationships between humans and microorganisms.

Career/Transfer Opportunities:
A solid background in human biology is required for many undergraduate majors and careers in the allied-health field.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (15 units):
Complete fifteen units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 004</td>
<td>Microbiology</td>
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<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology -OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H</td>
<td>Human Physiology - Honors</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Electives (9 units): Complete a minimum of nine units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010</td>
<td>Introduction to Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010L</td>
<td>Introduction to Biology Lab</td>
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</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 012</td>
<td>Emerging Infectious Diseases -OR-</td>
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</tr>
<tr>
<td>BIO012H</td>
<td>Emerging Infectious Diseases - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014</td>
<td>Introductory Neuroscience -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014H</td>
<td>Introductory Neuroscience - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017</td>
<td>Genetics and Society -OR-</td>
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</tr>
<tr>
<td>BIO 017H</td>
<td>Genetics and Society - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018</td>
<td>The Biology of Cancer -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018H</td>
<td>The Biology of Cancer - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 022</td>
<td>Anatomy and Physiology for Allied Health Workers</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 001A</td>
<td>General Chemistry I -OR-</td>
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<tr>
<td>CHM 001AH</td>
<td>General Chemistry I - Honors</td>
<td>5.0</td>
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<tr>
<td>CHM 030A</td>
<td>Fundamentals of Chemistry I</td>
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<tr>
<td>CHM 060</td>
<td>Survey of General, Organic, and Biological Chemistry</td>
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<tr>
<td>HOC 001</td>
<td>Medical Terminology</td>
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<tr>
<td>NTR 015</td>
<td>Human Nutrition -OR-</td>
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<td>NTR015H</td>
<td>Human Nutrition - Honors</td>
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</tr>
<tr>
<td>NTR 040</td>
<td>Nutrition and Disease -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR040H</td>
<td>Nutrition and Disease</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 24.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Kinesiology: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology) is designed to introduce the student to many facets of the science and study of movement. Kinesiology courses enhance skills and physical development in combatives, dance, individual and team sports, fitness and theory, and provide a foundation for understanding human anatomy and physiology. Students completing this program successfully will be able to demonstrate an understanding of the major systems of the human body as they relate to movement and activity by identifying, explaining, and applying principles of anatomy and physiology in various contexts. Students who complete the Kinesiology AA-T meet the lower-division requirements for transfer to a four-year program of study in Kinesiology.

Program Learning Outcomes:

- Demonstrate an understanding of the major systems of the human body as they relate to movement and activity by identifying, explaining, and applying principles of anatomy and physiology in various contexts.
- Critically analyze movement and effectively communicate their analysis.

Career/Transfer Opportunities:

Students have the skills and knowledge to transfer to a four-year institution (with the completion of a the Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology), and pursue a career in the following areas: coach, teacher, athletic trainer, sports management, sports medicine, dance therapy, and choreography.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (14 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology</td>
</tr>
<tr>
<td>KIN 078</td>
<td>Introduction to Kinesiology</td>
</tr>
</tbody>
</table>

Movement Based Courses: Complete three (3) courses from three (3) different movement based areas for a minimum of three (3) units: Combatives, Dance, Fitness, Individual Sports, Team Sports.

<table>
<thead>
<tr>
<th>Combatives:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 050A</td>
<td>Tai Chi - Introduction</td>
</tr>
<tr>
<td>KIN 050B</td>
<td>Tai Chi - Beginning</td>
</tr>
<tr>
<td>KIN 051A</td>
<td>Aikido - Introduction</td>
</tr>
<tr>
<td>KIN 051B</td>
<td>Aikido - Beginning</td>
</tr>
<tr>
<td>KIN 053A</td>
<td>Karate - Introduction</td>
</tr>
<tr>
<td>KIN 053B</td>
<td>Karate - Beginning</td>
</tr>
<tr>
<td>KIN 055A</td>
<td>Self-Defense - Introduction</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dance:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 040A</td>
<td>Modern Dance - Introduction</td>
</tr>
<tr>
<td>KIN 041A</td>
<td>Ballet - Introduction</td>
</tr>
<tr>
<td>KIN 041B</td>
<td>Ballet - Beginning</td>
</tr>
<tr>
<td>KIN 041C</td>
<td>Ballet - Intermediate</td>
</tr>
<tr>
<td>KIN 041D</td>
<td>Ballet - Advanced</td>
</tr>
<tr>
<td>KIN 042A</td>
<td>Jazz Dance - Introduction</td>
</tr>
<tr>
<td>KIN 042B</td>
<td>Jazz Dance - Beginning</td>
</tr>
<tr>
<td>KIN 046A</td>
<td>Ballroom Dancing - Introduction</td>
</tr>
<tr>
<td>KIN 046C</td>
<td>Ballroom Dance - Intermediate</td>
</tr>
<tr>
<td>KIN 046B</td>
<td>Ballroom Dancing - Beginning</td>
</tr>
<tr>
<td>KIN 046D</td>
<td>Ballroom Dance - Advanced</td>
</tr>
<tr>
<td>KIN 047A</td>
<td>Hip Hop - Introduction</td>
</tr>
<tr>
<td>KIN 047B</td>
<td>Hip Hop - Beginning</td>
</tr>
<tr>
<td>KIN 048A</td>
<td>Latin Dance/Salsa - Introduction</td>
</tr>
<tr>
<td>KIN 048B</td>
<td>Latin Dance/Salsa - Beginning</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Fitness:</th>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>KIN 030A</td>
<td>Pilates Matwork - Introduction</td>
</tr>
<tr>
<td>KIN 030B</td>
<td>Pilates Matwork - Beginning</td>
</tr>
<tr>
<td>KIN 031A</td>
<td>Step Aerobics - Introduction</td>
</tr>
<tr>
<td>KIN 031B</td>
<td>Step Aerobics - Beginning</td>
</tr>
<tr>
<td>KIN 032A</td>
<td>Aerobics-Introduction</td>
</tr>
<tr>
<td>KIN 032B</td>
<td>Aerobics- Beginning</td>
</tr>
<tr>
<td>KIN 033A</td>
<td>Kickboxing Fitness- Introduction</td>
</tr>
<tr>
<td>KIN 033B</td>
<td>Kickboxing Fitness - Beginning</td>
</tr>
<tr>
<td>KIN 035A</td>
<td>Weight Training - Introduction</td>
</tr>
<tr>
<td>KIN 035B</td>
<td>Weight Training - Beginning</td>
</tr>
<tr>
<td>KIN 035C</td>
<td>Weight Training - Intermediate</td>
</tr>
<tr>
<td>KIN 037A</td>
<td>Cardio-Cross Training - Introduction</td>
</tr>
<tr>
<td>KIN 037B</td>
<td>Cardio-Cross Training - Beginning</td>
</tr>
<tr>
<td>KIN 038A</td>
<td>Lower Body Conditioning Introduction</td>
</tr>
<tr>
<td>KIN 038B</td>
<td>Lower Body Conditioning Beginning</td>
</tr>
<tr>
<td>KIN 038C</td>
<td>Lower Body Conditioning - Intermediate</td>
</tr>
<tr>
<td>KIN 038D</td>
<td>Lower Body Conditioning Advanced</td>
</tr>
</tbody>
</table>
Kinesiology: Associate in Arts for Transfer (AA-T) Continued

KIN 061A  Hatha Yoga - Introduction  1.0
KIN 061B  Hatha Yoga - Beginning  1.0
KIN 061C  Hatha Yoga - Intermediate  1.0
KIN 063A  Hiking - Introduction  1.0
KIN 063B  Hiking - Beginning  1.0

Individual Sports: Units
KIN 021A  Tennis - Introduction  1.0
KIN 021B  Tennis - Beginning  1.0
KIN 021C  Tennis - Intermediate  1.0
KIN 021D  Tennis - Advanced  1.0
KIN 021E  Tennis - Tournament  2.0
KIN 021F  Tennis - Doubles Strategies and Play  1.5
KIN 023A  Archery: Introduction  1.0
KIN 020A  Badminton - Introduction  1.0
KIN 020B  Badminton: Beginning  1.0
KIN 020C  Badminton - Intermediate  1.0

Team Sports: Units
KIN 014A  Volleyball - Introduction  1.0
KIN 014B  Volleyball - Beginning  1.0
KIN 015A  Basketball - Introduction  1.0
KIN 015B  Basketball - Beginning  1.0
KIN 019A  Soccer - Introduction  1.0
KIN 019B  Soccer - Beginning  1.0

List A. (6-10 units) Complete Two (2) Courses: Units
BIO 011  Human Biology  4.0
CHM 001A  General Chemistry I  5.0
CHM 030A  Fundamentals of Chemistry  4.0
MAT 010  Elementary Statistics  4.0
PHY 002A  General Physics - Mechanics and Thermodynamics  5.0

Required Units for the Major:  24.0-27.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units:  60.0
Nursing Assistant: Certificate of Proficiency (CP)

The Nursing Assistant Certificate of Proficiency prepares students for entry-level employment in the healthcare field. Nursing Assistants provide direct care to patients in residential, skilled nursing and hospice care facilities under the supervision of a licensed nurse. Completion of the Nursing Assistant courses provides eligibility for the National Nurse Aide Assessment Program (NNAAP) examination for the Certified Nursing Assistant (CNA).

HEALTH OCCUPATIONS PROGRAM ACCEPTANCE POLICY

Due to requirements from the California Department of Public Health, acceptance into the Nursing Assistant program will be dependent on the following:

- Submission of an application for the CNA program by the specified deadline. Applications are available online at missioncollege.org/depts/health/index.html/nursing.
- Attendance at an information session (dates will be posted online)

It is also recommended that students have completed HOC 001 prior to applying for this program.

Program Learning Outcomes:

- Use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Identify personal and professional growth through retrospection of nursing care.
- Complete all requirements for eligibility to apply for the Nursing Assistant Certification and pass the state examination.

Career/Transfer Opportunities:

The Certified Nursing Assistant is a member of the health care team who works under the LVN, RN or Physician. Employment opportunities for the Nursing Assistant include long-term care facilities, private duty, assisted living, adult day care facilities, pediatric sub-acute and mental health facilities. Home health aides work primarily in homes and as a visiting care provider (ie: hospice care or public health aide).

Core Requirements (6.5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 019A</td>
<td>Nursing Assistant Fundamentals</td>
<td>4.0</td>
</tr>
<tr>
<td>HOC 019AL</td>
<td>Nursing Assistant Fundamentals Lab</td>
<td>0.5</td>
</tr>
<tr>
<td>HOC 019B</td>
<td>Nursing Assistant Clinical Experience</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 6.5

Note: This Certificate of Proficiency is awarded by the academic department. This certificate will not appear on your transcript; however, you can receive a documentation of the certificate by contacting the department chair upon completion of the required coursework.
Nutrition and Dietetics: Associate in Science in for Transfer (AS-T)
The Associate in Science in Nutrition and Dietetics for Transfer introduces students to the principles and methodologies used in the study of nutrition and dietetics. Students will acquire the foundational knowledge necessary to pursue a baccalaureate degree in nutrition and dietetics. Graduation requirements.

Program Learning Outcomes:
• Explain physiological processes such as digestion, absorption, transport, and metabolism of nutrients.
• Critically analyze information on nutrition and separate scientifically supported information from misinformation.
• Analyze and explain the relationship between diet, lifestyle, and health outcomes, within the framework of cultural and societal influences.

Career/Transfer Opportunities:
Students with degrees in nutrition and dietetics find employment within a wide range of organizations, such as medical facilities, research labs, government agencies, universities, pharmaceutical companies, and the food industry. This degree is also an excellent preparation for students planning to continue training in medicine, public health, and/or other allied health sciences.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Curriculum Courses Required (16 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 001A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH</td>
<td>5.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 004</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A. (8-10 units)
Complete Two (2) course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 012A</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 012AH</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC 016</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 047</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List B. (3-5 units) Complete One (1) course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 001B</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001BH</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 030A</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 002</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM 002L</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 27.0-31.0
Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Pharmacy Technician

The Pharmacy Technician program at Mission College is a Not-for-Credit program. Graduates of the training program will receive a Certificate of Completion and eligibility for licensure (registration) by the CA State Board of Pharmacy. This program also prepares students for the PTCB certification exam.

Program Description

This is a 30-week intensive program which takes a very practical approach to pharmacy training and is designed to prepare graduates for work in one of many pharmacy settings in a short period of time. The program is excellent for recent high school graduates, college students, other health care workers, those looking for a career change, anyone who wants entry into the pharmacy or health fields, or anyone who wants to learn and skill and start a new career! The curriculum is written by pharmacists, and classes are taught by both pharmacists and certified pharmacy technicians practicing in all areas of pharmacy. Students will receive hours which include class and lab instruction, tutoring and workshop sessions, externship experiential training in a pharmacy.

Program Admittance

Visit our website: pharmacytech.missioncollege.edu to find complete information about applying for the admittance to the program. Admittance to this program requires students to complete CCCApply.

Program Costs

Costs for the program are $5,500. Financial aid is not applicable for this program, however the college does make available payment plans and financing options. See our website for more information.

Program Structure

Students may complete the program in evening classes which run February to August every year: M-Th, 6:30 p.m. to 9:30 p.m. or in day classes which run August to March every year: M-Th, 9:00 a.m. to 12:00 p.m. Additional externship hours are required with either option.

Program Coursework Includes:

- Intro to Pharmacy Practice
- Pharmacy Communications/Customer Service
- Pharmacy Terminology & Abbreviations
- Pharmacy Law • Pharmaceuticals/Pharmacology
- Pharmacy Calculations
- OTC & Healthcare Devices
- Managed Care
- Professional Development
- Prescription Computer Processing
- Compounding • Institutional Pharmacy Practice
- Outpatient Pharmacy Practice
- Clinical Pharmacy Externship
### Public Health Science: Associate in Science for Transfer (AS-T)

Public health is the science of protecting and improving the health of people and their communities. This work is achieved by promoting healthy lifestyles, researching disease and injury prevention, and detecting, preventing, and responding to infectious diseases. Overall, public health is concerned with protecting the health of entire populations. These populations can be as small as a local neighborhood, or as big as an entire country or region of the world. Public health professionals try to prevent problems from happening or recurring by implementing educational programs, recommending policies, administering services, and conducting research—often in contrast to clinical professionals like doctors and nurses, who focus primarily on treating individuals after they become sick or injured. Public health also works to limit health disparities. A large part of public health is promoting healthcare equity, quality, and accessibility.

### Program Learning Outcomes:

- Describe social, political, and economic issues that impact public health and healthcare delivery systems in the United States.
- Explain how functional anatomy and physiological regulations affect health and wellness.
- Apply basic epidemiological principles used to study patterns of disease and injury among diverse populations.
- Explain how social, behavioral, cultural, and environmental factors impact the health status of individuals and populations.
- Demonstrate effective communication and problem-solving skills necessary for addressing contemporary public health issues.

### Career/Transfer Opportunities:

Students with degrees in nutrition and dietetics find employment within a wide range of organizations, such as medical facilities, research labs, government agencies, universities, pharmaceutical companies, and the food industry. This degree is also an excellent preparation for students planning to continue training in medicine, public health and/or other allied health sciences.

### To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

### Core Requirement Courses (34-38 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>NTR 001</td>
<td>Introduction to Public Health</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 006</td>
<td>Personal Health and Wellness</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 010</td>
<td>Introduction to Biology  -AND-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 010L</td>
<td>Introduction to Biology - LAB -OR-</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM 001A</td>
<td>General Chemistry -OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 002</td>
<td>Introductory Chemistry -AND-</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM 002L</td>
<td>Introductory Chemistry - LAB</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology -OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H</td>
<td>Human Physiology Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>General Psychology -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>General Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics Honors -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010X</td>
<td>Elementary Statistics with Additional Support</td>
<td>6.0</td>
</tr>
</tbody>
</table>

### List A: Select One (1) Course

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>Principles of Microeconomics</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015H</td>
<td>Human Nutrition Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 045</td>
<td>Introduction to Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001</td>
<td>Introduction to Sociology -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001H</td>
<td>Introduction to Sociology Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### Required Units for the Major

34-38

Completion of General Education Requirements and electives as needed to reach 60 units.

### Total Required Units:

60.0
Registered Nursing (LVN to RN): Associate in Science (AS)

The Associate Degree (LVN-to-RN) Nursing curriculum is approved through the California Board of Registered Nursing (BRN) and is designed to prepare students to take the National Council Licensure Examination-Registered Nursing (NCLEX-RN). Upon successful completion of the NCLEX-RN examination, the student becomes a Registered Nurse (R.N.).

Program Admissions Information to the LVN-to-RN Program

The Nursing program is limited in the number of students it can admit each year. Applicants are cautioned that satisfaction of the prerequisite requirements qualifies them only for consideration for admission to the program. There is a selection procedure which assists us to select qualified applicants.

Required Prerequisite Coursework and Certification (prior to admission to the LVN-to-RN Program)

1. High school graduate or equivalent
2. Proof of active LVN license (copy)
3. Minimum cumulative GPA of 2.5 for all college coursework
4. Satisfactory score on the Test of Essential Academic Skills (TEAS)
5. Completion of the LVN-to-RN Course prerequisites listed below with a minimum grade of “C”: (18 units)
   • BIO 047: Human Anatomy (5-unit semester course or equivalent)
   • BIO 048: Human Physiology (5-unit semester course or equivalent)
   • BIO 004: Microbiology (5-unit semester course or equivalent)
   • ENG 001A: English Composition (3-unit semester course or equivalent)

NOTE: Applicants must have a minimum overall college GPA of 2.5 and no less than 2.5 GPA for Human Anatomy, Human Physiology, and Microbiology combined, with no grade less than a “C” for each course and no more than one repetition for any of the three courses.

Program Learning Outcomes:

• Students will demonstrate skills required for entry level practice.
• Students will demonstrate the use of theoretical and clinical skills during the performance of patient care to prepare for employment.
• Students will successfully pass the courses required to meet eligibility requirements for licensure and/or certification examination.

Career/Transfer Opportunities:

Employment opportunities following the acquisition of the license include hospitals, clinics, home-care, and community centers.

LVN-RN Program Requirements following Admission

Following admission to the program, the following requirements must be met:

• A Physical Exam documented on the Mission College Health Appraisal form, which considers the student free from communicable disease and ability to function in a hospital setting.
• Proof of immunity to Rubeola, Mumps, Rubella, Hepatitis B, Varicella.
• Evidence of physical and emotional fitness upon admission and throughout the program is expected and is subject to the opinion of the college physician.
• Current Cardiopulmonary Resuscitation certification, CPR for Health Care Provider or CPR for Professional Rescuer.
• Criminal background check. If you have been convicted of any offense other than a minor traffic violation, you may not qualify to be licensed as a registered nurse. Each case is reviewed and determined by the California Board of Registered Nursing. The Board considers the nature and severity of the offense, subsequent acts or crimes, compliance with the sanctions, and evidence of rehabilitation. (rn.ca.gov)

LVN-to-RN Thirty-Unit Option

The thirty-unit option allows the LVN to sit for the NCLEX-RN examination after completion of a maximum of thirty units of course work in Health Occupations and related disciplines. Students who elect this option will not be a graduate of the Nursing program and will not receive a degree. The student will receive a license to practice only in the state of California after passing the NCLEX-RN examination. Practice outside the State of California may be limited. A conference with the Director of the LVN-to-RN program regarding the option is required before the student may elect this option as an education pathway.
Registered Nursing (LVN to RN): Associate in Science (AS) continued

LVN-to-RN Program Course Requirements

General Education

Students must complete the General Education course requirements to receive a degree. Some of these requirements are fulfilled by the program prerequisites indicated above.

The following General Education courses are mandated by the Board of Registered Nursing must be taken prior to the last semester of the LVN to RN program. These courses are necessary to be eligible to take the NCLEX to become an RN. (10 Units)

- PSY 001: General Psychology or PSY 012: Human Growth and Development or equivalent (3 units)
- COM 001: Public Speaking or equivalent (3 units)
- MAT 010: Statistics or equivalent (4 units)

To complete the General Education requirements student must also complete the following prior to graduation:

- One American History and Institutions Course (Area D: Series 2)
- One Arts and Humanities Course (Area C)
- Fulfillment of Culture, Diversity and Equity (Area F) - can be fulfilled with an aligned course from Area C or Area D: Series 2.

* It is highly recommended that students complete all general-education coursework prior to entry into the LVN to RN program.

LVN-to-RN Program Coursework Requirements

The LVN to RN program consists of 3 terms of work. After completion of the Role Transition Courses (HOC 050 and 050A) the LVN-to-RN program consists of two additional semesters. Classroom instruction is offered concurrently with clinical experience. The Curriculum has been organized under the standards mandated by the State of California Board of Registered Nursing.

LVN-to-RN Program Coursework

- **Role Transition courses**
  - HOC 050: Role Transition LVN to RN (2.0 Units)
  - HOC 050A: Role Transition Clinical (1.0 Unit)

- **Semester 1**
  - HOC 051: Community Mental Health Nursing (2.0 Units)
  - HOC 052: Intermediate Medical-Surgical Nursing Theory (3.0 Units)
  - HOC 053: Introduction to Clinical Judgment (1.0 Unit)
  - HOC 054: Intermediate Clinical Practicum (4.0 Units)

- **Semester 2**
  - HOC 060: Advanced Maternal-Child Nursing (2.0 Units)
  - HOC 061: Advanced Medical-Surgical/Leadership Nursing (3.0 Units)
  - HOC 062: Leadership and Ethics (1.0 Unit)
  - HOC 064: Advanced Clinical Practicum (5.0 Units)

**Additional Requirements**

LVN-to-RN Program Prerequisite Courses:

- See details in program description
- 18 units

Mandated General Education Requirements:

- See Above (10.0 Units)
- LVN Advanced-Placement Credit (12.0 Units)

Completion of General Education and electives as needed to reach 72 units.

**Required Units for the Major**: 64.0

**Total Required Units**: 72.0
Vocational Nursing: Associate in Science (AS)

The licensed vocational nurse is a member of the health care team and works under the direction of a registered nurse or physician. Students who desire to earn an Associate in Science in Vocational Nursing must complete the college graduation requirements. Classroom theory consists of 10 to 12 hours per week. Approximately 16 hours per week are spent in clinical experiences and three hours per week in clinical simulation. Students must achieve a score of 75% or higher in all core courses and a C or better in all other courses in the program. Upon completion of the program, students are eligible to apply for the national licensing examination (NCLEX-PN). Upon successful completion of the Vocational Nursing program, students may apply to the California State Board of Vocational Nursing and Psychiatric Technician to obtain approval to take the Vocational Nursing licensure examination.

Program Admissions Information
Enrollment is limited. Students may obtain information from the Mission College website, under the Nursing/Health Occupations link, for information-session dates, application process, required courses, and recommended courses prior to entry into the program. Students are encouraged to make an appointment with a counselor for additional information and clarification.

Required Prerequisite Coursework and Certification (prior to admission to the program):

- Proof of current California Nursing Assistant certification and BLS-CPR certification.
- BIO 022 Anatomy and Physiology for Allied Health Workers 4.0 units.
- HOC 020 Introduction to Professional Health Care 0.5 units. There is no recency requirement for required courses; however, you are held strictly accountable for knowledge of their content. It is highly recommended that you refresh your knowledge of these subjects if you took them more than five years ago.

Program Learning Outcomes:

- Use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Critically analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Demonstrate personal and professional growth.
- Complete all requirements for eligibility to apply for the Vocational Nursing licensure and pass the national examination.

Career/Transfer Opportunities:
The licensed vocational nurse is a member of the health care team who works under the supervision of a registered nurse or physician. Employment opportunities for the licensed vocational nurse following licensure include sub-acute and extended care facilities, convalescent and rehabilitation institutions, home health agencies, and ambulatory care clinics.

To earn this degree, students must meet the following requirements:

a. Completion of 60 degree applicable units with an overall GPA of 2.0.

b. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.

c. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.
VOCATIONAL NURSING
nursing.missioncollege.edu

Vocational Nursing: Certificate of Achievement (CA)
The licensed vocational nurse is a member of the health care team and works under the direction of a registered nurse or physician. Students who desire to earn an Associate in Science in Vocational Nursing must complete the college graduation requirements. Classroom theory consists of 10 to 12 hours per week. Approximately 16 hours per week are spent in clinical experiences and three hours per week in clinical simulation. Students must achieve a score of 75% or higher in all core courses and a C or better in all other courses in the program. Upon completion of the program, students are eligible to apply for the national licensing examination (NCLEX-PN). Upon successful completion of the Vocational Nursing program, students may apply to the California State Board of Vocational Nursing and Psychiatric Technician to obtain approval to take the Vocational Nursing licensure examination.

Program Admissions Information
Enrollment is limited. Students may obtain information from the Mission College website, under the Nursing/Health Occupations link, for information-session dates, application process, required courses, and recommended courses prior to entry into the program. Students are encouraged to make an appointment with a counselor for additional information and clarification.

Required Prerequisite Coursework and Certification (prior to admission to the program):
- Proof of current California Nursing Assistant certification and BLS-CPR certification.
- BIO 022 Anatomy & Physiology for Allied Health Workers 4.0 units.
- HOC 020 Introduction to Professional Health Care 0.5 units.
- There is no recency requirement for required courses; however, you are held strictly accountable for knowledge of their content. It is highly recommended that you refresh your knowledge of these subjects if you took them more than five years ago.

Program Learning Outcomes:
- Use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Critically analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Demonstrate personal and professional growth.
- Complete all requirements for eligibility to apply for the Vocational Nursing licensure and pass the national examination.

Career/Transfer Opportunities:
The licensed vocational nurse is a member of the health care team who works under the supervision of a registered nurse or physician. Employment opportunities for the licensed vocational nurse following licensure include sub-acute and extended care facilities, convalescent and rehabilitation institutions, home health agencies, and ambulatory care clinics.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Languages and Liberal Arts

The Language & Liberal arts major and career pathway focuses on creativity, expression, writing and working with ideas. Students in this pathway learn how to communicate, understand cultures, and think critically. Career pathways include media, journalism, writing, editing, public relations, publishing, and teaching in both private and public industries.

Programs of Study

- Communication Studies (AA-T Degree, Certificate)
- English (AA-T Degree)
- Liberal Arts: Communication in English & Critical Thinking (AA Degree)
- Spanish (AA-T Degree)
Communication Studies: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Communication Studies for Transfer (AA-T in Communication Studies) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Communication Studies. California Community College students who are awarded an Associate in Arts in Communication Studies for Transfer (AA-T in Communication Studies) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Arts in Communication Studies for Transfer (AA-T in Communication Studies) consists of lower division courses that provide fundamental skills for success in both personal and professional development. Students gain self-awareness and the ability to build bridges to diverse audiences. The broad-based transfer curriculum includes interpersonal, intercultural, and group communication as well as public communication, argumentation and debate, and speech team activities. The program is highly valued in both academic institutions and professional organizations.

Program Learning Outcomes:
- Students will identify, explain, and apply theories about the communication process as they relate to a variety of audiences and contexts.
- Students will create and implement effective communication strategies to orally deliver a message appropriate to the context.
- Students will identify, analyze, and evaluate their own verbal and nonverbal messages as well as those of others in a variety of contexts.
- Students will research, analyze, and critically evaluate reference material to support the development of communication competence.

Career/Transfer Opportunities:
A degree in Communication Studies is universally applicable across all organizations and industries. Some common career paths include broadcasting, consumer affairs, public relations, advertising, education, marketing, government, human resources, law, community/international affairs, politics negotiations, journalism, customer service, recreation, management, and recruiting. Note: Completing courses that satisfy CSU’s U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.

To earn this degree, students must meet the following requirements:

<table>
<thead>
<tr>
<th>Core Requirement Courses (3 Units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 001</td>
<td>Public Speaking -OR-</td>
</tr>
<tr>
<td>COM 001H</td>
<td>Public Speaking - Honors -OR-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List A. (6 units) Complete Two (2) Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 004</td>
<td>Small Group Communication</td>
</tr>
<tr>
<td>COM 008</td>
<td>Interpersonal Communication</td>
</tr>
<tr>
<td>COM 012</td>
<td>Intercultural Communication</td>
</tr>
<tr>
<td>COM 020</td>
<td>Argumentation and Debate -OR-</td>
</tr>
<tr>
<td>COM 020H</td>
<td>Argumentation and Debate - Honors</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List B. (3 units) Complete One (1) Course:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 012</td>
<td>Intercultural Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List C. (3 units) Complete One (1) Course:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 003</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>PSY 001</td>
<td>General Psychology OR</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>General Psychology - Honors</td>
</tr>
<tr>
<td>SOC 001</td>
<td>Introduction to Sociology OR</td>
</tr>
<tr>
<td>SOC 001H</td>
<td>Introduction to Sociology - Honors</td>
</tr>
<tr>
<td>ENG 001B</td>
<td>English Composition and Literature</td>
</tr>
<tr>
<td>ENG 001C</td>
<td>Clear Thinking in Writing</td>
</tr>
</tbody>
</table>

Required Units for the Major: 18.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Communication Studies: Certificate of Achievement (CA)

The Certificate of Achievement in Communication Studies is designed for students who successfully complete nine or more units of Communication Studies coursework at Mission College. Students will receive a certificate signed by the college president that they may attach to letters and/or applications informing future employers, admissions offices to colleges, graduate schools, and professional institutions that they received specialized training in communication skills. Students will also see this certificate of achievement noted on their transcript. The importance of interpersonal and intercultural communication, small group and team skills, and public speaking training cannot be emphasized enough in providing the fundamental skills for successful personal and professional activities. This nine-unit Communication Certificate of Achievement will not only enhance students’ chances of being selected for a job or position they seek, it may also open doors to them both professionally and personally. These skills will increase students’ self-understanding, their ability to communicate with other people, and provide the necessary knowledge to build bridges with other people.

Program Learning Outcomes:
- Identify, explain, and apply theories about the communication process as they relate to a variety of audiences and contexts.
- Create and implement effective communication strategies to orally deliver a message appropriate to the context.
- Identify, analyze, and evaluate their own verbal and nonverbal messages as well as those of others in a variety of contexts.
- Research, analyze, and critically evaluate reference material to support the development of communication competence.

Career/Transfer Opportunities:
Communication Studies is universally applicable across all organizations and industries. Some common career paths include broadcasting, consumer affairs, public relations, advertising, education, marketing, government, human resources, law, community/international affairs, politics negotiations, journalism, customer service, recreation, management, and recruiting.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

This program can be completed entirely online.
ENGLISH
english.missioncollege.edu

English: Associate in Arts for Transfer (AA-T)

The Associate in Arts in English for Transfer (AA-T in English) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in English. California Community College students who are awarded an Associate in Arts in English for Transfer (AA-T in English) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Arts in English for Transfer (AA-T in English) provides students with a strong foundation in critical reading, writing, and thinking as well as literary analysis and research methods. Students majoring in English enroll in survey courses, which expose them to a wide range of types and styles of literature; courses in literature from many cultures and eras; and courses in special topics such as film and creative writing. Upon completion of the Associate in Arts in English for Transfer (AA-T in English), students will possess the knowledge and skills required for upper-division coursework in English. In addition, students will have gained preparation for careers in fields such as law, government, business, entertainment, advertising, public relations, writing, editing, and education.

Program Learning Outcomes:

- Write focused organized, well-developed essays that support clear thesis statements and demonstrate competence in Standard English grammar and usage.
- Demonstrate critical thinking skills by analyzing and evaluating academic essays and literature.
- Formulate and clearly communicate their positions on diverse issues.
- Write a research paper that demonstrates the effective evaluation, integration, and documentation of sources.

Career/Transfer Opportunities:

Students will be eligible to major in English upon successful completion of the program. Possible career options for students completing the Associate in Arts in English for Transfer and transferring to a four-year institution include: advertising, business, civil service, editing, journalism, law, library science, management, marketing communication, politics, public relations, publishing, research, teaching, technical communications, or writing.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (4 - 6 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 001B</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 001C</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A. (6 units) Complete Two (2) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 005A</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 005B</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 006B</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 007A</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 007B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B. (3-6 units) Complete one (1) option:

Option One: Any course from List A not used above
Option Two: Any course from List B not used above

List C. (3 units) Complete one (1) Option:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 078B</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 013</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 043</td>
<td>3.0</td>
</tr>
<tr>
<td>FRN 001</td>
<td>3.0</td>
</tr>
<tr>
<td>FRN 002</td>
<td>3.0</td>
</tr>
<tr>
<td>FRN 003</td>
<td>3.0</td>
</tr>
<tr>
<td>FRN 004</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001A</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001B</td>
<td>3.0</td>
</tr>
<tr>
<td>JPN 001</td>
<td>3.0</td>
</tr>
<tr>
<td>JPN 002</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 001</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>3.0</td>
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<td>SPA 003</td>
<td>3.0</td>
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<tr>
<td>SPA 004</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 050A</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 050B</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 001</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 002</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049A</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 18.0-20.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

Department Chair: Margaret Juncker
408-855-5229 | SEC-246B
margaret.juncker@missioncollege.edu
Dean: TBA
Liberal Arts: Communication in the English Language and Critical Thinking: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Communication in the English Language and Critical Thinking provides students the opportunity to develop knowledge and understanding of the form, content, context, and effectiveness of communication. Students will develop proficiency in oral and written communication in English, examining communication from the rhetorical perspective and practicing reasoning and advocacy, organization, and accuracy. Critical thinking skills and self-understanding through these courses provide a framework for lifelong learning in written and oral communication and offers students a breadth of knowledge that could be focused into single discipline degrees as well as applied to an interdisciplinary degree.

Program Learning Outcomes:
- Analyze written and oral information effectively.
- Use language as a tool for logical thought, clear and precise expression, and critical evaluation of communication.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units):
Complete a minimum of eighteen units from the following

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area A.

Must include courses from at least two different disciplines.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Spanish: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Spanish for Transfer (AA-T in Spanish) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Spanish. California Community College students who are awarded an Associate in Arts in Spanish for Transfer (AA-T in Spanish) with a completion of 60 semester units/completion of IGETC and/or CSU GE Breadth are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Spanish department offers courses that serve as a basis for broad liberal education, for advanced degrees and further study in languages, linguistics, English Literature, as preparation for a teaching credential, and as supplementary preparation for many professional fields including: emergency services, the legal and medical professions, social work, business, hospitality, information technology, foreign service, public relations, journalism, translation, and interpretation. Training in the Spanish language is widely considered essential preparation for teachers in California’s public schools. Upon completing the program the student will acquire a level of competence in Spanish (reading, writing, listening, speaking) that will increase marketability or enhance job performance in professions where knowledge of the Spanish language is necessary or helpful. The student will also be prepared for upper division coursework in Spanish at a four-year university.

Program Learning Outcomes:

- Compare and contrast cultural topics such as colonization, geography, nationality, ethnicity, politics, worldviews, and/or socioeconomic disparities within the Spanish-speaking world.
- Express ideas clearly and accurately in writing at the intermediate level of proficiency (at a minimum) consistent with the American Council on the Teaching of Foreign Languages (ACTFL) guidelines on proficiency in a foreign language through written compositions and essays.
- Demonstrate speaking skills at the intermediate level of proficiency (at a minimum) consistent with the American Council on the Teaching of Foreign Languages (ACTFL) guidelines on proficiency in a foreign language by completing an oral interview.
- Demonstrate listening comprehension at the intermediate level of proficiency (at a minimum) consistent with the American Council on the Teaching of Foreign Languages (ACTFL) guidelines on proficiency in a foreign language by responding appropriately to written and spoken expressions in Spanish.

Career/Transfer Opportunities:

Spanish is the language of the majority of Western hemisphere countries and is also the fastest growing language in California. For students planning to work in the health industry, Foreign Service, hospitality, education, law or public service, information technology, agriculture, construction, knowledge of Spanish is an invaluable asset. A degree in Spanish is an excellent way to expand career opportunities.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSUGE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

### Core Requirement Courses (16 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 001</td>
<td>First Semester Spanish (Elementary Level)</td>
</tr>
<tr>
<td>SPA 002</td>
<td>Second Semester Spanish (Elementary Level)</td>
</tr>
<tr>
<td>SPA 003</td>
<td>Third Semester Spanish (Intermediate Level)</td>
</tr>
<tr>
<td>SPA 004</td>
<td>Fourth Semester Spanish (Intermediate Level)</td>
</tr>
</tbody>
</table>

### List A. (3 units) Complete One (1) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 003</td>
<td>Cultural Anthropology</td>
</tr>
<tr>
<td>ENG 013</td>
<td>Chicana/o-Latina/o Literature</td>
</tr>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots &amp; Culture</td>
</tr>
</tbody>
</table>

### Required Units for the Major: 23.0

Completion of General Education Requirements and electives as needed to reach 60 units.

### Total Required Units: 60.0
The Public Service & Social Science major and career pathway is focused on working with people, helping others, and making connections. Students in this pathway learn how to solve problems through being inquisitive, empathetic and cooperative. Career pathways include various helping professions working directly with others such as social services, education, emergency responders, mental health and government/law.

**Programs of Study**
- Administration of Justice (AS-T Degree)
- Anthropology (AA-T Degree)
- Child Development, Associate Teacher (Certificate)
- Child Development, Early Intervention Assistant (Certificate)
- Child Development, Master Teacher (Certificate)
- Early Childhood Education (AS-T Degree, AS Degree)
- Economics (AA-T Degree)
- Fire Fighter/EMT Academy (Certificate)
- Fire Prevention Internship Certification (Certificate)
- Fire Technology (AS Degree)
- History (AA-T Degree)
- Liberal Arts: Social and Behavioral Science (AA Degree)
- Political Science (AA-T Degree)
- Psychology (AA-T Degree)
- Social Justice Studies (AA-T Degree)
- Sociology (AA-T Degree)
Administration of Justice:
Associate in Science for Transfer (AS-T)

Associate in Science in Administration of Justice for Transfer (AS-T) The Associate in Science in Administration of Justice for Transfer (AS-T in Administration of Justice) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Administration of Justice. California Community College students who are awarded an Associate in Science in Administration of Justice for Transfer (AS-T in Administration of Justice) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Science in Administration of Justice for Transfer (AS-T in Administration of Justice) is an innovative social science program that emphasizes critical thinking about corrections, crime and delinquency, legal studies, and working with diverse communities. This multidisciplinary program explores the connections between law, crime, and justice. The program develops the high level of academic, personal, and professional competence demanded in a wide range of agencies. Students who successfully complete this program meet the lower-division requirements for seamless transfer to a CSU program of study in Corrections, Criminal law, Criminology, and Justice Studies.

Program Learning Outcomes:
- Students will describe the history, development, structure and function of American police, courts, and correctional institutions.
- Students will apply major criminological theories to the analysis of crime and criminality. Students will identify the innovative programs designed for specific Correctional Institutions and describe their impact on the corrections client and society at large.
- Students will identify and explain key issues that pose potential conflict between diverse communities and the courts, police, and corrections.
- Students will critically analyze various components of our system of criminal law.

Career/Transfer Opportunities:
Career opportunities include the following: law enforcement, social work, security, and corrections

To earn this degree, students must meet the following requirements:

Core Requirement Courses (6 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 050</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 054</td>
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</tr>
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</table>

List A. (6 units) Complete Two (2) Courses:

<table>
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<tr>
<th>Course</th>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>SOC 060</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 058</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B. (6 units) Complete Two (2) Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 009</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>4.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001H</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 016</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 047</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 18.0-20.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Anthropology: Associate in Arts for Transfer (AA-T)
The Associate in Arts in Anthropology for Transfer degree will enable students to develop a foundation in qualitative and quantitative scientific methodologies and a comprehensive understanding of human diversity and complexity. Students take classes in three of the discipline’s primary subfields: archaeology, cultural anthropology, and physical anthropology. Through these courses, students cultivate strong critical thinking, communication, and problem-solving skills that will prepare them for the requirements of upper-division course work and a baccalaureate degree in anthropology (or a related major).

Program Learning Outcomes
- Demonstrate in written or oral work, or lab exercise, knowledge and application of the scientific method, and the development of cultural and biological theory about humans.
- Classify universal shared elements of culture and assess alternative ways that human groups meet needs for stability, reproduction, and social control.
- Identify ethnocentrism (centered in one’s own culture) in self and others and assess the effects of ethnocentrism on cross-cultural relations among individuals, groups, and nations.
- Name and describe living patterns and world views of several groups in the world today as well as that of their own group.

Career/Transfer Opportunities
An Associate of Arts Degree in Anthropology allows Mission College graduates to better qualify for admission to university programs. As well as opportunities in the following careers:
Anthropologist, Instructor, Archaeology Technologist, Population Analyst, Archaeologist, Museum Curator, Environmental Impact Analyst,
Note: Some career options may require work beyond the AA or AS degree.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (9 Units):
- ANT 001 Introduction to Biological Anthropology 3.0
- ANT 002 Introduction to Archaeology 3.0
- ANT 003 Introduction to Cultural Anthropology 3.0

List A. (3 units) Complete One Course:
- ANT 001L Biological Anthropology Laboratory 1.0
- SJ 001 Social Justice 3.0
- SJ 002 Introduction to Gender Studies 3.0
- HIS 017A History of the United States to 1877 -OR- 3.0
- HIS 017AH History of the United States to 1877 - Honors 3.0
- HIS 017B History of the United States Since 1877 -OR- 3.0
- HIS 017BH History of the United States since 1877 - Honors 3.0
- MAT 010 Elementary Statistics -OR- 4.0
- MAT 010H Elementary Statistics - Honors -OR- 4.0
- MAT 010X Elementary Statistics with Additional Support 6.0
- SOC 016 Introduction to Statistics in Social And Behavioral Sciences 3.0
- LNG 001 Introduction to Language and Linguistics 3.0

List B. (3-5 units) Complete One (1) Option:
- Option 1: Any List A Course, 3 units or more, not already used.
- Option 2: Science Methods: Complete one (1) course:
  - PSY015 Introduction to Research Methods 3.0
  - PSY015H Introduction to Research Methods - Honors 3.0
- Option 3: Sciences: Complete one (1) course:
  - BIO047 Human Anatomy 5.0

List C. (3 units) Complete One (1) Option:
- Any course not selected from List A or B; and/or any anthropology course; and/or any other non-anthropology course from the humanities of social sciences on cultural diversity.

Option 1: Any List A or List B course, 3 units or more, not already used.
- Option 2: Any non-Anthropology course from the humanities or social sciences on cultural diversity.
  (then include the existing list - however the -OR- needs to go between the non honors and honors versions of courses.)

Program Learning Outcomes: 18.0-23.0
Completion of General Education Requirements and electives as needed to reach 60 units.
Total Required Units: 60.0
Child Development, Associate Teacher: Certificate of Achievement (CA)

The Certificate of Achievement: Associate Teacher is an academic and vocational training program that prepares students for future work as early childhood educators in diverse early childhood settings. The certificate is designed to prepare students to enter the workforce prepared with skills necessary to effectively work in the field. Courses meet entry level requirements and/or meet the requirements needed to obtain a California Child Development Permit. The program is designed to prepare students with coursework as required by California licensing policies. Course completion with practicum experience can lead to a California Child Development Permit and employment. Coursework may apply toward lower division preparation requirements for students interested in transferring to a four-year college or university. Please see a counselor for more information.

Program Learning Outcomes:

- Create and implement developmentally and culturally appropriate curriculum.
- Identify developmental milestones in the cognitive, emotional, social, and physical domains.
- Identify and explain the dominant theories and philosophies in early childhood education.

Career/Transfer Opportunities:

Completion of this certificate qualifies students to apply for the California Child Development Permit at the Associate Teacher level. Students completing the Certificate of Achievement in Associate Teaching can gain entry level positions as an assistant or associate teacher in private or publicly funded early childhood or afterschool programs. On-the-job training fulfills the requirement to attain a lead teaching position. Students planning to transfer to a four-year college or university and wishing to pursue careers in human development, child psychology, social work, and secondary education should see a counselor to develop an education plan for further requirements.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001</td>
<td>Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 002</td>
<td>Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 008A</td>
<td>Practicum A</td>
<td>3.5</td>
</tr>
<tr>
<td>CHD 010</td>
<td>Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 015</td>
<td>Observation and Assessment of Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 017</td>
<td>Child Health, Safety, and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 026</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Units Required: 21.5
Child Development, Early Intervention Assistant: Certificate of Achievement (CA)

Early Intervention Assistant is an academic and vocational training program that prepares students for future work as early childhood educators in diverse early childhood settings. Courses are designed to meet entry level requirements and/or meet the requirements needed to obtain a California Child Development Permit. Coursework for the program leads to employment in a program for children with special needs or an inclusion program. This program is designed to prepare students to compete for higher paying positions when seeking employment in a program that cares for children with special needs. Please see a counselor for more information.

Program Learning Outcomes:

- Demonstrate effective verbal and written communication skills to actively collaborate with families in an ongoing and positive manner to support each child's and family's development.
- Recognize the typical and atypical child developmental milestones of children birth to age five.
- Explain the process of curriculum and environment development including adaptations and modifications for infants/toddlers and preschool children at high risk and/or with disabilities.
- Recognize a variety of disabilities by identifying the disability characteristics and warning signs and how the disability impacts the child and family development.

Career/Transfer Opportunities:

Students planning to transfer to a four-year college or university and wishing to pursue careers in special education, child psychology, social work, and other related field may be able to apply child development units toward lower division preparation requirements. See a counselor for additional information.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (24 units):

Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001</td>
<td>Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 002</td>
<td>Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 010</td>
<td>Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 016</td>
<td>Infant and Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 020</td>
<td>The Child with Special Needs in the Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 024</td>
<td>Positive Guidance in Early Childhood Programs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 025</td>
<td>Inclusion Strategies and Curriculum in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK 300CD</td>
<td>Occupational Work Experience for Child Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective (1-3 units):

Complete one course from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 003</td>
<td>Language and Literacy for the Young Child</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 004</td>
<td>Cognitive Experiences for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 015</td>
<td>Observation and Assessment of Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 018</td>
<td>Parenting Issues for Teachers</td>
<td>1.0</td>
</tr>
<tr>
<td>CHD 017</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 021</td>
<td>Children and Play</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 25.0-27.0
Child Development, Master Teacher: Certificate of Achievement (CA)

The Certificate of Achievement: Master Teacher is an academic and vocational training program that prepares students for future work as early childhood educators in diverse early childhood settings. The program is designed to prepare students to enter the workforce prepared with skills necessary to effectively work in the field. Courses meet entry level requirements and/or meet the requirements needed to obtain a California Child Development Permit. The program is designed to prepare students with coursework as required by California licensing policies. Course completion with practicum experience can lead to a California Child Development Permit and employment. Coursework may apply toward lower division preparation requirements for students interested in transferring to a four-year college or university. Please see a counselor for more information.

Program Learning Outcomes:
- Complete appropriate preparation for the Master Teacher Child Development Permit from the State of California.

Career/Transfer Opportunities:
Completion of this certificate qualifies students to apply for the California Child Development Permit at the Master Teacher level. Upon successful completion of this program students will have the opportunity to gain entry level positions as a lead teacher or be a master teacher in private or publicly funded early childhood and afterschool programs. On the job training fulfills the requirement to attain a lead teaching position. Students planning to transfer to a four-year college or university and wishing to pursue careers in human development, child psychology, social work, and secondary education should see a counselor to develop an education plan.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

<table>
<thead>
<tr>
<th>Core Requirements (29.5 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001 Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 002 Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 003 Language and Literacy for the Young Child</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 004 Cognitive Experiences for Children</td>
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</tr>
<tr>
<td>CHD 008A Practicum A</td>
<td>3.5</td>
</tr>
<tr>
<td>CHD 010 Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 015 Observation and Assessment of Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 017 Child Health, Safety, and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 026 Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 022 Adult Supervision in Early Childhood</td>
<td>2.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Electives (6 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 005 Movement and Melody</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 006 Administration I: Programs in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 007 Administration II: Personnel in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 013 Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 014 Art and Creative Development of Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 016 Infant and Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 020 The Child with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 021 Children and Play</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 024 Positive Guidance in Early Childhood</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 025 Inclusion Strategies and Curriculum in Early Childhood Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 35.5
Early Childhood Education: Associate in Science (AS)
The Associate in Science in Child Development is an academic and vocational training program that prepares students for future work as early childhood educators in diverse early childhood settings. Courses are designed to meet entry-level requirements for employment and/or meet the requirements needed to obtain a California Child Development Permit and employment in a state licensed, private or publicly funded center-based child care program. Completion of specific coursework can also lead to employment in a program for children with special needs or an inclusion program. This program is designed to prepare students to compete for higher paying positions and to facilitate transfer to a four-year college or university.

Students whose are English language learners may also be interested in English for Childcare noncredit certificate and courses.

Program Learning Outcomes:
- Demonstrate an understanding of typical development of young children.
- Identify and apply Developmentally Appropriate Practices in curriculum which include sensitivity to diverse family structures, abilities of children and individual learning styles.
- Compare and contrast developmental theorists and their contribution to early childhood education.
- Demonstrate the differences between typical and atypical development in young children and identify resources for children with special needs.
- Examine the differences between education models for ECE.
- Create Developmentally Appropriate education plans for young children identifying outcomes using Bloom’s taxonomy and accurately document the learning that happens.
- Observe and assess young children’s development using various observation and assessment tools.

Career/Transfer Opportunities:
Career opportunities include the following: lead teacher, program director, site supervisor, consultant, or parent educator. Completion of core coursework meets entry level educational requirements in early childhood education programs per California licensing policies. Students wishing to pursue higher level careers in early childhood programs, human development, child psychology, social work, and secondary education should see a counselor to determine the transfer requirements of specific four year colleges or universities.

Core Requirements (30.5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001</td>
<td>Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 002</td>
<td>Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 008A</td>
<td>Practicum A</td>
<td>3.5</td>
</tr>
<tr>
<td>CHD 010</td>
<td>Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 013</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 015</td>
<td>Observation and Assessment of Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 016</td>
<td>Infant and Toddler Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 017</td>
<td>Child Health, Safety, and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 020</td>
<td>The Child with Special Needs</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 026</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective (6 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 003</td>
<td>Language and Literacy for the Young Child</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 004</td>
<td>Cognitive Experiences for Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 005</td>
<td>Music and Movement</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 006</td>
<td>Administration I: Programs in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 007</td>
<td>Administration II: Personnel and Leadership in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 014</td>
<td>Art and Creative Development of Young Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 018</td>
<td>Parenting Issues for Teachers</td>
<td>1.0</td>
</tr>
<tr>
<td>CHD 021</td>
<td>Children and Play</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 022</td>
<td>Adult Supervision in Early Childhood</td>
<td>2.0</td>
</tr>
<tr>
<td>CHD 024</td>
<td>Positive Guidance in Early Childhood</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 025</td>
<td>Inclusion Strategies and Curriculum in Early Childhood Education</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 36.5

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Units Required: 60.0

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Early Childhood Education: 
Associate in Science for Transfer (AS-T)

The Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Early Childhood Education. California Community College students who are awarded an Associate in Science in Early Childhood Education for Transfer (AS-T in Early Childhood Education) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. Students who complete this program will possess a working knowledge of child development in all domains, and will have the ability to develop and implement curriculum in early childhood education that is both developmentally and culturally appropriate. Students will understand the importance of the family and cultural connection to the developing child.

Program Learning Outcomes:

- Demonstrate knowledge of child development theory and its application to Early Care and Education by identifying key developmental theorists and recognizing children’s developmental stages.
- Demonstrate competence in facilitating the development of each young child as a unique individual through the creation of individual and group curriculum that promotes physical, cognitive and/or socio-emotional development.
- Achieve eligibility for certification of an Early Childhood Education Permit from the California State Department of Education through the completion of at least six units of early childhood development coursework.

Career/Transfer Opportunities:

Courses meet entry level educational requirements in early childhood programs per California licensing policies. Students wishing to pursue higher level careers in early childhood programs, human development, child psychology, social work, and secondary education should see a counselor to determine the transfer requirements of specific four-year colleges or universities.

To earn this degree, students must meet the following requirements:

1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirement Courses (24 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001</td>
<td>Child Growth and Development</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 002</td>
<td>Child, Family, and Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 010</td>
<td>Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 013</td>
<td>Teaching in a Diverse Society</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 015</td>
<td>Observation and Assessment of Children</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 017</td>
<td>Child Health, Safety and Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 026</td>
<td>Introduction to Curriculum</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 008A*</td>
<td>Practicum A</td>
<td>3.5</td>
</tr>
</tbody>
</table>

*Must complete CHD 001, 002, 026 and 010 prior to enrolling in CHD 008A

Required Units for the Major: 24.5

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
ECONOMICS
missioncollege.edu/depts/economics

Economics: Associate in Arts for Transfer (AA-T)
The Associate in Arts in Economics for Transfer (AA-T in Economics) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Economics. California Community College students who are awarded an Associate in Arts in Economics for Transfer (AA-T in Economics) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

Program Learning Outcomes:
• Apply general economic theories and models to describe economic phenomena.
• Analyze and make predictions about the impact of government intervention and changing market conditions on consumer and producer behavior and well-being.
• Generate constructive analysis and creative solutions to real world issues by drawing upon relevant data and utilizing suitable economic theories.

Career Opportunities:
Career Opportunities include the following: economist, loan officer, systems analyst, project administrator, research assistant, sales engineer, state policy analyst, statistician, systems analyst, personal banker, insurance agent, stock broker, investment advisor, financial analyst, financial advisor, economic affairs officer, and many more.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better;
2. Completion of 60 CSU-transferable semester units with a grade point average of at least 2.0 and;
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (16-17 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>Principles of Microeconomics</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics - OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics - Honors</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 012</td>
<td>Calculus for Business and Social Sciences - OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 003A</td>
<td>Analytic Geometry and Calculus I</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A. (3-5 units) Complete One (1) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 001B</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 021</td>
<td>Introduction to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 003B</td>
<td>Analytic Geometry and Calculus II</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List B. (3-5 units) Complete One (1) Course:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any course not selected from List A</td>
<td></td>
<td>3.0-5.0</td>
</tr>
<tr>
<td>ECN 006</td>
<td>The Global Economy</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 004A</td>
<td>Multivariable Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004C</td>
<td>Linear Algebra</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Units Required for the Major: 22.0-26.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Fire Fighter/EMT Academy: Certificate of Achievement (CA)

This Certificate of Achievement is designed to prepare an individual for the entry level position as a Firefighter/EMT. The certification is two-fold; once certified as an EMT, employment can be gained in the emergency medical field until the completion of the Firefighter 1 Academy. When both certifications are met, they are prepared for the entry level position as a Firefighter/EMT. The EMT training program is designed to prepare individuals to render pre-hospital basic life support at the scene of an emergency, during transport of the sick and injured, or during inter-facility transfer within an organized EMS system. This course meets all the theory requirements for certification as an Emergency Medical Technician-I as specified in the regulations approved by the State of California Emergency Medical Services Authority in July 2017. Students must also successfully complete FPT 065L and FPT 065C concurrently with FPT 065 to be eligible for certification. The Firefighter 1 Academy provides the skills and knowledge needed for the entry level Professional or Volunteer Fire Fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the 2013 edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the 2012 edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the 2008 edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. This certification is required to become a Professional or Volunteer Firefighter/EMT, and includes instruction on basic firefighting skills, laws and regulations affecting the fire service. Starting in 2013, State of California Fire Training requires that both Volunteer and Professional Fire Fighters complete a Fire Fighter 1 Academy. This has created an increase in demand. The course provides the student with knowledge and skills to safely perform, under minimal supervision, essential and advanced fire ground tasks, basic rescue, basic fire prevention and fire investigation task and to use, inspect, and maintain firefighting and rescue equipment. This curriculum provides the minimum required training required by the State of California Fire Training in the field of fire technology as it relates to firefighters.

Program Learning Outcomes:
- Be prepared for entry-level employment as a professional and competent Fire Fighter and meet the requirements for Firefighter 1 Certification from California State Fire Training
- Be prepared for entry-level employment as a professional and competent Emergency Medical Technician and meet the needs of the local health care community.

<table>
<thead>
<tr>
<th>Core Requirements (22.5 units): Complete all of the following</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPT 065 Emergency Medical Technician I Theory</td>
<td>6.0</td>
</tr>
<tr>
<td>FPT 065C Emergency Medical Technician 1 Clinical Experience</td>
<td>0.5</td>
</tr>
<tr>
<td>FPT 065L Emergency Medical Technician Laboratory</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 200 Fire Fighter 1 Fire Academy</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Total Required Units: 22.5

Career/Transfer Opportunities:
Students are eligible for entry-level positions in fire protection and emergency response agencies.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Fire Prevention Internship Certification: Certificate of Achievement (CA)

Fire Prevention is a dynamic public safety profession that requires a wide and ever-changing range of knowledge and skills. Areas of necessary knowledge include safety, fire behavior and suppression, rescue, emergency medical service delivery and operations, hazardous materials, building construction, detection and signaling systems and the incident command system. This program focuses on preparing the student for their first career in the fire prevention bureau. This program includes educational opportunities for those employed within the fire service, as well as those within volunteer fire agencies. Courses include those required for transfer to four-year colleges, those required to meet eligibility requirements for employment, and those required for incentive salary increases and promotions. Fire Prevention Interns will be required to complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Internships may have eligibility requirements that vary according to agency.

Program Learning Outcomes:

- Students will utilize the Uniform Fire Code requirements and regulations when performing fire inspections.
- Explain how to determine Occupancy Classifications and Load
- Explain how Site Access & Emergency Access affect life safety
- Describe how to complete a Hood and Duct Inspection
- Describe the types of Fire Suppression Systems
- Identify the responsibility, authority and process for fire prevention inspections and fire cause determination
- Identify how to Determine the Operational Readiness of a Fire Detection and Alarm systems
- Describe the consequences of severe wildland fire conditions on unmitigated wildland urban interface areas.
- Identify the history of fire in the wildland urban interface environment.
- Achieve eligibility for certification on the State Fire Training Certification Tracks as a Fire Inspector I (Educational Requirements) from California State Fire Training through the completion of FPT301 - Fire Inspector 1A, FPT302 - Fire Inspector 1B, FPT303 - Fire Inspector 1C, FPT304 - Fire Inspector 1D.
- Demonstrate knowledge of building components, fire suppression systems, hazardous materials classifications, fire behavior and combustion, and rescue techniques

Core Requirements (30 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPT 300A</td>
<td>Fire Prevention Internship Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300B</td>
<td>Fire Prevention Internship Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300C</td>
<td>Fire Prevention Internship Course 3</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300D</td>
<td>Fire Prevention Internship Course 4</td>
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</tr>
<tr>
<td>FPT 301</td>
<td>Fire Inspector 1A Duties and Administration</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 302</td>
<td>Fire Inspector 1B: Fire and Life Safety</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 303</td>
<td>Fire Inspector 1C: Field Inspection</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 304</td>
<td>Fire Inspector 1D: Field Inspection CA</td>
<td>1.0</td>
</tr>
<tr>
<td>WRK 300FP</td>
<td>Occupational Work Experience for Fire Prevention Internship</td>
<td>12.0</td>
</tr>
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</table>

Program Prerequisite Note: FPT 055 must be taken before FPT 300A (FPT 055 is a prerequisite of FPT 300A).

Program Corequisite Note: WRK 300FP is a co-requisite with FPT 300A-D.

Total Required Units: 30.0

Career/Transfer Opportunities:

Career opportunities include the following: fire inspector, fire investigator, fire prevention specialist, fire marshal, deputy fire marshal, hazardous materials, and community education.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Fire Technology: Associate in Science (AS)

Firefighting is a dynamic public safety profession that requires a wide and ever-changing range of knowledge and skills. Areas of necessary knowledge include safety, fire behavior and suppression, rescue, emergency medical service delivery and operations, hazardous materials, building construction, detection and signaling systems and the incident command system. This program focuses on preparing the student for their first career in the fire service. This program includes educational opportunities for those employed within the fire service, as well as those within volunteer fire agencies. Courses include those required for transfer to four-year colleges, those required to meet eligibility requirements for employment, and those required for incentive salary increases and promotions.

Program Learning Outcomes:

- Critically analyze and classify hazardous materials and catastrophic events into appropriate categories (fire, medical, hazardous materials, and weapons of mass destruction). 100
- Explain the elements of critical assessment for fire and medical emergencies. 100
- Analyze, assess, demonstrate the knowledge and appropriate fire extinguishing methods to suppress fires and response to hazardous situations. 100
- Analyze, assess, and demonstrate the appropriate medical treatment that is a solution to a given medical problem. 100
- Demonstrate in written and oral presentation, or lab exercises, knowledge and application of firefighting and medical equipment. 100
- Demonstrate in written and oral presentation, or practical exercises, knowledge and application of firefighting safety clothing and survival techniques. 100
- Demonstrate knowledge of building components, fire suppression systems, hazardous materials classifications, fire behavior and combustion, and rescue techniques.

Career/Transfer Opportunities:

Career opportunities include the following: firefighter, firefighter-EMT, emergency medical technician, fire investigator, fire prevention specialist, fire marshal, deputy fire marshal, fire officer, chief officer, hazardous materials, and public education.

To earn this degree, students must meet the following requirements:

1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.
History: Associate in Arts for Transfer (AA-T)

Associate in Arts in History for Transfer (AA-T) The Associate in Arts for Transfer in History (AA-T in History) provides students the opportunity to cultivate a broad perspective on history. The program is designed to stimulate appreciation for, and understanding of historical and cultural trends, and knowledge of key figures and events. The program is also designed to facilitate learning in such a way to allow students to make connections to modern institutions and ideas, patterns of change and progress, and encourage an interest in the 21st century world. Students will also refine their cognitive and analytical faculties through studying historical works, researching historical subjects, and writing using primary and secondary sources. Critical thinking skills and historical understanding through these courses provide a framework for lifelong study in the history and the humanities areas and offers students a breadth of knowledge that could be focused into single discipline degrees as well as applied to an interdisciplinary degree. The AA-T in History is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in History. California Community College students who are awarded an AA-T in History are guaranteed admission with junior standing within the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

Program Learning Outcomes:
- Students will identify major historical issues.
- Students will identify the main participants in historical events of the culture under study.
- Students will analyze major historical events either verbally or in writing.
- Students will define and be able to compare and contrast key historical issues and cultural assumptions.
- Students will describe the value and positive attributes of different cultures and societies.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (6 total units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 017A History of the United States to 1877-OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017AH History of the United States to 1877-Hons</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017B History of the United States Since 1877-OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017BH History of the United States Since 1877-Hons</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List A (6 total units) Complete Two (2) courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 004A History of Western Civilization -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004AH History of Western Civilization - Hons -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 015 World History to 1500 -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 015H World History to 1500 - Hons -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004B History of Western Civilization -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004BH History of Western Civilization - Hons -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016 World History Since 1500 -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016H World History Since 1500 - Hons</td>
<td>3.0</td>
</tr>
</tbody>
</table>

| List B (6-8 total units) Complete one (1) course from Area 1 and one course from Area 2 You may not select a course already selected for List A. |
|-------------------------------------------------------------------------------|-------|
| Diversity: | Units |
| HIS 015 World History to 1500 -OR- | 3.0   |
| HIS 015H World History to 1500 - Hons | 3.0   |
| HIS 016 World History Since 1500 -OR- | 3.0   |
| HIS 016H World History Since 1500 - Hons | 3.0   |
| HIS 033 Women’s Issues Past and Present -OR- | 3.0   |
| HIS 033H Women’s Issues Past and Present - Hons | 3.0   |
| HUM 018 African-American Culture and Humanities -OR- | 3.0   |
| HUM 018H African-American Culture and Humanities - Hons | 3.0   |
| FRN 001 First Semester French (Elementary Level) | 5.0   |
| FRN 002 Second Semester French (Elementary Level) | 5.0   |
| FRN 003 Third Semester French (Intermediate Level) | 5.0   |
| FRN 004 Fourth Semester French (Intermediate Level) | 5.0   |
| HIS 031 History of East Asia | 3.0   |
| HUM 001A Human Values in and From the Arts | 3.0   |
| HUM 001B Human Values in and From the Arts | 3.0   |
| HUM 016A Hispanic Roots and Culture | 3.0   |
| HUM 022 Introduction to Islam | 3.0   |
| JPN 001 First Semester Japanese | 5.0   |
| JPN 002 Second Semester Japanese | 5.0   |
| SPA 001 First Semester Spanish (Elementary Level) | 5.0   |
| SPA 002 Second Semester Spanish (Elementary Level) | 5.0   |
| SPA 003 Third Semester Spanish (Intermediate Level) | 5.0   |
| SPA 004 Fourth Semester Spanish (Intermediate Level) | 5.0   |
| SPA 050A Basic Conversational Spanish and Culture | 3.0   |
| SPA 050B Basic Conversational Spanish and Culture | 3.0   |
| VIE 001 First Semester Vietnamese (Elementary Level) | 5.0   |
History: Associate in Arts for Transfer (AA-T) Continued

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>VIE 002</td>
<td>Second Semester Vietnamese</td>
<td>5.0</td>
</tr>
<tr>
<td>VIE 049A</td>
<td>Vietnamese for the Vietnamese - Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049B</td>
<td>Vietnamese Language and Culture for Fluent Speakers</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Area 2:**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 003</td>
<td>Introduction to Cultural Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 012</td>
<td>Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COU 055</td>
<td>Valuing Diversity</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 007</td>
<td>International Films</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 001</td>
<td>American Government -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 001H</td>
<td>American Government - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 004</td>
<td>International Relations</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 007</td>
<td>International Films</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>General Psychology -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>General Psychology - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001</td>
<td>Introduction to Sociology -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 001H</td>
<td>Introduction to Sociology - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Required Units for the Major:** 18.0-20.0

Completion of General Education Requirements and electives as needed to reach 60 units.

**Total Required Units:** 60.0
LIBERAL ARTS: SOCIAL AND BEHAVIORAL SCIENCES

Liberal Arts: Social and Behavioral Sciences: Associate in Arts (AA)
The Associate in Arts in Liberal Arts with an emphasis in Social and Behavioral Sciences provides students an opportunity to develop a broad perspective on concepts, theories and methodologies of the disciplines typically found in the variety of disciplines that comprise the study in the social and behavioral sciences. Students study about themselves and others as a member of a larger society in order to gain a basic knowledge of the cultural and social organizations in which they exist as well as the behavioral and social organizations of other human societies.

Program Learning Outcomes:
• Evaluate human behavior in relation to human, social, political, and economic institutions.
• Evaluate and critique past, present, and future issues from a historical, cultural, psychological, and social perspective.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units):
Complete a minimum of eighteen units from the following

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area D.

Must include courses from at least two different disciplines.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units 60.0
Political Science: Associate in Arts for Transfer (AA-T)

The Associate in Arts in Political Science for Transfer (AA-T in Political Science) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Spanish. California Community College students who are awarded an Associate in Arts in Political Science for Transfer (AA-T in Political Science) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.

The Associate in Arts in Political Science for Transfer is designed to involve students in the examination of the structure of government and the political systems in our and other nations. The curriculum covers the interaction and responsibilities of citizens and social institutions in those systems. This program offers insights into these events on the local, state, national and international levels and these insights also encourage involvement of the citizenry.

Students completing this program successfully will be able to identify and explain the sources of and reasons for democratic government. Students will also be able to classify and explain the various kinds of governments other nations have. In addition, students will be able to define and trace the historical development of the modern international system.

Program Learning Outcomes:
- Students will be able to identify and describe major political institutions.
- Students will be able to analyze the exercise of power.
- Students will be able to apply theories and concepts of Political Science to real world events and situations.

Career/Transfer Opportunities:
Career opportunities include the following: attorney, city planner, lobbyist, civics teacher, journalist, researcher, social worker, public administrator, political analyst, and media specialists.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (3 units):
- POL 001 American Government OR 3.0
- POL 001H American Government - Honors 3.0

List A. (9-13 units) Complete Three (3) courses from the following:
- POL 002 Comparative Government 3.0
- POL 003 Introduction to Social and Political Philosophy 3.0
- POL 004 International Relations 3.0
- POL 005 Political Science Research Methodology 3.0
- MAT 009 Integrated Statistics II 5.0
- MAT 010 Elementary Statistics -OR- 4.0
- MAT 010H Elementary Statistics - Honors 4.0
- SOC 016 Introduction to Statistics in Social and Behavioral Sciences 3.0

List B. (6-8 units) Complete two (2) Courses from the following:
- POL 006 Politics of Race, Class and Gender 3.0
- POL 007 International Films 3.0
- POL 020 Controversial Legal Issues 3.0
- GLB 001 Global Perspectives 3.0
- GLB 002 Global Issues 3.0
- GLB 004 The Developing World 3.0
- GEO 002 Introduction to Cultural Geography 3.0
- GEO 006 World Regional Geography 3.0
- ECN 001A Principles of Macroeconomics 4.0
- ECN 001B Principles of Microeconomics 4.0
- ECN 006 The Global Economy 3.0
- BUS 028A Business Law I 3.0
- ANT 003 Introduction to Cultural Anthropology 3.0

Required Units for the Major: 18.0-21.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Psychology: Associate in Arts for Transfer (AA-T)

Associate in Arts in Psychology for Transfer (AA-T) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Psychology. California Community College students who are awarded an Associate in Arts in Psychology for Transfer degree (AA-T in Psychology) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. Psychology concerns itself with the study of human and animal behavior. This program provides students training both in pure science and in the practical application of science to matters of everyday life. This program is designed for students who seek to learn to examine psychological processes from multiple perspectives and to apply psychological principles and methods to personal and social issues in ways that promote self-understanding, personal development, and effective interpersonal relationships as members of a diverse society. Students who complete the Associate in Arts in Psychology for Transfer (AA-T in Psychology) meet the lower-division requirements for transfer to a four-year program of study in Psychology.

Program Learning Outcomes:
- Design and demonstrate an exercise showing how psychosocial factors influence behavior.
- Students will explain the effects of genetic and environmental factors on personality and behavior.
- Describe how an appreciation of cultural relativity and human diversity might enrich the understanding of psychology.
- Identify research models and relate the findings of research to life situations.
- Develop critical thinking exemplified in their uses of psychological techniques in analyzing, comparing and contrasting human behavior.

Career/Transfer Opportunities:
The Associate in Arts in Psychology for Transfer (AA-T in Psychology) encourages students to pursue professions in or related to the field of psychology and furthers their understanding of persons, the processes by which they develop, and the effects of cultural, social, and environmental factors on behavior.

Core Requirement Courses (9-11 units):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics – Honors -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC 016</td>
<td>Introduction to Statistics in Social And Behavioral Sciences</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>General Psychology -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>General Psychology – Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 015</td>
<td>Introduction to Research Methods -OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 015H</td>
<td>Introduction to Research Methods - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A. (3 units)

Complete one (1) course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 010</td>
<td>Introduction to Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>PSY 007</td>
<td>Biological Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B. (3 units)

Complete one (1) course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any List A course not used above.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSY 012</td>
<td>Human Growth and Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List C. (3 units)

Complete one (1) course from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 010</td>
<td>Social Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 025</td>
<td>Introduction to Abnormal Psychology</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 030</td>
<td>Psychology of Addiction and Substance Abuse</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 045</td>
<td>Introduction Human Sexuality</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 045</td>
<td>Introduction to Human Sexuality</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 18.0-21.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Social Justice Studies: Associate in Arts for Transfer (AA-T)

Associate in Arts in Social Justice Studies (AA-T) program is an interdisciplinary study of social justice. The program will cover philosophical and historical foundations of the social justice concept and movement and examine the socio-economic, cultural and political conditions of key social groups.

Program Learning Outcomes:
- Students will assess the relationship of economic systems, such as capitalism and socialism, and public policy to social justice.
- Students will explain concepts and theories of race, ethnicity, gender, sexuality, and disability and how they are socially and politically constituted and institutionalized.
- Students will identify the interplay of race, ethnicity, class, and sexuality affecting gender relations and inequality.

Career Opportunities:
Ethnic Studies, Labor Studies, Gender Studies, Sociology, and Women's Studies are among the many CSU majors available to students who complete this program.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Required Courses (9 units):
- SJS 001 Social Justice 3.0
- SOC 021 Minorities in the United States 3.0
- SJS 002 Introduction to Gender Studies 3.0
- SJS 003 Introduction to LGBTQ Studies 3.0

List A. (9 units) Complete Three (3) course from the following Areas:

Area 1. (3 units) History or Government:
- HIS 033 Women's Issues Past and Present -OR- 3.0
- HIS 033H Women's Issues Past and Present – Honors 3.0
- POL 006 Politics of Race, Class and Gender 3.0

Area 2. (3 units) Arts and Humanities:
- HUM 016A Hispanic Roots & Culture 3.0
- HUM 018 African-American Culture and Humanities -OR- 3.0
- HUM 018H African-American Culture and Humanities – Honors 3.0
- HUM 020 Asian Roots and Culture 3.0
- HUM 022 Introduction to Islam 3.0
- HUM 024 The Asian-American Experience 3.0

Area 3. (3 units) Social Science:
- ECN 001A Principles of Macroeconomics 4.0
- ECN 001B Principles of Microeconomics 4.0
- POL 001 American Government -OR- 3.0
- POL 001H American Government – Honors 3.0
- PSY 001 General Psychology -OR- 3.0
- PSY 001H General Psychology – Honors 3.0
- PSY 045 Introduction to Human Sexuality 3.0
- SOC 001 Introduction to Sociology -OR- 3.0
- SOC 001H Introduction to Sociology – Honors 3.0
- SOC 045 Human Sexuality 3.0

Area 4. Complete One (1) Quantitative Reasoning and Research Methods:
- MAT 010 Elementary Statistics -OR- 4.0
- MAT 010H Elementary Statistics – Honors 4.0
- POL 005 Political Science Research Methodology 3.0
- PSY 015 Introduction to Research Methods -OR- 3.0
- PSY 015H Introduction to Research Methods – Honors 3.0
- SOC 016 Introduction to Statistics in Social And Behavioral Sciences 3.0

Required Units for the Major: 18.0-21.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Sociology: Associate in Arts for Transfer (AA-T)
The Associate in Arts in Sociology for Transfer (AA-T in Sociology) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Sociology. California Community College students who are awarded an Associate in Arts in Sociology for Transfer (AA-T in Sociology) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions.
The Associate in Arts in Sociology for Transfer (AA-T in Sociology) provides a foundation for understanding many aspects of the social sciences, and assists students in comprehending other behavioral sciences. The required courses offer a basic understanding of how people relate to one another, the types of relationships people form, and various aspects and difficulties of such relationships.

Program Learning Outcomes:
- Students will utilize the basic principles of sociology to analyze the behavior of people functioning in social groups
- Students will compare and contrast group dynamics in formal and informal social groups. Students will explain formal and informal rules of social behavior.
- Students will relate social customs and social interactions within specific groups to analysis of how global perspectives affect United States Society.

Career/Transfer Opportunities:
Career opportunities include the following: sociologist, social worker, instructor, foster care worker, probation officer, urban planner, demography analyst, employment counselor, advocate for endangered children, advocate for disabled adults, and advocate for disadvantaged elderly.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
The STEM major and career pathway focuses on problem solving through data, analytics, facts, innovation and research. Students in this pathway learn how to use science, mathematics and technology through theory and application. Career pathways include working in private and public industries such as education, government, health, and technology as scientists, engineers, developers, managers, researchers and teachers.

**Programs of Study**
- Biology (AS-T Degree)
- Biological Science (AS Degree)
- Cisco Certified Network Administration (CCNA) (Certificate)
- Computer Information Systems (AS Degree, Certificate)
- Computer Network Technology (AS Degree)
- Data Analyst Associate (Certificate)
- Engineering (AS Degree, Certificate)
- Human Biology (AS Degree)
- IT Helpdesk Technician (Certificate)
- Liberal Arts: Natural Science and Mathematics (AA Degree)
- Mathematics (AS-T Degree, AS Degree)
- Mechatronic Technology (AS Degree, Certificate)
- Nutrition and Dietetics (AS-T Degree)
- Physics (AS-T Degree)
- Web Design (Certificate)
- Web Development (Certificate)
Biological Sciences: Associate in Science (AS)

Associate in Science in Biology for Transfer (AS-T) The Associate in Science in Biology for Transfer (AS-T in Biology) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Biology. California Community College students who are awarded an Associate in Science in Biology for Transfer (AS-T in Biology) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Science in Biology for Transfer (AS-T in Biology) offered by Mission College is designed to prepare students who successfully complete the coursework outlined below. Through intensive training in organismal, molecular, and environmental biology, students will develop the ability to think critically and abstractly, as well as acquire the problem-solving and laboratory skills necessary for success in any field of biological science. Students completing this program will have a solid foundation in basic biology, evolutionary theory, and the scientific method, as well as strong preparation in the supporting fields of mathematics, chemistry, and physics.

Program Learning Outcomes:

- Students will apply the scientific method to investigate biological questions by collecting and quantitatively analyzing data.
- Identify and apply the central concepts, hypotheses, and theories that comprise the major areas of the biological sciences, including cell and organism structure and function.
- Explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.
- Follow transfers and transformations of energy and matter through biotic and abiotic systems.

Career/Transfer Opportunities:

Students who successfully complete the Associate in Science in Biology for Transfer (AS-T Biology) will be prepared for a seamless transfer to a CSU to pursue a Bachelor’s degree in Biology. Through intensive training in organismal, molecular, and environmental biology, students will develop the ability to think critically and abstractly, as well as acquire the problem-solving and laboratory skills necessary for success in any field of biological science. Students completing this program will have a solid foundation in basic biology, evolutionary theory, and the scientific method, as well as strong preparation in the supporting fields of mathematics, chemistry, and physics.

Core Requirements (10 units):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 001</td>
<td>General Biology: Organism</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001A</td>
<td>General Biology: Cells - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001AH</td>
<td>General Biology: Cells - Honors</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Elective (8 units):

Complete a minimum of eight units from the following

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001</td>
<td>Biological Anthropology</td>
<td>.0</td>
</tr>
<tr>
<td>BIO 004</td>
<td>Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 010</td>
<td>Introduction to Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 010L</td>
<td>Introduction to Biology Lab</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 012</td>
<td>Emerging Infectious Diseases - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 012H</td>
<td>Emerging Infectious Diseases - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014</td>
<td>Introductory Neuroscience - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014H</td>
<td>Introductory Neuroscience - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 016</td>
<td>Marine Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 017</td>
<td>Genetics and Society - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017H</td>
<td>Genetics and Society - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 018</td>
<td>The Biology of Cancer-OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 018H</td>
<td>The Biology of Cancer - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 019</td>
<td>Oceans: Life in the Sea</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 025</td>
<td>Environmental Biology - OR-</td>
<td>.0</td>
</tr>
<tr>
<td>BIO 025H</td>
<td>Environmental Biology - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 030</td>
<td>Tropical Ecology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 030L</td>
<td>Tropical Ecology Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO 032</td>
<td>California Plants and Animals</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H</td>
<td>Human Physiology - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001A</td>
<td>General Chemistry - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH</td>
<td>General Chemistry I - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015H</td>
<td>Human Nutrition - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 040</td>
<td>Nutrition and Disease-OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 040H</td>
<td>Nutrition and Disease-Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 18.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
BIOLOGY
missioncollege.edu/depts/biology

Biology: Associate in Science for Transfer (AS-T)

Associate in Science in Biology for Transfer (AS-T) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Biology. California Community College students who are awarded an Associate in Science in Biology for Transfer (AS-T in Biology) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. The Associate in Science in Biology for Transfer (AS-T in Biology) offered by Mission College is designed to prepare students who successfully complete the coursework outlined below. Through intensive training in organismal, molecular, and environmental biology, students will develop the ability to think critically and abstractly, as well as acquire the problem-solving and laboratory skills necessary for success in any field of biological science. Students completing this program will have a solid foundation in basic biology, evolutionary theory, and the scientific method, as well as strong preparation in the supporting fields of mathematics, chemistry, and physics.

Program Learning Outcomes:

- Apply the scientific method to investigate biological questions by collecting and quantitatively analyzing data.
- Identify and apply the central concepts, hypotheses, and theories that comprise the major areas of the biological sciences, including cell and organism structure and function.
- Explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.
- Follow transfers and transformations of energy and matter through biotic and abiotic systems.

Career/Transfer Opportunities:

A solid background in the life sciences is required for many careers, including work in the allied health professions, biotechnology, horticulture, land management, and education.

To earn this degree, students must meet the following requirements:

1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Core Requirement Courses (10 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 001A General Biology: Cells</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001AH General Biology: Cells - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001B General Biology: Organisms</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A. (19-20 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 001A General Chemistry I</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry I - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001B General Chemistry II</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001BH General Chemistry II - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003A Analytic Geometry and Calculus I Thermodynamics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 002A General Physics - Mechanics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004A Engineering Physics-Mechanics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 002B General Physics - Electricity, Magnetism and Optics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004B Engineering Physics-Electricity and Magnetism</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 34.0-35.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Certificate of Achievement in Cisco Certified Network Administration (CCNA)

The Certificate of Achievement in Cisco Certified Network Administration (CCNA) is designed to provide the knowledge and skills needed to design, install, operate, and maintain networks in small-to-medium businesses as well as enterprise and service provider environments. The program provides an integrated and comprehensive coverage of networking topics including; IP fundamentals, network security and services, network programmability and automation while providing learners opportunities for hands-on practical experience and career skills development. This program prepares students for the globally recognized Cisco CCNA certification.

Program Learning Outcomes:
• Install, operate, and troubleshoot medium-sized routed and switched networks.
• Implement and troubleshoot various protocols to manage addressing, perform load balancing and authentication.
• Develop critical thinking and problem-solving skills using real equipment and Cisco Packet Tracer.

Career/Transfer Opportunities:
Career opportunities include the following: Network Technician, Network Administrator, Network Engineer, Network Analyst, or Network security analyst.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Computer Information Systems: Associate in Science (AS)

The Associate in Science in Computer Information System is designed to provide students with knowledge and skills required for a variety of positions in the field of computer information technology. The program includes foundation courses in computer information systems and a wide range of skill-builder courses in current topics of technology.

Program Learning Outcomes:
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Apply software development techniques that use the correct syntax and semantics of a programming language to write the source code to implement and test/debug a specified design.
- Use current techniques, skills, and tools necessary for computing practice.

Career/Transfer Opportunities:
Career opportunities include the following: Computer System Analyst, Software Developer, Computer Programmer and Other Computer Occupations such as Quality Assurance Engineer and Tester.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (12 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043</td>
<td>Software Development With Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 044</td>
<td>Introduction to Data Structures Using Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective (8 units):
Complete a minimum of eight additional units from the following. A maximum of two units of WRK 300GW can be applied to these eight units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 008</td>
<td>Advanced Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 033</td>
<td>Robotics and Embedded Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 037A</td>
<td>Introduction to C Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 039</td>
<td>Introduction to Computer Systems and Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 040</td>
<td>C++ Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 045</td>
<td>Linux Essentials I</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 047</td>
<td>Linux System Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 051</td>
<td>Introduction to Data Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Database Management Systems I</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 056</td>
<td>Database Management Systems II</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 063</td>
<td>Mobile Apps Programming - Android</td>
<td>4.0</td>
</tr>
<tr>
<td>WRK 300GW</td>
<td>General Work Experience</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

Units Required for the Major: 20.0-22.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Computer Information Systems: Certificate of Achievement (CA)

The Computer Information Systems Certificate of Achievement prepares students to work in the information systems field. The program includes foundation courses in computer information systems and a wide range of skill-builder courses in current topics of technology.

Program Learning Outcomes:
- Analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Apply software development techniques that use the correct syntax and semantics of a programming language to write the source code to implement and test/debug a specified design.
- Use current techniques, skills, and tools necessary for computing practice.

Career/Transfer Opportunities:
Career opportunities include the following: Computer System Analyst, Software Developer, Computer Programmer and Other Computer Occupations such as Quality Assurance Engineer and Tester.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (8 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043</td>
<td>Software Development With Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective (8 units):
Complete a minimum of eight additional units from the following. A maximum of two units of WRK 300GW can be applied to these eight units.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 008</td>
<td>Advanced Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 033</td>
<td>Robotics and Embedded Systems</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 037A</td>
<td>Introduction to C Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 039</td>
<td>Introduction to Computer Systems and Assembly Language</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 040</td>
<td>C++ Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 044</td>
<td>Introduction to Data Structures Using Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 045</td>
<td>Linux Essentials I</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 047</td>
<td>Linux System Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 051</td>
<td>Introduction to Data Analysis</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Database Management Systems I</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 056</td>
<td>Database Management Systems II</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 060</td>
<td>Mobile Apps Programming IPhone</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 063</td>
<td>Mobile Apps Programming - Android</td>
<td>4.0</td>
</tr>
<tr>
<td>WRK 300GW</td>
<td>General Work Experience</td>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 16.0-18.0
Computer Network Technology: Associate in Science (AS)

Associate in Science in Computer Network Technology
The Associate in Science in Computer Networking Technology prepares students to design, administer, maintain, and troubleshoot networks of different sizes. Students learn a diverse array of skills, including specification preparation, network management, network design, equipment and system sales, and software development. Laboratory courses provide students with hands-on experience to demonstrate the principles of enterprise networking. Courses provide learning opportunities for students new to the field, as well as for those who are experienced professionals. Specialized courses are also among the optional electives in this program, available to help students prepare for Cisco Certified Network Associate (CCNA), Cybersecurity, and Microsoft Certified Solutions Associate (MCSA).

Program Learning Outcomes:
Students will design and plan a network infrastructure to support specific user and business requirements.
Students will implement enterprise networks with advanced routing and switching strategies.
Students will manage and troubleshoot enterprise networks.

Career/Transfer Opportunities:
Career opportunities include the following: System Administrator, Network Technician, Network Administrator, and Network Analyst.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (12 units):

Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 012</td>
<td>Introduction to Networking (Network +)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 021</td>
<td>Cisco Network Fundamentals (Cisco-1)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 022</td>
<td>Routing Protocols and Concepts (Cisco-2)</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective (12 units): Complete a minimum of twelve units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 011</td>
<td>Introduction to Computer Hardware and Software (A+)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT0 13</td>
<td>AWS 1 Cloud Practitioner- Foundational</td>
<td>3.0</td>
</tr>
<tr>
<td>CIT0 14</td>
<td>AWS 2 Solutions Architect- Associate</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 016</td>
<td>IT Security and Ethical Hacking</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 017</td>
<td>Cyber Security Essentials</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 018</td>
<td>CCNA Cyber Security Operations</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 023</td>
<td>Scaling Networks (Cisco-3)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 024</td>
<td>Connecting Networks (Cisco-4)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 078</td>
<td>Microsoft Server Essentials 1</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 24.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
DATA ANALYST ASSOCIATE

csit.missioncollege.edu

Data Analyst Associate: Certificate of Achievement (CA)
The Certificate of Achievement in Data Analytics Associate is designed to provide students with knowledge and skills required for a variety of entry level positions in the field of Data Analytics. The program includes foundation courses in Data Analytics and a wide range of skill-builder courses.

Program Learning Outcomes:
- Analyze a problem and identify and define the computing and data requirements appropriate to its solution.
- Apply data analytics techniques and tools to implement and test a specified design.
- Communicate and report data findings and solutions using data presentation and visualization tools.

Career/Transfer Opportunities:
Career opportunities include the following: Computer System Analyst, Data Analyst, Data Warehousing Specialists, Computer and Information Research Scientists, Operations Research Analysts.

Core Requirements (11 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>CIS 007</td>
<td>Introduction to Python Programming</td>
</tr>
<tr>
<td>4.0</td>
<td>CIS 051</td>
<td>Introduction to Data Analysis</td>
</tr>
<tr>
<td>3.0</td>
<td>CIS 055</td>
<td>Introduction to Database and SQL</td>
</tr>
</tbody>
</table>

Elective (7 Units): Complete a minimum of seven units from the following, or any CIS course work

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>CIS 001</td>
<td>Introduction to Computer Science and Tech</td>
</tr>
<tr>
<td>3.0</td>
<td>CIS 056</td>
<td>Database Management Systems II</td>
</tr>
<tr>
<td>1.0</td>
<td>BUS 021L</td>
<td>Intro to Business Computing Lab</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 078B</td>
<td>Business Communication</td>
</tr>
<tr>
<td>1.0</td>
<td>CAP 062B</td>
<td>An Introduction to Microsoft Excel</td>
</tr>
<tr>
<td>2.0</td>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel</td>
</tr>
<tr>
<td>1.0-4.0</td>
<td>WRK 300GW</td>
<td>General Work Experience</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-19.0
Engineering: Associate in Science (AS)

Engineers design and create the technology of the future. They use the principles of math, science, and engineering to design and build new products, or to develop large-scale systems such as transportation systems or a water treatment plant. Engineering problems usually involve teams of people, so engineers must work well with others and communicate effectively. The Associate in Science in Engineering will assist in preparing students for transfer to engineering programs at many four-year universities. Upon completion of the Associate in Science in Engineering, students will possess the knowledge and skills required for upper-division coursework in Engineering.

Program Learning Outcomes:
- Students will analyze and interpret experimental results and/or data to make engineering problem decisions.
- Students will use math, science, and engineering concepts to describe, formulate, and solve engineering problems.
- Students will communicate the results of design and/or analysis orally and through text and graphics.
- Students will work effectively in teams.

Career/Transfer Opportunities:
Career opportunities include the following engineering disciplines: aerospace, architectural, bio-engineering, biomedical, chemical, civil, computer, electrical, environmental, industrial, manufacturing, materials, mechanical, software, and nuclear. More career information can be found at https://www.bls.gov/oes/current/oes170000.htm

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (35 units) Units
- EGR 010 Introduction to Engineering - OR- 4.0
- EGR 010H Introduction to Engineering - Honors 4.0
- MAT 003A Analytic Geometry and Calculus I 5.0
- MAT 003B Analytic Geometry and Calculus II 5.0
- MAT 004A Multivariable Calculus 4.0
- MAT 004B Differential Equations 4.0
- PHY 004A Engineering Physics-Mechanics 5.0
- PHY 004B Engineering Physics-Electricity and Magnetism 4.0
- PHY 004C Engineering Physics-Light and Heat 4.0

Complete one of the following tracks (13-23 units)
Mechanical, Aerospace, Manufacturing Engineering or Civil Engineering Track (22-23 units):
Complete all of the following Units
- CHM 001A General Chemistry - OR- 5.0
- CHM 001AH General Chemistry - Honors 5.0
- EGR 023 Mechanics - Statics 3.0
- EGR 024 Introduction to Circuit Analysis 3.0
- EGR 025 Engineering Graphics and Design 4.0
- EGR 026 Engineering Materials 4.0
- EGR 030 Introduction to Computing for Engineers - OR- 4.0
- MAT 005 Programming and Problem-Solving in MATLAB 3.0

Electrical Engineering Track (13 Units):
Complete all of the following Units
- CHM 001A General Chemistry -OR- 5.0
- CHM 001AH General Chemistry - Honors 5.0
- EGR 024 Introduction to Circuit Analysis 3.0
- EGR 024L Introduction to Circuit Analysis Lab 1.0
- EGR 030 Introduction to Computing for Engineers 4.0

Computer, Software Engineering Track (16 Units):
Complete all of the following Units
- CIS 044 Introduction to Data Structures w/Java 4.0
- EGR 024 Introduction to Circuit Analysis 3.0
- EGR 024L Introduction to Circuit Analysis Lab 1.0
- EGR 030 Introduction to Computing for Engineers 4.0
- MAT 019 Discrete Mathematics 4.0

Required Units for the Major: 48.0-58.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 63.0-76.0
Engineering: Certificate of Achievement (CA)

Engineering Certificate: Engineers design and create the future. They use the principles of math, science, and engineering to design and build new products or to develop large-scale systems such as transportation systems or a water treatment plant. Engineering problems usually involve teams of people, so engineers must work well with others and communicate effectively. The Engineering Certificate is modeled after the statewide Engineering Transfer Preparation Certificate and offers four distinct engineering tracks. It is identical to the Engineering AS degree except all general education degree requirements are omitted. In order to transfer to a 4-year college or university, students who complete one of the certificate tracks will also have to complete the minimum admissions requirements for the intended transfer institution. Upon completion of the Engineering Certificate, students will possess the knowledge and skills required for upper-division coursework in Engineering.

Program Learning Outcomes:
- Analyze and interpret experimental results and/or data to make engineering problem decisions.
- Use math, science, and engineering concepts to describe, formulate, and solve engineering problems.
- Communicate the results of design and/or analysis orally and through text and graphics. Students will work effectively in teams.

Career Opportunities:
Career opportunities for students who have completed baccalaureate degrees in Engineering include the following engineering disciplines: aerospace, architectural, bioengineering, biomedical, chemical, civil, computer, electrical, environmental, industrial, manufacturing, materials, mechanical, software, and nuclear. More career information can be found at bls.gov/oes/current/oes170000.htm

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

<table>
<thead>
<tr>
<th>Core Requirements (35 units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 010 Introduction to Engineering -OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 010H Introduction to Engineering - Honors</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 003A Analytic Geometry and Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003B Analytic Geometry and Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 004A Multivariable Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004B Differential Equations</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY 004A Engineering Physics-Mechanics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004B Engineering Physics-Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY 004C Engineering Physics-Light and Heat</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Complete one of the following tracks (13-23 units)

Mechanical, Aerospace, Manufacturing Engineering or Civil Engineering Track (22-23 units):

Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHM 001A General Chemistry -OR-</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry - Honors</td>
</tr>
<tr>
<td>EGR 023 Mechanics - Statics</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis</td>
</tr>
<tr>
<td>EGR 025 Engineering Graphics and Design</td>
</tr>
<tr>
<td>EGR 026 Engineering Materials</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers -OR-</td>
</tr>
<tr>
<td>MAT 005 Programming and Problem-Solving in MATLAB</td>
</tr>
</tbody>
</table>

Electrical Engineering Track (13 Units):

Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
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</thead>
<tbody>
<tr>
<td>CHM 001A General Chemistry -OR-</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry - Honors</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis</td>
</tr>
<tr>
<td>EGR 024L Introduction to Circuit Analysis Lab</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers</td>
</tr>
</tbody>
</table>

Computer, Software Engineering Track (16 Units):

Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 044 Introduction to Data Structures w/Java</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis</td>
</tr>
<tr>
<td>EGR 024L Introduction to Circuit Analysis Lab</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers</td>
</tr>
<tr>
<td>MAT 019 Discrete Mathematics</td>
</tr>
</tbody>
</table>

Total Required Units: 48.0-58.0
Human Biology: Associate in Science (AS)

The Human Biology Associate in Science degree provides a solid foundation in the biological sciences for students who are seeking entry to nursing and related health occupations. Completion of this degree meets all Biology and Chemistry prerequisites for admission to the LVN and LVN-RN programs, and fulfills many of the lower-division requirements for a variety of baccalaureate degrees in Health Sciences. This degree is not intended for pre-medical, pre-dental, or pre-pharmacy students (see A.S. or AS-T in Biological Sciences instead).

Program Learning Outcomes:
- Students will describe the gross and microscopic structure of the major organs of the human body.
- Students will describe homeostatic control mechanisms of the different body systems, and how they relate to the maintenance of good health.
- Students will compare and contrast commensurable, opportunistic, and pathological relationships between humans and microorganisms.

Career/Transfer Opportunities:
A solid background in human biology is required for many undergraduate majors and careers in the allied-health field.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (15 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 004</td>
<td>Microbiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H</td>
<td>Human Physiology - Honors</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Electives (9 units): Complete a minimum of nine units from the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001</td>
<td>Physical Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010</td>
<td>Introduction to Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010L</td>
<td>Introduction to Biology Lab</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 012</td>
<td>Emerging Infectious Diseases - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO012H</td>
<td>Emerging Infectious Diseases - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014</td>
<td>Introductory Neuroscience - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014H</td>
<td>Introductory Neuroscience - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017</td>
<td>Genetics and Society - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017H</td>
<td>Genetics and Society - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018</td>
<td>The Biology of Cancer - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018H</td>
<td>The Biology of Cancer - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 022</td>
<td>Anatomy and Physiology for Allied Health Workers</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 001A</td>
<td>General Chemistry I - OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH</td>
<td>General Chemistry I - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 030A</td>
<td>Fundamentals of Chemistry I</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 060</td>
<td>Survey of General, Organic, and Biological Chemistry</td>
<td>4.0</td>
</tr>
<tr>
<td>HOC 001</td>
<td>Medical Terminology</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR015H</td>
<td>Human Nutrition - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 040</td>
<td>Nutrition and Disease - OR-</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR040H</td>
<td>Nutrition and Disease</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 24.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
IT Helpdesk Technician: Certificate of Achievement (CA)

The goal of the Certificate of Achievement in IT helpdesk technician is designed to provide students with knowledge and skills required for a variety of entry level positions in the field IT support. The program includes foundation courses that aligned with industry certificates and a wide range of skill-builder courses.

Program Learning Outcomes:
- Install, configure and support computing devices and software.
- Connect, maintain and support computing devices on a network.
- Advise and support users in their IT needs.

Career/Transfer Opportunities:
Career opportunities include the following: Computer User Support Specialist, Computer Network Support Specialist, Network and Computer System Administrators.

Core Requirements (12 units):
- CIT 011 Introduction to Computer Hardware and Software, 4.0 units
- CIT 012 Introduction to Networking, 4.0 units
- CIS 045 Linux Essentials, 4.0 units

Elective (6 units): Complete a minimum of 6 units from the following, or any CIT course work
- CIT 017 Cyber Security Essentials, 4.0 units
- CIT 078 Microsoft Server Essentials, 4.0 units
- CIT 021 Introduction to Cisco Networks, 4.0 units
- BUS 078B Business Communication, 3.0 units
- BUS021L Intro to Business Computer Lab, 1.0 unit
- WRK300GW General Work Experience, 1.0-4.0 units

Total Required Units: 18.0-20.0
Liberal Arts: Natural Science and Mathematics: Associate in Arts (AA)

The Associate in Arts in Liberal Arts with an emphasis in Science and Math provides students an opportunity to develop knowledge of scientific theories, concepts and data about both living and non-living systems. The courses in this area also emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. In addition, these courses emphasize experimental methodology, testing hypotheses, and the power of systematic questioning. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of elementary algebra.

Program Learning Outcomes:
- Demonstrate an ability to think logically and critically in solving problems.
- Demonstrate an understanding of experimental methodology, testing of hypothesis, the power of systematic questioning, and influence of the scientific method in society.

Career/Transfer Opportunities:
The program is intended for students who are considering transfer, but have not decided on a major; students who are required to complete a degree for job promotion; or students who may wish to further their education and are considering a major that is interdisciplinary in focus.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (18 units):
Complete a minimum of eighteen units from the following

All courses approved for California State University General Education Certification and Certificate of Achievement Requirements (CSU GE-B) Area B.

At least one mathematics course and one science course must be included.

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units 60.0
Mathematics: Associate in Science for Transfer (AS-T)

Associate in Science in Mathematics for Transfer (AS-T) is designed to provide a clear pathway to a CSU institution for students who plan to transfer and complete a CSU major or baccalaureate degree in Mathematics. California Community College students who are awarded an Associate in Arts in Mathematics for Transfer (AS-T in Mathematics) are guaranteed admission with junior standing somewhere in the CSU system and given priority admission consideration to their local CSU institution or to a program that is deemed similar to their community college major. This priority does not guarantee admission to specific majors or institutions. Mathematics is a multifaceted subject of great beauty and application.

Mathematics courses provide the student with a universal language used to study quantities and relationships in all fields. Through the study of mathematics, the student develops the ability to think logically and abstractly, as well as developing the problem solving and computational skills necessary for success in any field of study.

Program Learning Outcomes:
- Solve mathematical problems using techniques appropriate to the course content and level of study.
- Solve applied problems using mathematical methods appropriate to the course content and the level of study.
- Apply technology to analyze and solve problems.
- Prepare students to transfer to an accredited 4-year college or university and succeed in upper division math courses to complete their Bachelor Degree in Mathematics.

Career/Transfer Opportunities:
Career opportunities include the following: teaching, education, researcher, computer programming, and statistical analysis.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Required Courses:
- MAT 003A: Analytic Geometry and Calculus I -OR- 5.0
- MAT 003AH: Analytic Geometry and Calculus I – Honors 5.0
- MAT 003B: Analytic Geometry and Calculus II - 5.0
- MAT 004A: Multivariable Calculus 4.0

List A. (4 units) Complete one (1) course from the following:
- MAT 004B: Differential Equations 4.0
- MAT 004C: Linear Algebra 4.0

List B. (4 units) Complete one (1) course from the following:
- CIS 037A: Introduction to C Programming 4.0
- CIS 043: Software Development With Java 4.0
- MAT 010: Elementary Statistics -OR- 4.0
- MAT 010H: Elementary Statistics- Honors 4.0
- MAT 019: Discrete Mathematics 4.0

Required Units for the Major: 22.0
Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0
Mathematics: Associate in Science (AS)

Associate in Science in Mathematics is a multifaceted subject of great beauty and application. Mathematics courses provide the student with a universal language used to study quantities and relationships in all fields. Through the study of mathematics, the student develops the ability to think logically and abstractly, as well as developing the problem solving and computational skills necessary for success in any field of study.

**Program Learning Outcomes:**

- Solve mathematical problems using techniques appropriate to the course content and level of study.
- Solve applied problems using mathematical methods appropriate to the course content and the level of study.
- Apply technology to analyze and solve problems.

**Career/Transfer Opportunities:**

Career opportunities include the following: teaching, education, researcher, computer programming, and statistical analysis.

**To earn this degree, students must meet the following requirements:**

1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

**Core Requirements (22 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 003A</td>
<td>Analytic Geometry and Calculus I – OR-</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003AH</td>
<td>Analytic Geometry and Calculus I – Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003B</td>
<td>Analytic Geometry and Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 004A</td>
<td>Multivariable Calculus</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004B</td>
<td>Differential Equations – OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004C</td>
<td>Linear Algebra</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics – OR-</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>Elementary Statistics – Honors</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Elective List A (3-5 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 001</td>
<td>Astronomy</td>
<td>3.0</td>
</tr>
<tr>
<td>AST 003</td>
<td>Astronomy with Lab</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 010</td>
<td>Introduction to Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM 002</td>
<td>Introductory Chemistry</td>
<td>3.0</td>
</tr>
<tr>
<td>PHY 002A</td>
<td>General Physics - Mechanics and Thermodynamics</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Elective List B (3-4 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 008</td>
<td>Advanced Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 037A</td>
<td>Introduction to C Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 040</td>
<td>C++ Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043</td>
<td>Software Development With Java</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 030</td>
<td>Introduction to Computing for Engineers</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 005</td>
<td>Introduction to MATLAB</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 019</td>
<td>Discrete Mathematics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Required Units for the Major:** 28.0-31.0

Completion of General Education Requirements and electives as needed to reach 60 units.

**Total Required Units:** 60.0
Mechatronic Technology: Associate in Science (AS)

Mechatronic technology is an interdisciplinary field that combines the study of mechanics, electronics, automation, and computers. The Associate in Science in Mechatronic Technology is designed to provide students with knowledge and skills required for a variety of positions in the following industries: Advanced Manufacturing/Semiconductor, Electrical/Electronics, Mechanical/Quality, Transportation/Logistics, Electric and Hybrid Vehicles, Medical Equipment, Biotechnology, Aerospace/Defense, and Construction. The program includes a wide range of skill-builder courses.

Program Learning Outcomes:
- Integrate electrical, electronic, and mechanical systems and devices.
- Demonstrate written and verbal communication skills through technical documentation and oral presentations.
- Troubleshoot and repair electrical, electronic, and mechanical systems and devices.

Career/Transfer Opportunities:
Career opportunities include the following: robotics technician, field service technician, industrial maintenance technician, engineering technician, electromechanical technician, research and development technician.

To earn this degree, students must meet the following requirements:
1. Completion of 60 degree applicable units with an overall GPA of 2.0.
2. Completion of a minimum of 18 semester units in the major with a grade of C (or P) or better.
3. Completion of the AA/AS Graduation Requirements, CSU GE-B or IGETC.

Core Requirements (12-14 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>EGR 025 Engineering Graphics and Design</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 010 Introduction to Technology and Careers</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 012 Electronic Systems Measurement and Troubleshooting</td>
</tr>
<tr>
<td>4.0</td>
<td>MAT 001 College Algebra -OR-</td>
</tr>
<tr>
<td>6.0</td>
<td>MAT 002 Pre-Calculus Algebra and Trigonometry</td>
</tr>
</tbody>
</table>

Elective (10 units):
Complete a minimum of ten units from the following

<table>
<thead>
<tr>
<th>Units</th>
</tr>
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<tbody>
<tr>
<td>2.0</td>
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<tr>
<td>2.0</td>
</tr>
<tr>
<td>1.0-2.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 22.0-30.0

Completion of General Education Requirements as needed to reach 60 units.

Total Required Units: 60.0
Mechatronic Technology: Certificate of Achievement (CA)

Mechatronic technology is an interdisciplinary field that combines the study of mechanics, electronics, automation, and computers. Certificate of Achievement in Mechatronic Technology prepares students to work in various industries. Depending on the course track selected, students gain specialized technical skills in electrical, electronic and/or mechanical industry environment.

Program Learning Outcomes:
- Analyze and integrate electrical, electronic, and mechanical systems and devices.
- Demonstrate written and verbal communication skills through technical documentation and oral presentations.
- Troubleshoot and repair electrical, electronic, and mechanical systems and devices.

Career Opportunities:
Career opportunities include the following: robotics technician, field service technician, industrial maintenance technician, engineering technician, electromechanical technician, research and development technician.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (4 units): Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>MTT 010 Introduction to Technology and Careers</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 012 Electronic Systems Measurement and Troubleshooting</td>
</tr>
</tbody>
</table>

Elective (14 units): Complete a minimum of 14 units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>EGR 025 Engineering Graphics and Design</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 020 PLC Process Control Systems</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 022 PLC and Robotic System Components</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 030 Electrical Motors and Control Systems</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 032 Microcontroller Systems</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 034 Fluid Power Systems</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 040 Analog Circuits and Semiconductor Devices</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 042 Digital Logic Systems</td>
</tr>
<tr>
<td>2.0</td>
<td>MTT 050 Digital Manufacturing</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-24.0
Nutrition and Dietetics: Associate in Science in for Transfer (AS-T)

The Associate in Science in Nutrition and Dietetics for Transfer introduces students to the principles and methodologies used in the study of nutrition and dietetics. Students will acquire the foundational knowledge necessary to pursue a baccalaureate degree in nutrition and dietetics. Graduation requirements.

Program Learning Outcomes:
- Explain physiological processes such as digestion, absorption, transport and metabolism of nutrients.
- Critically analyze information on nutrition and separate scientifically supported information from misinformation.
- Analyze and explain the relationship between diet, lifestyle and health outcomes, within the framework of cultural and societal influences.

Career/Transfer Opportunities:
Students with degrees in nutrition and dietetics find employment within a wide range of organizations, such as medical facilities, research labs, government agencies, universities, pharmaceutical companies, and the food industry. This degree is also an excellent preparation for students planning to continue training in medicine, public health and/or other allied health sciences.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C or better.
2. Completion of a maximum of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).
Core Requirement Courses (27 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PHY 004A</td>
<td>Engineering Physics-Mechanics</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004B</td>
<td>Engineering Physics-Electricity and Magnetism</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY 004C</td>
<td>Engineering Physics-Light and Heat</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 003A</td>
<td>Analytic Geometry and Calculus I</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003B</td>
<td>Analytic Geometry and Calculus II</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 004A</td>
<td>Multivariable Calculus</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 27.0

Completion of General Education Requirements and electives as needed to reach 60 units.

Total Required Units: 60.0

Program Learning Outcomes:
- Apply the scientific method to investigate physics problems by collecting and quantitatively analyzing data.
- Understand the principles of physics and be able to apply these theoretical and analytical principles to real world situations.

Career/Transfer Opportunities:
Career opportunities include the following: astronomer, architect, chemist, geologist, engineer, physicist, physical scientist, meteorologist and oceanographer.

To earn this degree, students must meet the following requirements:
1. Completion of the following major courses with grades of C (or P) or better.
2. Completion of 60 CSU-transferable semester units with a grade point average of at least 2.0; and
3. Certified completion of either the California State University General Education Breadth pattern (CSU GE-B) or the Intersegmental General Education Transfer Curriculum (IGETC).

Note: Completing courses that satisfy CSU’s U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.
Web Design: Certificate of Achievement (CA)

Certificate of Achievement in Web Design The Certificate of Achievement in Web Design is intended to provide the necessary basic technical and creative skills for those planning to enter this growing field of visual communication. The program will prepare students for positions in the web design field such as entry level web designers, user experience designers, content developers, and information architects. Other examples where students might find employment using their creative problem-solving and design skills might include website development, interaction design, and the creation of interactive media such as digital publications, marketing presentations, or interactive learning products. The students, by the end of the program, are expected to understand and apply the basic principles of visual communication as applied to Interactive and Web Design, along with the basic coding skills and software skills used in web design and related fields. The certificate includes training in basic front-end coding. This program differs from the Web Development Certificate in its emphasis on the design and strategy aspects or web production, whereas the Web Development includes more training on back-end (server-side) coding. The classes in the core requirements should be taken in the general order that they are listed.

Program Learning Outcomes:
- Identify, explain and apply design principles such as typography, color and layout to the creation and evaluation of web designs.
- Generate documents related to User Experience Design such as wireframes and personas.
- Apply basic front end coding skills, technical concepts and best practices used in web design and development at an intermediate level.

Career/Transfer Opportunities:
Career opportunities include the following: web design, user experience design, interaction design, web production, interface design, information architecture, visual design, application design, and mobile design.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (15 units): Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 035 Web Design and Development 1</td>
<td>Beginning Graphic Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 046 Web Design and Development 2</td>
<td>Web Design and Development</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 070 User Experience, Interface, and Multimedia Design</td>
<td>User Experience, Interface, and Multimedia Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 072 Digital Imaging and User Interface Design</td>
<td>Digital Imaging and User Interface Design</td>
</tr>
</tbody>
</table>

Electives List A (6 units): Take six units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>GDS 047 Web Animation</td>
<td>Web Animation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 049 WordPress and Content Management Systems( - Check Title)</td>
<td>WordPress and Content Management Systems( - Check Title)</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 051 Mobile Application and Web Development with Web Standards</td>
<td>Mobile Application and Web Development with Web Standards</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064 Introduction to Adobe Photoshop</td>
<td>Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076 Emerging Trends in Interaction Design</td>
<td>Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 077 Interactive Projects &amp; Explorations in UXD</td>
<td>Interactive Projects &amp; Explorations in UXD</td>
</tr>
</tbody>
</table>

Electives List B. (3 units): Take three units from the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.0</td>
<td>ART 031A Beginning Drawing</td>
<td>Beginning Drawing</td>
</tr>
<tr>
<td>3.0</td>
<td>ART 033A Basic Design: Two-Dimensional</td>
<td>Basic Design: Two-Dimensional</td>
</tr>
<tr>
<td>3.0</td>
<td>BUS 084 Internet Marketing</td>
<td>Internet Marketing</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 012 History of Photography</td>
<td>History of Photography</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 022 Digital Media for Marketing</td>
<td>Digital Media for Marketing</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 047 Web Animation</td>
<td>Web Animation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 049 WordPress and Content Management Systems( - Check Title)</td>
<td>WordPress and Content Management Systems( - Check Title)</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 051 Mobile Application and Web Development with Web Standards</td>
<td>Mobile Application and Web Development with Web Standards</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 055A Design Agency and Branding</td>
<td>Design Agency and Branding</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 062 Digital Illustration with Adobe Illustrator</td>
<td>Digital Illustration with Adobe Illustrator</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 064 Introduction to Adobe Photoshop</td>
<td>Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 069 3D for Designers and Illustrators</td>
<td>3D for Designers and Illustrators</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 073 Digital Photography</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 074 Digital Video Production 1</td>
<td>Digital Video Production 1</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 076 Emerging Trends in Interaction Design</td>
<td>Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 077 Interactive Projects &amp; Explorations in UXD</td>
<td>Interactive Projects &amp; Explorations in UXD</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 085 Professional Portfolio and Design Career Preparation</td>
<td>Professional Portfolio and Design Career Preparation</td>
</tr>
<tr>
<td>3.0</td>
<td>GDS 089 JavaScript 1</td>
<td>JavaScript 1</td>
</tr>
</tbody>
</table>

Total Required Units: 24.0
Web Development: Certificate of Achievement (CA)

Web Development Businesses, schools, community groups and other organizations all need a presence on the web, and the need for skilled web developers continues with the increasing volume of online content. Web developers are critical to creating and maintaining this online content. This certificate focuses on the scripting and programming used on the web. A web developer may focus on the back end or server-side of web delivery to ensure that a website functions correctly and efficiently, or on the front end helping to create interactions for users.

Program Learning Outcomes:

- Develop front end code for interactive websites using technologies and languages including HTML, CSS, JavaScript and related front-end frameworks.
- Identify, explain, and apply current technologies in back-end web development such as SQL, CMS Systems, and back-end frameworks as applied to the creation of websites.

Career/Transfer Opportunities:

Career opportunities include the following: front-end web development, back-end web development, content management, web production, information architecture, application development, and mobile development.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (12 units): Complete all of the following.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 045</td>
<td>Web Design and Development 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046</td>
<td>Web Design and Development 2</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089</td>
<td>JavaScript 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089B</td>
<td>JavaScript 2 and Web Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Electives (minimum 9 units): Complete a minimum of nine units from the following.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 047</td>
<td>Web Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 049</td>
<td>WordPress and Content Management Systems</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 051</td>
<td>Mobile Application and Web Development with Web Standards</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 001</td>
<td>Introduction to Computer Science and Technology</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 008</td>
<td>Advanced Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 037A</td>
<td>Introduction to C Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 040</td>
<td>C++ Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 044</td>
<td>Introduction to Data Structures Using Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 045</td>
<td>Linux Essentials I</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 047</td>
<td>Linux System Administration</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043</td>
<td>Software Development with Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Database Management Systems I</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 056</td>
<td>Database Management Systems II</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS 063</td>
<td>Mobile Apps Programming - Android</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 21.0-22.0
VTA Apprenticeship Program

Programs of Study

- Coach Operator (Certificate)
- Light Rail Operator (Certificate)
- Overhead Line Worker (Certificate)
- Public Transit Leadership (Certificate)
- Service Mechanic (Certificate)
- Track Worker Apprentice (Certificate)
Coach Operator: Certificate of Achievement (CA)

Certificate of Achievement in Coach Operator Upon successful completion of 18 units of course requirements and 2000 hours of related work experience, graduates will be eligible for a Certificate of Completion of Coach Operator Apprenticeship from two government entities: the State of California Department of Industrial Relations, Division of Apprenticeship Standards, and the US Department of Labor, Employment and Training Administration, Office of Apprenticeship. Graduates are employed as Coach Operators, an entry-level position in the mass transit field. A Coach Operator employed by a transit agency can readily transfer/promote into a wide range of transit career positions, if qualified.

Program Learning Outcomes:
- Demonstrate the skills needed to immediately contribute to quality, on-time service delivery to the riding public in a dynamic public transit environment.
- Display a sound command of both technical (driving) and interpersonal skills in coach operation and passenger relations.
- Interact effectively with a diverse community of coworkers and transit customers in order to meet and exceed service delivery objectives.

Career/Transfer Opportunities:
Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, coach operator graduates find employment as coach operators, light rail operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (18 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.0</td>
<td>TRN 101</td>
</tr>
<tr>
<td>2.0</td>
<td>TRN 401</td>
</tr>
<tr>
<td>5.0</td>
<td>TRN 402</td>
</tr>
<tr>
<td>1.0</td>
<td>TRN 403</td>
</tr>
<tr>
<td>1.0</td>
<td>TRN 404</td>
</tr>
<tr>
<td>1.0</td>
<td>TRN 405</td>
</tr>
<tr>
<td>6.0</td>
<td>WRK 300TN</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Light Rail Operator: Certificate of Achievement (CA)

Certificate of Achievement in Light Rail Operator Upon successful completion of 21 units of course requirements and 2000 hours of related work experience, graduates of the Certificate of Achievement in Light Rail Operator will be eligible for a Certificate of Completion of Light Rail Operator Apprenticeship from two government entities: the State of California Department of Industrial Relations, Division of Apprenticeship Standards, and the US Department of Labor, Employment and Training Administration, Office of Apprenticeship. Graduates are employed as Light Rail Operators, an entry-level position in the mass transit field. A Light Rail Operator employed by a transit agency can readily transfer/promote into a wide range of transit career positions, if qualified.

Program Learning Outcomes:
- Demonstrate the skills needed to safely operate light rail vehicles on multiple transit lines in a dynamic public transit environment, while maintaining on-time performance.
- Demonstrate the skills needed to safely operate light rail vehicles on multiple transit lines in a dynamic public transit environment, while maintaining on-time performance.
- Display a sound command of radio, signals, switches, and physical communication systems skills in light rail vehicle operation.

Career/Transfer Opportunities:
Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, light rail operator graduates find employment as light rail operators, coach operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

<table>
<thead>
<tr>
<th>Core Requirements (21 units): Complete all of the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN101 Foundations of Public Service for Transit Workers</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN501 Light Rail Operator Safety Certification</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN502 Light Rail Operator Yard Certification</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN503A Light Rail Infrastructure: Mainline Operation Certification</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN503B Light Rail Infrastructure: Blue Line Familiarization</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN503C Light Rail Infrastructure: Orange Line Familiarization</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN503D Light Rail Infrastructure: Green Line Familiarization</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN504 Light Rail Train Operation</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK300TN Occupational Work Experience for the Transportation Industry</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 21.0

408-855-5179 | GC-217H
jeffrey.pallin@missioncollege.edu
Dean: Jeffrey Pallin
Overhead Line Worker: Certificate of Achievement (CA)

Upon successful completion of 25.5 units of course requirements and 2000 hours of related work experience, [students will be eligible for the Overhead Line Worker Apprenticeship approved by the State of California Department of Industrial Relations, Division of Apprenticeship Standards.] Graduates are employed as Overhead Line Workers, a high-level Way, Power, and Signal maintenance position in the mass transit field. An Overhead Line Worker working at a transit agency can train and promote to Overhead Line Worker Foreperson as the next step in the Way, Power, and Signal maintenance career path. Depending on qualifications, the Overhead Line Worker can also apply for a range of other transit occupations.

Program Learning Outcomes:
- Perform inspection, maintenance and repair of major overhead line components of a light rail system; and maintain tools, equipment, and vehicles in good operational condition.
- Demonstrate effective safety protocols in a high voltage rail system environment.
- Interact effectively with a diverse community of coworkers in order to meet and exceed service delivery objectives.

Career/ Transfer Opportunities:
Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, coach operator graduates find employment as coach operators, light rail operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (25.5 - 28.5 units):
Complete all of the following

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 141</td>
<td>Principles of Electricity and Test Equipment</td>
<td>3.0</td>
</tr>
<tr>
<td>TRN 142</td>
<td>Electrical Safety for the Trades</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 143</td>
<td>Theory and Power Components</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 144</td>
<td>Traction Power Safety Practices</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 151</td>
<td>Overhead Line Worker Apprenticeship Fundamentals I</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 152</td>
<td>Overhead Line Worker Apprenticeship Fundamentals II</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 153</td>
<td>Overhead Line Worker Apprenticeship Fundamentals III</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 154</td>
<td>Catenary Safe Work Practices</td>
<td>5.0</td>
</tr>
<tr>
<td>TRN 155</td>
<td>Mobile Crane - Boom Truck</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300TN</td>
<td>Occupational Work Experience for the Transportation Industry</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 25.5-28.5
Certificate of Achievement in Public Transit Leadership: Certificate of Achievement (CA)

Upon successful completion of 18 units of course requirements, graduates will be qualified to perform leadership duties at the field level across multiple job classifications within the Operations Division of a transit agency. These duties include apprenticeship mentoring/instruction; and/or field level positions with leadership responsibilities, such as lead worker, foreperson, dispatcher, or supervisor.

Program Learning Outcomes:
- Demonstrate basic working knowledge of the functions, inter-relationships, and teamwork required for effective Transit Operations functioning.
- Utilize positive methods and take responsibility for solving problems at the field level whenever possible, within the chain of command.
- Interact effectively with a diverse community of coworkers in order to meet and exceed service delivery objectives.

Career Opportunities/Transfer Opportunities:
Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, coach operator graduates find employment as coach operators, light rail operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.
Service Mechanic Apprenticeship: Certificate of Achievement (CA)

Certificate of Achievement in Service Mechanic Apprenticeship Upon successful completion of 33.5 units of course requirements and 2000 hours of related work experience, graduates will be eligible for a Certificate of Completion, Service Mechanic Apprenticeship from the State of California Department of Industrial Relations, Division of Apprenticeship Standards; and a Certificate of Completion, Automotive Technician Specialist (Service Mechanic) Apprenticeship from the US Department of Labor, Employment and Training Administration, Office of Apprenticeship. Graduates are employed as Service Mechanics, an entry-level maintenance mechanic position in the mass transit field. A Service Mechanic working at a transit agency can train and promote to Transit Mechanic or Overhaul and Repair Mechanic as the next step in the maintenance mechanic career path. The Service Mechanic can also apply for a wide range of other transit occupations, if qualified.

Program Learning Outcomes:

- Demonstrate the skills needed to perform minor repair, inspection, and lubrication of public transit vehicles.
- Assist transit mechanics and/or other journey level maintenance mechanics in more difficult mechanical maintenance work.
- Interact effectively with a diverse community of coworkers in order to meet and exceed service delivery objectives.

Career/Transfer Opportunities:

Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, coach operator graduates find employment as coach operators, light rail operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (33.5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 201</td>
<td>Service Mechanic: Orientation &amp; Safety</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 202</td>
<td>Service Mechanic: Tools &amp; Fasteners</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 203A</td>
<td>Service Mechanic: Electrical/Electronics 1</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 203B</td>
<td>Service Mechanic: Electrical/Electronics 2</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 204</td>
<td>Service Mechanic: Air Brakes</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 205</td>
<td>Service Mechanic: Transmission</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 206</td>
<td>Service Mechanic: Diesel Engine</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 207</td>
<td>Service Mechanic: Hybrid Familiarization</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 208</td>
<td>Service Mechanic: I/O Controls</td>
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</tr>
<tr>
<td>TRN 209</td>
<td>Service Mechanic: Preventative Maintenance - PMI</td>
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</tr>
<tr>
<td>TRN 210</td>
<td>Service Mechanic: Overhaul &amp; Repair Orientation</td>
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</tr>
<tr>
<td>WRK 300TN</td>
<td>Occupational Work Experience for the Transportation Industry</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Total Required Units: 33.5
Track Worker Apprenticeship: Certificate of Achievement (CA)

Certificate of Achievement in Track Worker Apprenticeship Upon successful completion of 18.5 units of course requirements and 2000 hours of related work experience, graduates will be eligible for a Certificate of Completion: Track Worker Apprenticeship from the State of California Department of Industrial Relations, Division of Apprenticeship Standards. Graduates are employed as Track Workers, an entry level Way, Power, and Signal maintenance position in the mass transit field. A Track Worker Mechanic working at a transit agency can train and promote to Senior Track Worker as the next step in the Way, Power, and Signal maintenance career path. Depending on qualifications, the Track Worker can also apply for a wide range of other transit occupations.

Program Learning Outcomes:
- Perform inspection, maintenance and repair of major track components of a light rail system; and keep general track area clean and in good operational condition.
- Demonstrate effective safety protocols in a high voltage rail system environment.
- Interact effectively with a diverse community of coworkers in order to meet and exceed service delivery objectives.

Career/Transfer Opportunities:
Career opportunities for qualified persons entering the public transit industry are very diverse. Depending on the student’s career interest and courses taken, coach operator graduates find employment as coach operators, light rail operators, dispatchers, supervisors; and are eligible to transfer to other public transit careers such as maintenance, scheduling, or information technology (IT).

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better.

Core Requirements (18.5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 121</td>
<td>Way, Power, &amp; Signal Maintenance Core Training I</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 122</td>
<td>Way, Power, &amp; Signal Maintenance Core Training II</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 123</td>
<td>Way, Power, &amp; Signal Maintenance Core Training III</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 131</td>
<td>Basic Principles of Track Maintenance I</td>
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</tr>
<tr>
<td>TRN 132</td>
<td>Basic Principles of Track Maintenance II</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 133</td>
<td>Advanced Principles of Track Maintenance I</td>
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<tr>
<td>TRN 134</td>
<td>Advanced Principles of Track Maintenance II</td>
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</tr>
<tr>
<td>WRK 300TN</td>
<td>Occupational Work Experience for the Transportation Industry</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.5
Understanding Advisories and Course Requisites
As students read about Mission College courses in the College Catalog or in the Class Schedule they will often see indications about advisories or course requisites. The information below should help you better interpret these indicators.

Algebra Skills Advisories & Prerequisites
Some courses will have an advisory or prerequisite of Elementary Algebra Skills. This means students have completed a course such as High School Algebra I, Integrated Math I (or an equivalent course at a college) or acquired the skills through other means. Mission College has offered an elementary algebra course, MAT 903, which returning students may have completed. Some courses will have an advisory or prerequisite of Intermediate Algebra Skills. This means students have completed a course such as High School Algebra II, Integrated Math III (or an equivalent course at a college) or acquired the skills through other means. Mission College has offered an intermediate algebra course, MAT 000C, which returning students may have completed.

Advisories
Course advisories are placed on courses as a recommendation that a student has completed another Mission College course prior to enrollment, but it is not required. Students may also feel confident they are prepared for the course if they have completed a similar course to the advisory course at another college, or if they believe they have acquired the knowledge or skills learned in the advisory course through other means.

Prerequisites
Courses at Mission College have prerequisites that mandate students to either have successfully completed another Mission College course or fulfill specific requirements before enrolling in the desired course.

Corequisites
Corequisites are placed on courses to require students to enroll simultaneously in the courses. Sometimes a course is indicated as a Corequisite or Prerequisite which permits the student to enroll if they have previously completed the prerequisite course or are enrolling in it simultaneously.

Antirequisites
An Antirequisite means a student cannot enroll and receive credit for this course, if they have already received credit for the antirequisite course. Students who have questions about or need assistance with meeting requisites can get help from Placement and Assessment Services, Admissions and Records, Counseling, or the academic department in which the course is offered.

Reading the Requisite Requirements
Simple Requisites: Many requisites are very easy to understand. In the example below, a student must have completed or be currently taking and scheduled to complete ACC001A, or work with Placement and Assessment Services to clear the prerequisite through alternative means, before enrolling in ACC001B for an upcoming term.

ACC 001B MANAGERIAL ACCOUNTING 4.0 UNITS
Prerequisite: ACC 001A

More Than One Way to Meet the Requisite: In some cases, students have options in how to meet a requisite. In the example below a student can meet the prerequisite for BIO 001B by completing either BIO 001A or BIO 001AH.

BIO 001B GENERAL BIOLOGY: ORGANISMS 5.0 UNITS
Prerequisite: BIO 001A or BIO 001AH

More Than One Requisite: Some courses may have more than one requisite. In the example below the student must meet two prerequisite, MAT 003B and PHY 004B. In addition, the student is advised (but not required) to have completed MAT 004A, before enrolling in EGR 024.

EGR 024 INTRODUCTION TO CIRCUIT ANALYSIS 3.0 UNITS
Prerequisite: MAT 003B and PHY 004B
Advisory: MAT 004A

Complex Requisites: Occasionally, requisites can be complex. When this happens, parenthesis are used to help communicate the complexities. When you see the parenthesis, you should interpret the information within them as a block before considering the information outside the parenthesis. In the example below, a student must complete CHM 001A or CHM 001AH (but not both) as well as complete PHY 004A prior to enrollment in EGR 026.

EGR 026 ENGINEERING MATERIALS 4.0 UNITS
Prerequisite: (CHM 001A or CHM 001AH) and PHY 004A

One of the most complex requisites is for BIO 004, where a set of double parenthesis exist. Starting from the left, there is a set of parenthesis indicating a student can choose between four different options to meet the first prerequisite. The student can complete BIO011 or BIO01A or BIO022 or BIO010 and BIO010. Because BIO010 and BIO010L are in an additional set of parentheses this information is to be taken as a block. Three of the four options can be met with a single course, while the fourth option requires completion of two courses. Yet another set of parentheses indicate a student can choose between three different options to meet a second prerequisite. In this case the student must complete one of three possible chemistry course.

BIO 004 MICROBIOLOGY 5.0 UNITS
Prerequisite: ((BIO010 and BIO010L) or BIO011 or BIO001A or BIO022) and (CHM 003A or CHM 001A or CHM 060)
ACCOUNTING (ACC)

ACC 001A  FINANCIAL ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: University of California, California State University
This is the study of accounting as an information system, examining why it is important and how it is used by investors, creditors, and others to make decisions. The course covers the accounting information system, including recording and reporting of business transactions with a focus on the accounting cycle, the application of generally accepted accounting principles, the financial statements, and statement analysis. Included are issues relating to asset, liability, and equity valuation, revenue and expense recognition, cash flow, internal controls, and ethics. This course is approved for credit by exam. Grade only. C-ID # ACCT 110.

ACC 001B  MANAGERIAL ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Advisory: Elementary Algebra Skills
Acceptable for credit: University of California, California State University
This is the study of how managers use accounting information in decision-making, planning, directing operations, and controlling. The focus is on cost terms and concepts, cost behavior, cost structures and cost-volume-profit analysis. Included are issues relating to cost systems, cost control, profit planning, and performance analysis in manufacturing and service environments. Grade only. C-ID # ACCT 120.

ACC 023  SMALL BUSINESS ACCOUNTING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is designed as a non-theoretical, practical approach to accounting with special emphasis on accounting for the smaller business establishments including the basic bookkeeping cycle, petty cash, bank reconciliations, and payroll accounting. Pass/No Pass Option.

ACC 033  FORECASTING FINANCIAL STATEMENTS USING EXCEL  1.5 UNITS
Total Lecture: 27 hours
Prerequisite: ACC 001A
Acceptable for credit: California State University
In this course students learn how Excel is a useful tool in analyzing and reporting accounting information. Students learn basic and intermediate Excel functions as they prepare key financial statements, account reconciliations, and analyze records such as inventory, long-term assets, and sales. Excel topics start with basic tools including copying, pasting, printing, modifying cells, and formatting, then progress to formulas, functions, worksheet management, pivot tables, and conditional formatting. Pass/No Pass Option.

ACC 034  BUSINESS FINANCIAL PLANNING USING EXCEL  1.5 UNITS
Total Lecture: 27 hours
Prerequisite: ACC 001A
Acceptable for credit: California State University
This course covers financial planning and analysis models used in accounting and business, while teaching intermediate and advanced Excel commands. Students build Excel spreadsheet models for loan amortization, depreciation, break even analysis, operating and capital budgeting, and financial statements analysis. Key Excel skills covered include working with tables, structured references, a sample of logical and financial functions, macros, charts, and data analysis tools such as Goal Seek. Pass/No Pass Option.

ACC 046  PERSONAL FINANCE  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: High School Algebra I, or equivalent elementary algebra skills.
Acceptable for credit: University of California (Pending), California State University
Fundamentals of personal finance including financial planning, money management, income and asset protection, and investments. Course material covered includes calculations and problem solving related to budgeting, managing income taxes, building and maintaining good credit, large personal assets purchases, managing property and liability risk, investment fundamentals, and retirement and estate planning. Pass/No Pass Option.

ACC 051A  TAXATION OF INDIVIDUALS  4.0 UNITS
Total Lecture: 72 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: California State University
This course covers Federal and California income tax laws and preparation as related to individuals and small business entities. Topics include income tax theory, law, and preparation of common tax forms for individuals. Grade Only.

ACC 051B  TAXATION OF BUSINESS ENTITIES  3.0 UNITS
Total Lecture: 54 hours
Advisory: ACC 051A and Elementary Algebra Skills
Acceptable for credit: California State University
This course, through problems and case studies, develops a basic understanding of the taxation principles applied to partnerships, corporations, estates and trusts with an emphasis on tax research and written communication skills. Grade only.

ACC 052  PAYROLL AND BUSINESS TAX ACCOUNTING  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: ACC 001A
Advisory: Elementary Algebra Skills
Acceptable for credit: California State University
This course offers a thorough study of payroll preparation, payroll taxes, sales and use taxes, and property taxes. Basic payroll procedures used in business are stressed. Various manual and automated methods of payroll preparation are presented. Grade only.

ACC 057A  COST ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Advisory: ACC 058A and Elementary Algebra Skills
Acceptable for Credit: California State University
The course provides a thorough presentation of cost accounting terminology and concepts, and develops a basic facility in cost accounting techniques and systems. Emphasis is placed on the use of cost accounting data rather than data accumulation. The course covers job order costing, process costing, standard costing, activity-based costing, budgeting, flexible budgeting, cost volume profit analysis, incremental and relevant costing, product pricing, the balanced scorecard, capital budgeting, and management accounting ethics. Grade only.

ACC 058A  INTERMEDIATE ACCOUNTING I  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Advisory: ACC 058A and Elementary Algebra Skills
Acceptable for credit: California State University
This course provides a comprehensive study of liabilities, formation and changes in stockholders' equity, statement of cash flows, pension plans, leases, earnings per share, accounting for income taxes, and accounting changes and corrections. Current standards and pronouncements are presented. Financial statement analysis also is reviewed. Grade only.
ACC 058B  INTERMEDIATE ACCOUNTING II  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Advisory: ACC 058A and Elementary Algebra Skills
Acceptable for credit: California State University
This course provides a comprehensive study of liabilities, revenue recognition, stockholders' equity, earnings per share, statement of cash flows, pension plans, leases, accounting for income taxes, accounting changes and corrections, and disclosure in financial reporting. Current standards and pronouncements are presented. Grade only.

ACC 059A  FINANCIAL AUDITING  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Advisory: ACC 058A and ACC 058B
Acceptable for credit: California State University
The course introduces the student to the audit process and how to render an opinion on published financial statements and related financial reports. The course emphasizes the application of generally accepted auditing standards and procedures, fraud exposure, professional ethics, the legal environment, work paper preparation and report writing. Grade only.

ACC 061  QUICKBOOKS: ONLINE SOFTWARE  3.0 UNITS
Total Lecture: 54 hours
Advisory: ACC 001A
Acceptable for credit: California State University
Students use QuickBooks Online accounting software to set up, enter transactions, and produce reports using general ledger, accounts receivable, accounts payable, financial statement analysis, depreciation, inventory and payroll modules. It is recommended that students have either completed, or are concurrently enrolled in, ACC 001A or have practical accounting experience. Pass/No Pass Option.

ACC 066  ACCOUNTING FOR GOVERNMENTAL AND NONPROFIT ENTITIES  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: ACC 001A
Advisory: ACC 001B
Acceptable for credit: California State University
Study of the theory and practice of accounting for federal, state, and local governmental entities and nonprofit organizations. Topics include analysis and application of pronouncements from the Governmental Accounting Standards Board (GASB); fund accounting, operational and cash budgeting, and operational control issues; transaction analysis, financial statement preparation and analysis, and external reporting issues. Accounting for Governmental and Nonprofit Entities includes topics tested on the Financial Accounting and Reporting (FAR) section of the CPA exam. This course is part of the CPA Exam Preparation Series, which is intended to meet the education requirement to sit for the CPA exam. Students who intend to transfer should take this course at their transfer school. Pass/No Pass Option.

ACC 067  ADVANCED ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Advisory: ACC 058A and ACC 058B
Acceptable for credit: California State University
Advanced Accounting is the last in the series of financial accounting courses. Topics covered in this class include: accounting for consolidations, investments in other corporations, foreign currency transactions, and partnerships. Advanced Accounting includes topics tested on the Financial Accounting and Reporting (FAR) section of the CPA exam. This course is part of the CPA Exam Preparation Series, which is intended to meet the education requirement to sit for the CPA exam. Students who intend to transfer should take this course at their transfer school. Pass/No Pass Option.

ACC 070  ETHICS IN ACCOUNTING  3.0 UNITS
Total Lecture: 54 hours
Advisory: ACC 001A
Acceptable for credit: California State University
This course involves the study of ethical problems which arise within the contexts of accounting and corporate management. Topics include major ethical theories and the professional code of conduct for accountants, auditors, and tax preparers. The focus is on ethical issues in corporate case studies such as Enron, Worldcom, Sunbeam, and Madoff. Pass/No Pass Option.

ACC 073  ACCOUNTING INFORMATION SYSTEMS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Acceptable for credit: California State University
Using SAP, an enterprise resource system (ERP) adopted by the majority of Fortune 1000 companies, students will gain valuable and practical skills in Accounting Information Systems, common business processes, basic database designs, and systems controls. The skills built will be useful for individuals planning to take additional higher level business, accounting, and/or information systems classes; seeking careers in the accounting / finance department of organizations; or interested in becoming an auditor, analyst, or consultant. Grade only.

ACC 077  BUSINESS PROCESSES AND ENTERPRISE RESOURCE PLANNING SYSTEMS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A and ACC 073
Advisory: ACC 058A and ACC 058B
Acceptable for credit: California State University
This course examines the relationships and impacts between business processes and enterprise resource planning (ERP) systems to effectively manage major businesses. Students learn the integration concepts, challenges, common practices, and opportunities by doing hands-on configuration cases, using the world's #1 ERP system, SAP. Through various individual and teamwork, students will gain project facilitation exposure, make business decisions, and perform basic analysis utilizing large datasets from the ERP-based business information. This is a key course to take to prepare for the exceptionally marketable SAP Application Associate certification, also known as “TS410 Certified.” Pass/No Pass Option.

ANT 001  BIOLOGICAL ANTHROPOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces the concepts, methods of inquiry, and scientific explanations for biological evolution and their application to the human species. Issues and topics will include but are not limited to, genetics, evolutionary theory, human variation, and biocultural adaptations, comparative primate anatomy and behavior, and fossil evidence for human evolution. The scientific method serves as the foundation of the course. The course may include field trips to museums, parks, and field sites. Pass/No Pass Option. C-ID # ANTH 110. CSUGE: B2; IGETC: 5B.
<table>
<thead>
<tr>
<th>COURSES</th>
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<tbody>
<tr>
<td><strong>ANT 001L BIOLOGICAL ANTHROPOLOGY LABORATORY</strong> 1.0 UNIT</td>
</tr>
<tr>
<td>Total Lab: 54 hours</td>
</tr>
<tr>
<td>Prerequisite or Corequisite: ANT 001</td>
</tr>
<tr>
<td>Acceptable for credit: University of California, California State University</td>
</tr>
<tr>
<td>This laboratory course is offered as a supplement to ANT 001, Introduction to Biological Anthropology, either taken concurrently or in a subsequent term. Laboratory exercises are designed to introduce students to the scientific method and explore genetics, human variation, human and non-human primate anatomy and behavior, the primate/hominid fossil record, and other resources to investigate processes that affect human evolution. Pass/No Pass Option. CSUGE: B3; IGETC: 5C.</td>
</tr>
</tbody>
</table>

| **ANT 002 INTRODUCTION TO ARCHEOLOGY 3.0 UNITS** |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| Advisory: ENG 001A or ENG 001AX |
| This course is an introduction to the study of concepts, theories, data, and models of anthropological archaeology that contribute to our knowledge of the human past. The course includes a discussion of the nature of scientific inquiry; the history and interdisciplinary nature of archaeological research; dating techniques; methods of survey, excavation, analysis, and interpretation; cultural resource management; professional ethics; and selected cultural sequences. This course may include field trips to museums, parks, and field sites. Pass/No Pass Option. C-ID # ANTH 150. CSUGE: D; IGETC: 4. |

| **ANT 003 CULTURAL ANTHROPOLOGY 3.0 UNITS** |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course explores how anthropologists study and compare human culture. Cultural anthropologists seek to understand the broad arc of human experience focusing on a set of central issues: how people around the world make their living (subsistence patterns); how they organize themselves socially, politically and economically; how they communicate; how they relate to each other through family and kinship ties; what they believe about the world (belief systems); how they express themselves creatively (expressive culture); how they make distinctions among themselves such as through applying gender, racial and ethnic identity labels; how they have shaped and been shaped by social inequalities such as colonialism; and how they navigate culture change and processes of globalization that affect us all. Ethnographic case studies highlight these similarities and differences, and introduce students to how anthropologists do their work, employ professional anthropological research ethics, and apply their perspectives and skills to understand humans around the globe. Pass/No Pass Option. C-ID # ANTH 120. CSUGE: D; IGETC: 4. |

| **ART 001A SURVEY OF WESTERN ART I 3.0 UNITS** |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course is a chronological survey of painting, sculpture, and architecture in Western civilization from Prehistoric through Medieval times. Works of art are viewed within their historical, religious, political, and social context. A museum field trip is required. Pass/No Pass Option. C-ID # ARTH 110. CSUGE: C1; IGETC: 3A. |

| **ART 001B SURVEY OF WESTERN ART II 3.0 UNITS** |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course is a chronological survey of western painting, sculpture, and architecture from the Renaissance to Modern times. Works of art are viewed within their historical, religious, political, and social context. The course consists of illustrated lectures and discussion. A museum field trip is required. Pass/No Pass Option. C-ID # ARTH 120. CSUGE: C1; IGETC: 3A. |

| **ART 004 ART APPRECIATION 3.0 UNITS** |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course offers a study of the themes and purposes, elements of style and principles of design, techniques and media, and terminology of the visual arts as a form of communication. Works of art from many different time periods and cultures are discussed and analyzed. The course consists of illustrated lectures and discussions. A museum field trip is required. Pass/No Pass Option. C-ID # ARTH 100. CSUGE: C1; IGETC: 3A. |

**APPRENTICESHIPS**

Please refer to courses in the following Apprenticeships found alphabetically in the catalog.

**TRANSPORTATION (TRN)**
ART 007  SURVEY OF ASIAN ART  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a general survey of the painting, sculpture, architecture and minor arts from prehistoric times to the present day in India, China, Korea, Japan, and Southeast Asia, emphasizing aesthetic, cultural and historical values. Pass/No Pass Option. C-ID # ARTH 130. CSUGE: C1; IGETC: 3A.

ART 011  THE HISTORY OF MODERN DESIGN  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This introductory survey course focuses on the history, perception and development of design as an art form during the Twentieth Century. The students develop an understanding of the evolution and role of the Modern Movement in society. The students also learn about the evaluation criteria of two-dimensional and three-dimensional design objects while examining examples of architecture, industrial design, graphic design and interior design. The students are introduced to outstanding Twentieth Century design figures and their work. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

ART 031A  BEGINNING DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This is a beginning drawing course for students with no previous drawing experience. Students work from observation, directed toward realistic rendering of objects through line, shading, pictorial composition and perspective. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 110. CSUGE: C1.

ART 031B  INTERMEDIATE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A
Acceptable for credit: University of California, California State University
This is an intermediate course for students with previous college-level drawing experience. This course emphasizes refinement of drawing skills and in-depth concentration on composition and color. Pass/No Pass Option. C-ID # ARTS 205.

ART 033A  BASIC DESIGN: TWO-DIMENSIONAL  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Acceptable for credit: University of California, California State University
This course is an introduction to the principles and elements of two-dimensional design and composition. Materials Fee. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 100. CSUGE: C1.

ART 033B  BASIC DESIGN: THREE-DIMENSIONAL  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 033A.
Acceptable for credit: University of California, California State University
This course introduces students to the elements and principles of design as they apply to three-dimensional forms. Emphasis is on contemporary design methods using formats, techniques, tools and materials appropriate to three-dimensional concepts. Pass/No Pass Option. C-ID # ARTS 101.

ART 033C  BASIC DESIGN: COLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 033A
Acceptable for credit: University of California, California State University
This course is an introduction to the principles and elements of color. This course is approved for credit by exam. Pass/No Pass Option. C-ID # ARTS 270.

ART 034A  INTRODUCTION TO DIGITAL ART  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Acceptable for credit: University of California, California State University
This course is an introductory computer art course. The course introduces students to microcomputers and visual design software. Applications that manipulate flat images and 3D space are explored. This course introduces the student to basic design elements and principles. Linear perspective is covered, and projects that focus on line, shape, form, the illusion of deep space, and color are pursued. Students learn the basic procedures needed to use computers and related peripheral devices. Pass/No Pass Option. CSUGE: C1.

ART 034B  ADVANCED DIGITAL ART  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 034A
Acceptable for credit: University of California, California State University
This is an advanced course combining computer graphics and fine arts image processing. The course utilizes micro-computers to create and manipulate images. It introduces the student to advanced concepts and principles. Specific projects are executed related to unity, variety, rhythm/pattern, color, movement, balance, computer particle animation and 3D modeling techniques. Students learn techniques for file management and data backup and recovery, and peripheral devices as creative tools for the artist. This course is approved for credit by exam. Pass/No Pass Option.

ART 035A  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A
Acceptable for credit: University of California, California State University
This course is a fundamental study of the human figure as the main subject matter of drawings and its use as a means of artistic expression. Pass/No Pass Option. C-ID # ARTS 200. CSUGE: C1.

ART 035B  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035A
Acceptable for credit: University of California, California State University
This course is a low intermediate study of the human form and structure. It emphasizes creative interpretation and use of the human form for artistic expression. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.

ART 035C  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035B
Acceptable for credit: University of California, California State University
This course is a high intermediate study of the human form and structure. It emphasizes creative interpretation and use of the human form for artistic expression. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.
ART 035D  LIFE DRAWING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 035C
Acceptable for credit: University of California, California State University
This course is an advanced study of the human form and structure. It emphasizes creative interpretation and use of the human form for artistic expression. It focuses on drawing the live model in a variety of styles and media. Pass/No Pass Option.

ART 039A  SURVEY OF PRINTMAKING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
Course covers various techniques and media used in fine art printmaking. It explores the use of the etching press as well as other transfer tools used in making the printed image. In addition, the course explores the development of printing plates, i.e., intaglio, monotype, collagraph and others. Media includes both water-based inks as well as the more traditional oil-based inks and paints. This course is approved for credit by exam. Pass/No Pass Option.

ART 047A  WATERCOLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to painting using various waterbase media, with a focus on color mixing, composition, and content. This course is approved for credit by exam. Pass/No Pass Option.

ART 047B  WATERCOLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 047A
Acceptable for credit: University of California, California State University
This course provides continuing instruction in watercolor techniques, exploration of watercolor styles, and personal development of the student's artistic direction. This course is approved for credit by exam. Pass/No Pass Option.

ART 047C  WATERCOLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 047B
Acceptable for credit: University of California, California State University
This course is high intermediate level painting with various water base media. This course is approved for credit by exam. Pass/No Pass Option.

ART 047D  WATERCOLOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 047C
Acceptable for credit: University of California, California State University
This course is advanced level painting with various water base media. This course is approved for credit by exam. Pass/No Pass Option.

ART 048A  AIRBRUSH PAINTING: INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A
Acceptable for credit: University of California, California State University
This course is an introduction to the airbrush as a painting tool. Students explore water-based media, principles of color, transparency, masking techniques, and composition. This course is approved for credit by exam. Pass/No Pass Option.

ART 048B  AIRBRUSH PAINTING: BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 048A
Acceptable for credit: University of California, California State University
This course is low intermediate studio practice which focuses on strengthening the basic skills learned in ART 048A. This course is approved for credit by exam. Pass/No Pass Option.

ART 048C  AIRBRUSH PAINTING: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 048B
Acceptable for credit: University of California, California State University
This course is high intermediate studio practice which focuses on a continued progression of intermediate techniques and portfolio development. This course is approved for credit by exam. Pass/No Pass Option.

ART 048D  AIRBRUSH PAINTING: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 048C
Acceptable for credit: University of California, California State University
This course is an introduction to traditional and contemporary painting techniques and media. This course is approved for credit by exam. Pass/No Pass Option.

ART 049A  PAINTING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to traditional and contemporary painting techniques and media. This course is approved for credit by exam. Pass/No Pass Option.

ART 049B  PAINTING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 049A
Acceptable for credit: University of California, California State University
This course is advanced studio practice which focuses on advanced techniques and portfolio development. This course is approved for credit by exam. Pass/No Pass Option.

ART 049C  PAINTING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 049B
Acceptable for credit: University of California, California State University
This course is a high intermediate studio practice which focuses on mixed media, self-expression, composition, and content. This course is approved for credit by exam. Pass/No Pass Option.
ART 049D  PAINTING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 049C
Acceptable for credit: University of California, California State University
This course is an advanced studio practice which focuses on developing individual style and direction in painting. Pass/No Pass Option.

ART 065A  CERAMICS - HANDBUILDING: INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 065A
Acceptable for credit: University of California, California State University
This course is an introductory course in ceramic hand-building techniques. Students learn the physical properties of clay and other ceramics materials, ceramic decorative techniques, 2-dimensional and 3-dimensional design, and use this knowledge to express themselves creatively. Materials Fee. Pass/No Pass Option.

ART 065B  CERAMICS - HANDBUILDING: BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 065A
Acceptable for credit: University of California, California State University
This course is an advanced course in ceramics/hand-building techniques, firing kilns, clay body construction, and ceramic development of projects directed toward individualized self-expression. Topics also include advance decoration and an in-depth study of two and three dimensional ceramic design. Materials Fee. Pass/No Pass Option.

ART 065C  CERAMICS - HANDBUILDING: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 065A
Acceptable for credit: University of California, California State University
This course focuses on different aspects of ceramics providing students with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

ART 065D  CERAMICS - HANDBUILDING: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 065C
Acceptable for credit: University of California, California State University
This course focuses on different aspects of ceramics, providing students with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

ART 067A  CERAMICS-POTTER'S WHEEL: INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Acceptable for credit: University of California, California State University
This course introduces students to those basic skills and techniques of the potter’s wheel needed to create a variety of ceramic forms. Instruction includes clay and glaze formulation, construction, and stacking and firing of ceramic kilns. Students develop aesthetic awareness of three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 067B  CERAMICS-POTTER'S WHEEL: BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 067A
Acceptable for credit: University of California, California State University
This course is an advanced course working on the potter’s wheel. The course is directed toward: refinement of skills on the potter’s wheel, production throwing techniques, advanced kiln firing techniques, clay compositions, thrown sculpture, and combining hand and wheel techniques. Focus is on developing a personal design style. Materials Fee. Pass/No Pass Option.

ART 067C  CERAMICS-POTTER'S WHEEL: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 067B
Acceptable for credit: University of California, California State University
ART 067C focuses on building high-intermediate technical skills in working with the potter’s wheel. Pass/No Pass Option.

ART 067D  CERAMICS-POTTER'S WHEEL: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 067C
Acceptable for credit: University of California, California State University
This course is an advanced course working on the potter’s wheel. The course is directed toward: refinement of skills on the potter’s wheel, production throwing techniques, advanced kiln firing techniques, clay compositions, thrown sculpture, and combining hand and wheel techniques. Focus is on developing a personal design style. Materials Fee. Pass/No Pass Option.

ART 075A  METALSMITHING: INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: ART 033A and ART 033B
Acceptable for credit: California State University
This studio course introduces metalsmithing techniques used in sculpture and jewelry. Emphasis is on fabrication techniques and materials used in metal arts, including soldering, welding, cold connections, forging and forming. Pass/No Pass Option.

ART 075B  METALSMITHING: BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075A
Acceptable for credit: California State University
This studio course continues the study of metalsmithing techniques used in sculpture and jewelry. Emphasis is on concept development and fabrication methods and materials used in metal arts. Pass/No Pass Option.

ART 075C  METALSMITHING: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075B
Acceptable for credit: California State University
This intermediate studio course focuses on complex metalsmithing techniques used in sculpture and jewelry. Emphasis is on concept development, project planning, and fabrication methods and materials used in metal arts. Pass/No Pass Option.

ART 075D  METALSMITHING: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075C
Acceptable for credit: California State University
This advanced studio course focuses on complex metalsmithing techniques used in sculpture and jewelry. Emphasis is on concept development and refining technical skills used in metal arts. Pass/No Pass Option.
ART 085A  FURNITURE DESIGN AND WOODWORKING: INTRODUCTION 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078A
Acceptable for credit: California State University
This course develops basic technical skills in furniture design, construction and finishing. The emphasis is on individual design and innovative use of materials in the construction. Materials Fee. Pass/No Pass Option.

ART 085B  FURNITURE DESIGN AND WOODWORKING: BEGINNING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078B
Acceptable for credit: California State University
ART 085B is an introductory level course in woodworking and furniture design which involves furniture construction techniques and equipment not covered in previous levels. Topics include advanced cabinetry techniques and complex joinery. Materials Fee. Pass/No Pass Option.

ART 085C  FURNITURE DESIGN AND WOODWORKING: INTERMEDIATE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078C
Acceptable for credit: California State University
ART 085C is an intermediate-to-advanced level course in woodworking and furniture design. Fourth in the series, this course allows students to work independently to continue to refine previously mastered design and technical skills, and to prepare for careers in the industry. Materials Fee. Pass/No Pass Option.

ART 085D  FURNITURE DESIGN AND WOODWORKING: ADVANCED 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 085C
Acceptable for credit: California State University
This course focuses on different aspects of metal sculpture and innovative use of materials in the construction. Materials Fee. Pass/No Pass Option.

ART 088A  METAL SCULPTURE CASTING: INTRODUCTION 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 088B
Acceptable for credit: California State University
This course is a study of the metal casting process which introduces new techniques and skill-building assignments, as well as development of a personal form. Materials Fee. Pass/No Pass Option.

ART 088B  METAL SCULPTURE CASTING: BEGINNING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 088A
Acceptable for credit: California State University
This course is an advanced course in metal sculpture casting. Students develop skills in lost wax and lost styrofoam techniques with an emphasis on three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 088C  METAL SCULPTURE CASTING: INTERMEDIATE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 088B
Acceptable for credit: California State University
This course is a basic course in metal sculpture casting. Students develop skills in lost wax and lost styrofoam techniques with an emphasis on three-dimensional design. Materials Fee. Pass/No Pass Option.

ART 088D  METAL SCULPTURE CASTING: ADVANCED 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 088C
Acceptable for credit: California State University
This course is an advanced course in metal sculpture casting. It provides students with supervised participatory experience in which artistic skills are enhanced by repetition and practice. Materials Fee. Pass/No Pass Option.

AST 001  ASTRONOMY 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a descriptive astronomy lecture only course covering the entire panorama of the universe, including early human observations, the origin and structure of the solar system, and the properties, origin and evolution of stars, galaxies and cosmology. Grade only. CSUGE: B1; IGETC: 5A.

AST 003  ASTRONOMY WITH LAB 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course covers the entire panorama of the universe from the observations of the night sky to the origin and structure of the planets, stars, galaxies and the Universe. The laboratory portion of the course includes practical experience with the methods of astronomy using computers and other equipment. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.
AST 003H ASTRONOMY WITH LAB - HONORS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course covers the entire panorama of the universe from the observations of the night sky to the origin and structure of the planets, stars, galaxies and the universe. The laboratory portion of the course includes practical experience with the methods of astronomy using computers and other equipment. Students cannot get credit for both AST 003 and AST 003H. Enrollment in the Honors Transfer Project is required. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.

AST 004 ASTROBIOLOGY - LIFE IN THE UNIVERSE 3.0 UNITS
Total Lecture: 54 hours
Acceptable for Credit: California State University, University of California
This course applies the disciplines of astrophysics, biology, chemistry, geology, and planetary science to the possibility of life in the Universe outside of the Earth. Students study the astronomical, geological and physical environmental factors that determine habitability. Students further consider the chemical basis for life, the origin and evolution of life on Earth, the constraints of life on Earth, and the markers of life that may be seen in other places in the solar system as well as outside of the solar system. Pass/No Pass Option.

BIOLOGICAL SCIENCES (BIO)

BIO 001A GENERAL BIOLOGY: CELLS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: (BIO 010 or BIO 011) and (CHM 001A or CHM 001AH) and (MAT 000C or High School Algebra II)
Advisory: CHM 001B or CHM 001BH
Acceptable for credit: California State University, University of California
This course is an introductory general biology laboratory course designed for non-science majors. It reinforces biological principles presented in BIO 010 using laboratory and field exercises. Prerequisite or Corequisite BIO 010L, Introduction to Biology Lab.

BIO 001AH GENERAL BIOLOGY: CELLS - HONORS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: (BIO 010 or BIO 011) and (CHM 001A or CHM 001AH) and (MAT 000C or High School Algebra II)
Advisory: CHM 001B or CHM 001BH
Acceptable for Credit: University of California, California State University
This honors course is a comprehensive introduction to cell and molecular biology, and is designed for students pursuing degrees in biology or professional programs such as medicine or pharmacy. Topics addressed in lecture and lab include biochemistry, the structure and function of prokaryotic and eukaryotic cells, cellular metabolism, and prokaryotic and eukaryotic gene expression and regulation. Grade only. C-ID # BIOL 130S, BIOL 135S, BIOL 190. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 001B GENERAL BIOLOGY: ORGANISMS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: BIO 001A or BIO 001AH
Acceptable for credit: University of California, California State University
BIO 001B is an introduction to organisms and higher levels of biological organization. It examines the unity and diversity of multicellular life, ecological and evolutionary principles, and form/function relationships in plants and animals. The course is designed for students majoring in the biological sciences or seeking entry to professional programs such as Medicine, Pharmacy, and Dentistry. Grade only. C-ID # BIOL 130S, BIOL 135S. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 004 MICROBIOLOGY 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: ((BIO010 and BIO010L) or BIO011 or BIO001A or BIO022) and (CHM 030A or CHM 031A or CHM 060)
Acceptable for credit: University of California, California State University
This survey course in microbiology is intended for nursing and other health-science majors. Lecture topics include the morphology and physiology of the major groups of microorganisms, bacterial and viral genetics, mechanisms of infection and disease, and the human immune response to infection. Laboratory activities focus on techniques employed in the culture and identification of bacteria of medical importance. Grade only. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 010 INTRODUCTION TO BIOLOGY 3.0 UNITS
Total Lecture: 54 hours
Advisory: Elementary Algebra Skills.
Acceptable for credit: University of California, California State University
BIO 010 is an introductory course in biology designed for the non-biological sciences major. Topics include cell structure and function, energy exchange and life processes, taxonomy, ecology, heredity, diversification and evolution. This lecture course may be taken with or without BIO 010L, Introduction to Biology Lab. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 010L INTRODUCTION TO BIOLOGY LAB 1.0 UNIT
Total Lab: 54 hours
Prerequisite or Corequisite BIO 010
Acceptable for credit: University of California, California State University
This is an introductory general biology laboratory course designed for non-science majors. It reinforces biological principles presented in BIO 010 using laboratory and field exercises. Pass/No Pass Option. CSUGE: B3; IGETC: 5C.

BIO 011 HUMAN BIOLOGY 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to biology, with an emphasis on human beings. The principles and concepts of biology are covered, including the scientific method, cells, genetics, evolution, ecology and basic anatomy and physiology of humans. Pass/No Pass Option. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 012 EMERGING INFECTIOUS DISEASES 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to infectious diseases and the microbes that cause them. Recent outbreaks of human diseases are explored, as well as interrelationships between infectious disease agents, human biology, and the environment. Clinical approaches and surveillance methods to detect, investigate, and monitor emerging pathogens and bioterrorism agents are discussed. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.
BIO 014 **INTRODUCTORY NEUROSCIENCE** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the organization and functions of the nervous system. The physiology of the brain and senses are discussed. Emotions, sleep, language, attention, memory, and a survey of nervous system disorders are explored. This course may be offered via distance learning. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 014H **INTRODUCTORY NEUROSCIENCE HONORS** 3.0 UNITS
Total Lecture: 54 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: University of California, California State University
This honors course is an introduction to the organization and functions of the nervous system. The physiology of the brain and senses are discussed. Emotions, sleep, language, attention, memory and a survey of nervous system disorders are explored. Pass/No Pass Option

BIO 016 **MARINE BIOLOGY** 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
Marine Biology is an introduction to ocean environments and marine life. General ecological principles, biodiversity and marine conservation issues are emphasized. Human activities that modify ocean ecosystems are examined. Discussions include an overview and characteristics of diverse marine ecosystems, such as: rocky and sandy shores, estuaries, kelp forests, coral reefs, continental shelves, the open ocean and the deep sea. This field-intensive course has seven required field trips in the San Francisco and Monterey bays, allowing students to investigate ocean life in our local marine environments. This four-unit science course with lab is open to students of all majors. Materials Fee. Pass/No Pass Option. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 017 **GENETICS AND SOCIETY** 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: BIO 017H
Acceptable for credit: University of California, California State University
This course is a broad survey of genetics, with a focus on the societal impacts of topics in genetics such as human genetic disease, biotechnology, reproductive technologies, and evolution. It is designed for the general education student. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 017H **GENETICS AND SOCIETY - HONORS** 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: BIO 017
Acceptable for credit: University of California, California State University
This course is a broad survey of genetics, with a focus on the societal impacts of topics in genetics such as human genetic disease, biotechnology, reproductive technologies, and evolution. The honors component involves an in-depth analysis of specific topics, using current information from research journals. Students cannot get credit for both BIO 017 and BIO 017H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 018 **THE BIOLOGY OF CANCER** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces the basic principles underlying the development and treatment of cancer. Normal cell biology processes are contrasted with the genetic and cellular changes that lead to the development of cancer. Current topics in scientific and clinical research on cancer biology will be explored. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 018H **THE BIOLOGY OF CANCER - HONORS** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course introduces the basic principles underlying the development and treatment of cancer. Normal cell biology processes are contrasted with the genetic and cellular changes that lead to the development of cancer. Current topics in scientific and clinical research on cancer biology will be explored. This is the honors version of BIO 018. Students cannot get credit for both BIO 018 and BIO 018H. Enrollment in the Honors Program is required. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 019 **OCEANS: LIFE IN THE SEA** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This non-majors course surveys the biological principles of marine science. It provides an overview of the ocean environment and examines the diversity of marine life, basic ecological principles and major marine ecosystems. The relationship between humans and the ocean is emphasized, with a focus on conservation biology and sustainability. Pass/No Pass Option. CSUGE: B2; IGETC: 5B.

BIO 022 **ANATOMY AND PHYSIOLOGY FOR ALLIED HEALTH WORKERS** 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: Elementary Algebra Skills.
Acceptable for credit: California State University
This course is an overview of the normal structure and function of the human body and is designed to provide a foundation for the study of disease and dysfunction in the clinical setting. Laboratory work includes dissection of preserved materials. BIO 022 is designed to meet the state board requirements for the vocational nursing and psychiatric technician programs. Grade only. CSUGE: B2, B3.

BIO 025 **ENVIRONMENTAL BIOLOGY** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a scientific examination of the ecological interrelationships between humans and the environment. By understanding general ecological principles and major ecosystems on earth, we can evaluate how the human population impacts our planet by its growth and resource use, and what the implications are for ecosystems, biodiversity, as well as human health and welfare. Topics include: human population growth, food and water supplies, pollution, global climate change, energy use and sustainable development. Grade only. CSUGE: B2, E; IGETC: 5B.

BIO 030 **TROPICAL ECOLOGY** 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
The amazing diversity of life in the tropics is the subject of this introductory level class. Students explore rainforest inhabitants and their relationships, and learn about their value and conservation. This lecture course may be taken with or without BIO 030L, Tropical Ecology Lab. Pass/No Pass Option. CSUGE: B2.

BIO 030L **TROPICAL ECOLOGY FIELD STUDIES** 1.0 UNIT
Total Arranged Lab: 54 hours
Corequisite: BIO 030
Anti-Requisite: BIO 031L
Acceptable for credit: University of California, California State University
In this introductory level class, students carry out research methods that ecologists use to observe and investigate tropical ecosystems. This lab course may be taken with or without BIO 030, Tropical Ecology. Pass/No Pass Option. CSUGE: B3; IGETC: 5C.
BIO 031L TROPICAL ECOLOGY FIELD STUDIES 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: University of California (Pending), California State University
In this introductory level laboratory class, students carry out research methods that ecologists use to observe and investigate tropical ecosystems. This course includes a field trip to Costa Rica. Students who take this course are not required to complete BIO 30, the lecture course in Tropical Ecology. Pass/No Pass Option.

BIO 032 CALIFORNIA PLANTS AND ANIMALS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This field course explores the ecology of California flora and fauna through the study of plants and animals in terrestrial and aquatic ecosystems, with a primary focus on the San Francisco Bay region. The role of abiotic and biotic factors in communities is emphasized. Students examine the natural history of common plants and animals in different ecosystems, as well as their adaptations to the environment. Native American uses of flora and fauna are discussed. Laboratory and field investigations are conducted using the scientific method and environmental sampling techniques. Selected regional conservation issues and endangered species are discussed. Recommended for non-science majors to fulfill laboratory science requirement (4-units). Pass/No Pass Option. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 047 HUMAN ANATOMY 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: (BIO 001A or BIO 001AH) or BIO 011 or BIO 022 or (BIO 010 and BIO 010L)
Acceptable for credit: University of California, California State University
This course is an in-depth study of the microscopic and gross anatomical structure of the human body, including some corresponding pathology. It is designed to meet the prerequisite for programs in nursing, physical therapy, kinesiology, occupational therapy, etc. Laboratory work includes: examination of models, histological specimens, and animal specimens. Grade only. C-ID # BIOL 110B. CSUGE: B2, B3; IGETC: 5B, 5C.

BIO 048 HUMAN PHYSIOLOGY 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: BIO 047 and (CHM 001A or CHM 001AH or CHM 030A or CHM 060)
Advisory: Intermediate Algebra Skills.
Acceptable for credit: University of California, California State University
This course provides students with a basic understanding of the physiological mechanisms underlying body function in order to provide a foundation for more in-depth study and practical application. With an emphasis on cause and effect, details of the chemical and cellular basis for the workings of the nervous, muscular, cardiovascular, respiratory, renal and digestive systems are emphasized. Laboratory investigations of physiological processes familiarize students with scientific analysis and research techniques. Grade only. C-ID # BIOL 120B. CSUGE: B2; IGETC: 5B.

BIO 048H HUMAN PHYSIOLOGY - HONORS 5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: BIO 047 and (CHM 001A or CHM 001AH or CHM 030A or CHM 060)
Advisory: Intermediate Algebra Skills.
Acceptable for credit: University of California, California State University
This course provides students with a basic understanding of the physiological mechanisms underlying body function in order to provide a foundation for more in-depth study and practical application. With an emphasis on cause and effect, details of the chemical and cellular basis for the workings of the nervous, muscular, cardiovascular, respiratory, renal and digestive systems are emphasized. Laboratory investigations of physiological processes familiarize students with scientific analysis and research techniques. Grade only. C-ID # BIOL 120B. CSUGE: B2; B3; IGETC: 5B, 5C.

BUSINESS (BUS)

BUS 010 GLOBAL BUSINESS 3.0 UNITS
Total Lecture: 54 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: California State University
This course provides a comprehensive overview of global business including international management, finance, law, global strategy and marketing. Emphasis is on the firm in the global competitive context, decisions to enter markets, how to compete in global markets, and how to develop and implement a global strategy. Pass/No Pass Option.

BUS 011 INTERNATIONAL BUSINESS LAW 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course introduces the legal environment of international business, explains the basic principles of international business law and challenges students to consider legal implications of any international business strategy or transaction. Pass/No Pass Option.

BUS 012 INTERNATIONAL FINANCIAL MANAGEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course will focus on the fundamental principles of corporate finance in today’s global business environment. It introduces international finance with a focus on the important role of modern multinational corporations in global commerce. This class provides a wide range of managerial topics and emphasizes the most recent changes in the international environment. Pass/No Pass Option.

BUS 021 INTRODUCTION TO BUSINESS COMPUTING 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces computer hardware, software and technology applications in business. Information systems and the strategies for managing them change quickly, but the principles that guide both remain timeless. These principles form the backbone of this comprehensive survey of the field, designed for a student’s first course in information technology. By presenting the details as well as the big picture, this course puts the lessons of managing information systems into an understandable context. The overall principle is that the right information, if it is delivered to the right person, in the right fashion, and at the right time, can improve and ensure organizational effectiveness and efficiency. Pass/No Pass Option. C-ID # BUS 140.

BUS 021L INTRODUCTION TO BUSINESS COMPUTING LAB 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course provides an overview of how to use common software packages for business applications including word processing, spreadsheets, graphic presentations and how to use the Internet. This hands-on computer work will augment the basic concepts covered in BUS 021. This course is approved for credit by exam. Pass/No Pass Option.

BUS 022 PRINCIPLES OF E-BUSINESS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This class challenges students to explore the realities and implications of e-commerce from a marketer’s perspective, including an examination of Business-to-consumer (B2C) and business-to-business (B2B) e-commerce markets. The course introduces students to a wide range of electronic commerce issues for marketers and serves as a foundation for continual learning in the dynamic e-commerce environment. Pass/No Pass Option.
BUS 023 SOCIAL MEDIA MARKETING 3.0 UNITS
Total Lecture: 54 hours
Advisory: BUS 056A
Acceptable for credit: California State University
Social media (such as Twitter, Facebook, blogging, etc.) are technologies that enable individuals to create, collaborate, and share messages with audiences of all sizes. Students will explore the possibilities and limitations of social media and will have hands-on experience with several forms of social media technology. Pass/No Pass Option.

BUS 028A BUSINESS LAW I 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides an introduction to the laws in the United States with an emphasis on matters relating to the conduct of business and commerce. Specific topics covered include an overview of law making, governmental regulation, dispute resolution, courts and the court system, court cases and procedures, agency relationships, employment law, business formation and contracts. Pass/No Pass Option. C-ID # BUS 125.

BUS 037 FUNDAMENTALS OF PROJECT MANAGEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
In this course, students will learn the secrets to successful project management: how to create a plan, implement it, monitor progress, correct as necessary and deliver as promised. This course prepares students with the necessary skills required to successfully manage a project and to prepare for the PMP® (Project Management Professional) or CAPM® (Certified Associate in Project Management) certification exams. Pass/No Pass Option.

BUS 040 PROFESSIONAL SELLING 3.0 UNITS
Total Lecture: 54 hours
Advisory: COM 001
Acceptable for credit: California State University
This course is a study of sales principles and strategies. Topics include advanced sales techniques, high impact questioning methodologies, closing techniques and managing objections, account and territory planning and management, resource planning and management. The course explores in detail the “selling cycle”. Students taking this course explore how to succeed in sales. Pass/No Pass Option.

BUS 041 BEGINNING BUSINESS ANALYTICS 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MAT 009 or MAT 010 or MAT 010H or MAT 010X
Acceptable for credit: California State University
This introductory course focuses on the fast-growing field of Business Analytics. The course will use SAP’s Predictive Analysis tools in helping students to become big data literate and proficient in data environments of social media tracking, web analytics, customer and marketing information. Data analytic solutions explored will involve hands-on experience using real-world business case studies. Data Analytics has become a highly sought-after skill in business, engineering, economics, government services, science, health care and other fields. Pass/No Pass Option.

BUS 051 INTRODUCTION TO AMERICAN BUSINESS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
In this survey course students learn about the business landscape and begin planning their career in business. The course helps direct students towards career paths and a major which best reflects their own personal aptitudes, interests, and skills. This is a required first course for all business majors, and should be taken within their first year as a business major. Pass/No Pass Option.

BUS 052 FUNDAMENTALS OF FINANCIAL INVESTING 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course provides students with the fundamentals to make sound financial investment decisions. Study involves the investment environment, the risks and returns objectives consistent with an associated with different types of financial investments, and the establishment of investment individual’s characteristics, capacities and restrictions. Other topics include the participants in the investment process including organization issuing securities, and the laws and regulations covering their activities. Class projects cover techniques of investment analysis, timing, decision making, investment planning and management. Pass/No Pass Option.

BUS 054 SMALL BUSINESS START UP AND MANAGEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course covers methods of research and planning to start a small business and is recommended for persons who want to explore the opportunities and requirements of creating and managing their own business enterprise. Pass/No Pass Option.

BUS 056A MARKETING PRINCIPLES 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course gives students an overall understanding of marketing functions and their society. The course covers the fundamentals of marketing, including: product planning and development, buyer behavior; pricing strategies; marketing channels; and methods of marketing research. This course is approved for credit by exam. Pass/No Pass Option.

BUS 061 BUSINESS AND SOCIETY 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course examines business and its impact on society and society’s influence on business. This includes a critical and comparative examination of business ethics, business and government in a global society, managing environmental issues and societal challenges, and the benefits of business activity. Regardless of a student’s major, in these changing times, each student needs to be able to critically analyze the significance of business within society and the workplace. Pass/No Pass Option. CSUGE: D.

BUS 064B BUSINESS MATH 4.0 UNITS
Total Lecture: 72 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: California State University
This course is designed for business majors to review the fundamental mathematical principles through lectures and individual operation of electronic calculators. This course will emphasize methods of problem analysis, interpretation and the solving of common business calculation problems such as percentage, trade and cash discounts, interest, time value of money, compounding, depreciation and discounting notes. This course is recommended for all business majors. Pass/No Pass Option.
BUS 074   SUPPLY CHAIN MANAGEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is an introduction to the basic principles of supply chain management that covers traditional supply chain topics such as procurement, inventory management, operations, quality management, logistics and transportation. Also discussed are issues related to sustainability, humanitarian logistics, ethical business practices and supply chain analytics in the context of evolving supply chains around the world. Students discover how business processes, performance metrics and modern supply chain IT tools aid in the management and growth of effective and efficient supply chains. Pass/No Pass Option.

BUS 078B   BUSINESS COMMUNICATIONS 3.0 UNITS
Total Lecture: 54 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: California State University
This course develops writing skills to improve communication ability in the business environment. Topics covered include communication theory, business writing style and oral communication. Various forms of written communication are covered such as letters, email, memorandums, and reports. Pass/No Pass Option. C-ID # BUS 115.

BUS 084   INTERNET MARKETING 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course introduces students to Internet marketing techniques and tools and examines how advanced technologies affect marketing functions. Consideration is given to the development of an organization’s marketing plan and strategies in this dynamic environment. The course provides students with the opportunity to conceptualize and document an internet marketing plan based on ones’ professional goals. Pass/No Pass Option.

BUS 102   LEADERSHIP 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course guides students in developing life-long learning skills for leadership that apply to any organizational level in a wide variety of business environments. Both historical and cutting-edge leadership theory and practice are explored. Topics discussed include visioning, inspiring, motivating as well as the effective use of power. By taking an active leadership role in this course, students examine the issues, challenges, and practical skills of leadership in today’s workplace. Presentations, team activities, reflection, interviewing, and feedback are core developmental components of this course. Pass/No Pass Option.

BUS 104   PROJECT RISK MANAGEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for Credit: California State University
This course is designed for personnel who will make project-related decisions in the presence of undefined conditions. Students will understand how to handle change and risk and how they can be mitigated. Also, in this course, students will learn and apply proactive approaches to threats and opportunities based on an understanding of the risk management process. Pass/No Pass Option.

BUS 105   AGILE PROJECT MANAGEMENT 2.0 UNITS
Total Lecture: 36 hours
Corequisite: BUS 037
Acceptable for credit: California State University
The Agile Project Management course is designed for business students, project team members, project owners and project leaders looking to understand and apply the Agile approach and practices to new product development, software development and knowledge work projects. This course teaches management of projects using agile methods with a detailed focus on SCRUM and Kanban. Students will explore SCRUM roles, artifacts, events, and processes thereby learning how products can be delivered economically and how customers are brought into the loop of product development. Students will learn Kanban and how this flowed-based method is used to achieve efficient and smooth work management improving time-to-market. Even if you are currently using other project management methodologies, you will discover how Agile methods can make your projects more successful. Pass/No Pass Option.

BUS 107   SOFT SKILLS FOR PROJECT MANAGERS 2.0 UNITS
Total Lecture: 36 hours
This course is designed for students who want to build their soft skills. Soft skills, sometimes known as “people skills,” can provide an edge to project managers who have learned to use them well. This course will concentrate on the three pillars of Soft skills, Leadership, Communication and Collaboration. In this course we take a deep dive into these critical skills. Topic include, leading teams, coaching, mentoring, negotiating skills, motivating people, decision making and influencing, reading body language, team dynamics, conflict, power, and organizational behavior. Since, project managers typically spend over 80% of their time interfacing with people - these skills are critical to successful project managers. This course is part of the new certificate for Project Management. This course may be offered via distance learning. Pass/No Pass Option.

BUS 108   PMP & CAPM EXAM PREP 2.0 UNITS
Total Lecture: 36 hours
This course will prepare students for the for CAPM® (Certificate Associate in Project Management) or PMP® (Project Management Professional) exams. Also, students will receive substantial Project Management Education (PDUs) hours. This course emphasizes PMBOK Guide® (Project Management Body of Knowledge) and is structured around the ten knowledge areas, and it is focused on exactly what is necessary to pass the exam. The Project Management Professional (PMP®) certification is the profession’s most globally recognized and respected certification credential based on the Project Management Institute (PMI®) well-known Project Management Body of Knowledge (PMBOK®). Pass/No Pass Option.

BUS 109   BUSINESS LAW ENTREPRENEURS 2.0 UNITS
Total Lecture: 36 hours
Acceptable for credit: California State University
This course provides students a foundation to understand legal attributes of an entrepreneurship enterprise. The course materials are a diverse mixture of different topical areas in law. These areas include commercial law, tort law, business structure, employment and contract law, the legal framework of finance, intellectual property and laws governing the sale of a business. The students will be able to identify the specific legal issues that an entrepreneur face during the various stages of the organization. Pass/No Pass Option.

BUS 111   THE ENTREPRENEURIAL MINDSET 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is designed for students to learn about the principles contained in the entrepreneurial mindset and the unlimited opportunities it can provide. So, what is an entrepreneurial mindset? An entrepreneurial mindset is a specific set of beliefs, knowledge, and thought processes that drives entrepreneurial behavior (The Learning Initiative 2018). This course also takes the approach that anyone (not just those who want to start businesses) can benefit from understanding and applying an entrepreneurial mindset to any situation. Pass/No Pass Option.
BUS 112  BUSINESS MODELING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course covers practical business model techniques used by leading companies in different industries. The business model describes how companies create, deliver and capture value. The students will learn about the nine building blocks in creating and implementing a business model. These blocks include Customer Segments, Value Propositions, Channels, Customer Relationship, Revenue Streams, Key Resources, Key Activities, Key Partnerships and Cost Structure. Furthermore, the student shall understand disruptive innovation as a sensation and strategy in today’s business environment. Lastly, students will develop their own business model and understand the importance of sustainable. Pass/No Pass Option.

BUS 114  ENTREPRENEURSHIP FINANCE  2.0 UNITS
Total Lecture: 36 hours
Acceptable for credit: California State University
This course introduces financial thinking, tools, and techniques adapted to the area of entrepreneurship. Students will be introduced to the theories, knowledge, and financial tools an entrepreneur needs to start, build, and harvest a profitable venture. Students will learn how and where to obtain the financing necessary to launch and develop the venture. Also, we will highlight the discipline financial management practices that are vital to a venture’s operation. Pass/No Pass Option.

BUS 115  OPERATIONS MANAGEMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is an introduction to the field of operations management and addresses the design and management of the activities and resources that a firm uses to produce and deliver its products or services. Topics covered include product design, applied forecasting, aggregate planning, scheduling, total quality management, statistical process control, inventory management, facility layout operations planning, and lean/Just-in Time business processes. Concepts are illustrated by using abundant real world case studies, articles, illustrations, problems and cases. Pass/No Pass Option.

BUS 118  HUMAN RESOURCE MANAGEMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is designed as an overview of the Human Resource functions and the employment of human resources to achieve organizational strategic goals by working with and through people. Topics include HR legal environment, recruitment and selection, training and development, compensation and benefits, performance appraisals, workforce diversity, downsizing, outsourcing, contracting, and HR systems. This course offers a balance of practical and applied material in case study analysis. Pass/No Pass Option.

BUS 160  INTERNATIONAL MARKETING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course focuses on marketing management techniques, and strategies necessary to incorporate the marketing concept when doing business in international markets. The challenges of competing in markets of different cultures and different legal and political environments are also explored. Pass/No Pass Option.

CHEMISTRY (CHM)
Note: Completion of CHM 1A, 1B is equivalent to San Jose State University sequence of CHM 1A, 1B, although the order of topics presented is different. Students who are planning to complete the sequence are advised to take both semesters at the same college.

CHM 001A  GENERAL CHEMISTRY  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: (CHM 002 or High School Chemistry with a “B” or better) and (Intermediate Algebra Skills).
Acceptable for credit: University of California, California State University
Chemistry 001A is the first of a two-semester sequence in general inorganic chemistry designed for science majors and those seeking entry to medicine or other professional programs in the health sciences. Topics include atomic structure, theories of chemical bonding, nomenclature, stoichiometry, thermochemistry, gas laws, and the properties of solids, liquids, gases, and solutions. Grade only. C-ID # CHEM 110, CHEM 120S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 001AH GENERAL CHEMISTRY I - HONORS  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 002 or High School Chemistry with a “B” or better and (Intermediate Algebra Skills).
Acceptable for credit: University of California, California State University
Chemistry 001AH is the honors version of the first of a two-semester sequence in general inorganic chemistry designed for science majors and those seeking entry to medicine and other professional programs in the health sciences. Topics include atomic structure, stoichiometry, chemical bonding, thermochemistry, chemical reactivity, and the properties of solids, liquids, gases, and solutions. Students cannot get credit for both CHM 001A and CHM 001AH. Enrollment in the Honors Transfer Project is required. Grade only. C-ID # CHEM 110, CHEM 120S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 001B  GENERAL CHEMISTRY  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001A or CHM 001AH
Acceptable for credit: University of California, California State University
This course is a continuation of CHM 001A (General Chemistry I) and is intended for majors in chemistry, biological sciences, engineering, and professional programs in medicine and pharmacy. Topics include organic compounds, chemical kinetics, chemical equilibria, acid-bases, buffers, thermodynamics, electrochemistry, coordination compounds, and nuclear chemistry. Grade only. C-ID # CHEM 120S. CSUGE: B1, B3; IGETC: 5A, 5C.
CHM 001B · GENERAL CHEMISTRY II - HONORS  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001A or CHM 001AH
Acceptable for credit: University of California, California State University
Chemistry 001BH is the honors version of the second of a two-semester sequence in general inorganic chemistry designed for science majors and those seeking entry to medicine and other professional programs in the health sciences. Topics include organic compounds, chemical kinetics, chemical equilibria, acids-bases, buffers, thermodynamics, electrochemistry, coordination compounds, and nuclear chemistry. Students cannot get credit for both CHM 001B and CHM 001BH. Enrollment in the Honors Transfer Project is required. Grade only. C-ID # CHEM 120S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 002 · INTRODUCTORY CHEMISTRY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Intermediate Algebra Skills
Acceptable for credit: University of California, California State University
CHM 002 is designed specifically to prepare students for CHM 001A (general chemistry). It introduces the principles of atomic structure, gas laws, solutions, and acid-base theories. There is heavy emphasis on problem solving, chemical formulas, equations and quantity relationships. Pass/No Pass Option. C-ID # CHEM 101. CSUGE: B1; IGETC: 5A.

CHM 002L · INTRODUCTORY CHEMISTRY LABORATORY  1.0 UNIT
Total Lab: 54 hours
Prerequisite or Corequisite: CHM 002
Acceptable for credit: University of California, California State University
This course is a laboratory component to accompany CHM 002: Introductory Chemistry. Pass/No Pass Option. C-ID # CHEM 101. CSUGE: B3; IGETC: 5C.

CHM 012A · ORGANIC CHEMISTRY I  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001B or CHM 001BH
Acceptable for credit: University of California, California State University
CHM 012A is the first semester of organic chemistry, which includes a study of important organic molecules found in living systems and man-made molecules. This course includes both lecture and laboratory work designed to prepare students to enter fields of study such as chemistry, engineering, pre-pharmacy, pre-dentistry, pre-medicine, and biological sciences. Modern laboratory techniques, including instrumental methods of structure determination, are included. Grade only. C-ID # CHEM 150, CHEM 160S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 012AH · ORGANIC CHEMISTRY I - HONORS  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001B or CHM 001BH
Acceptable for credit: University of California, California State University
CHM 012AH is the honors course for the first semester of organic chemistry, which includes a study of important organic molecules found in living systems and man-made molecules. This course includes both lecture and laboratory work designed to prepare students to enter fields of study such as chemistry, engineering, pre-pharmacy, pre-dentistry, pre-medicine, and biological sciences. Modern laboratory techniques, including instrumental methods of structure determination, are included. Grade only. C-ID # CHEM 150, CHEM 160S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 012B · ORGANIC CHEMISTRY II  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001A or CHM 012AH
Acceptable for credit: University of California, California State University
CHM 012B is the second semester of organic chemistry, which includes a study of important organic molecules found in living systems and man-made molecules. This course includes both lecture and laboratory work designed to prepare students to enter fields of study such as chemistry, engineering, pre-pharmacy, pre-dentistry, pre-medicine, and biological sciences. Modern laboratory techniques, including instrumental methods of structure determination, are included. Grade only. C-ID # CHEM 160S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 012BH · ORGANIC CHEMISTRY II - HONORS  5.0 UNITS
Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 012A or CHM 012AH
Acceptable for credit: University of California, California State University
CHM 012BH is the honors course for the second semester of organic chemistry, which includes a study of important organic molecules found in living systems and man-made molecules. This course includes both lecture and laboratory work designed to prepare students to enter fields of study such as chemistry, engineering, pre-pharmacy, pre-dentistry, pre-medicine, and biological sciences. Modern laboratory techniques, including instrumental methods of structure determination, are included. Students cannot get credit for both CHM 012B and CHM 012BH. Enrollment in the Honors Transfer Project is required. Grade Only. C-ID # CHEM 160S. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 030A · FUNDAMENTALS OF CHEMISTRY  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: Elementary Algebra Skills
Acceptable for credit: University of California, California State University
CHM 030A is an introductory chemistry course designed for nursing and allied-health majors. Topics include dimensional analysis, inorganic nomenclature, atomic and molecular structure, bonding, chemical reactions, gas laws, solutions, acids-bases, oxidation-reduction, equilibrium and electrolyte systems. This course is not recommended for students majoring in biology or chemistry or for those seeking entry to professional programs in medicine or pharmacy. Grade only. CSUGE: B1, B3; IGETC: 5A, 5C.

CHM 060 · SURVEY OF GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: Elementary Algebra Skills
Acceptable for credit: California State University
Chemistry 060 is an introduction to General, Organic, and Biological Chemistry for Health Sciences. Topics include atomic structure, chemical bonding, and acid-base chemistry; organic chemistry nomenclature, functional groups, stereochemistry, and classes of organic reactions; an introduction to the structure and function of biological macromolecules (carbohydrates, lipids, DNA/RNA, and proteins) and an overview of metabolism. Grade Only. CSUGE: B1, B3.
COURSEs

CHILD DEVELOPMENT (CHD)

CHD 001 CHILD GROWTH AND DEVELOPMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This course is a study of typical and atypical child growth and development in the physical, social, emotional, cognitive, and language development from conception through adolescence. There is an emphasis on interactions between maturational processes and environmental factors within the family, cultural, and societal context. Students observe children using investigative research methods, evaluate differences, and analyze characteristics of development at various stages. This course fulfills requirements as a core course for Title 22 licensing and the Child Development Permit. C-ID# CDEV 100. Grade only. C-ID # CDEV 100. CSUGE: D.

CHD 002 CHILD, FAMILY, AND COMMUNITY 3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001
Acceptable for credit: California State University, University of California
This course addresses processes of socialization focusing on the interrelationship of family, school, and community. The course examines the influence of multiple societal contexts and explores the role of collaboration between family, community, and schools in supporting children's development, birth through adolescence. This course fulfills requirements as a core course for Title 22 licensing and the Child Development Permit. Grade only. C-ID # CDEV 110. CSUGE: D, E.

CHD 003 LANGUAGE AND LITERACY FOR THE YOUNG CHILD 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is designed to give students an opportunity to learn about the development of language in children and to learn about which experiences and techniques are needed to enable children to further that development. Students learn how to promote oral language abilities through activities offered by books, poetry, dramatic play, and group discussions. Grade Only.

CHD 004 COGNITIVE EXPERIENCES FOR CHILDREN 3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001 and CHD 002
Acceptable for credit: California State University
This course will examine the cognitive development in children by reviewing the theories, research and curriculum experiences that will enhance the child's thinking or understanding of the child's physical and social world. The implications of Piaget's theory for curriculum design and the role of the teacher and the environment in cognitive development will also be examined. Observation of children will be required. Grade only.

CHD 005 MUSIC AND MOVEMENT 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is the study of music and movement activities and how these activities affect the child's growth and development. Students learn how to assess musical and movement experiences and design activities that promote the child's development and culture. Students gain skills in determining how these musical experiences help with the pre-reading period, cognitive development, social-emotional development, and sensory and creative expressions. Observation of children is required. Students develop a resource file of songs and music to use for curriculum design and lesson plans. Grade Only.

CHD 006 ADMINISTRATION I: PROGRAMS IN EARLY CHILDHOOD EDUCATION 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001 and CHD 002 and CHD 010
Acceptable for credit: California State University
This course is an introduction to the administration procedures in early care and education programs. Topics include licensing requirements, administrative structures and governance, budgeting, program operation and quality improvement techniques. This course fulfills the State of California licensing requirements and partially fulfills requirements for Program Director or Site Supervisor Permits. Grade only.

CHD 007 ADMINISTRATION II: PERSONNEL AND LEADERSHIP IN EARLY CHILDHOOD EDUCATION 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001 and CHD 002 and CHD 010
Advisory: CHD 006
Acceptable for credit: California State University, California State University
This course is an in-depth study of effective application of personnel management and leadership procedures in early childhood programs. Topics include the unique goals, roles and responsibilities of the director or supervisor of the children's center. The course includes staff-administrator relationships, staff development and in-service training, and focuses on effective problem solving techniques, decision making models, meetings, performance appraisals, and assessment of individual leadership styles. This course fulfills requirements for the State of California licensing policies and procedures Title 22. This course also fulfills the requirements for the Site Supervisor and Program Director Child Development Permit. Grade only.

CHD 008A PRACTICUM A 3.5 UNITS
Total Lecture: 27 hours, Arranged Lab: 108 Hours
Prerequisite: CHD 001 and CHD 002 and CHD 010 and CHD 015 and CHD 026
Acceptable for credit: California State University
This course is a demonstration of developmentally appropriate early childhood program planning and teaching competencies under the supervision of ECE/CD faculty and other qualified early education professionals. Students will utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. Reflective practice will be emphasized as student teachers design, implement, and evaluate approaches, strategies, and techniques that promote development and learning. Includes exploration of career pathways, professional development, and teacher responsibilities. Grade only. C-ID # ECE 210.

CHD 010 PRINCIPLES AND PRACTICES IN EARLY CHILDHOOD EDUCATION 3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001 and CHD 002
Acceptable for credit: California State University
This is a survey course that explores the issues and methodology of Early Childhood Education from a diverse perspective. It includes the historical contexts and theoretical perspectives of developmentally and culturally appropriate practice in early care and education for children from birth through age eight. The course explores the typical roles and expectations of early childhood educators. Identifies professional ethics, career pathways, and professional standards. Introduces best practices for developmentally and culturally appropriate learning environments, curriculum, and effective pedagogy for young children including how play contributes to children's learning, growth, and development. Grade only. C-ID # ECE 120.
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE TITLE</th>
<th>UNITS</th>
<th>TOTAL LECTURE:</th>
<th>PREREQUISITE(S)</th>
<th>ACCEPTABLE FOR CREDIT(S):</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 013</td>
<td>TEACHING IN A DIVERSE SOCIETY</td>
<td>3.0</td>
<td>54 hours</td>
<td>CHD 001 and CHD 002</td>
<td>California State University, University of California</td>
<td>This course is an examination of the development of social identities and the theoretical and practical implications of oppression and privilege as they apply to young children, families, programs, classrooms and teaching. Various classroom strategies are explored emphasizing culturally and linguistically appropriate anti-bias approaches supporting all children in becoming competent members of a diverse society. This course includes self-examination and reflection on issues related to social identity, stereotypes and bias, and social and educational access, media and schooling. Grade only. C-ID # ECE 230. CSUGE: D, E.</td>
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<tr>
<td>CHD 014</td>
<td>ART AND CREATIVE DEVELOPMENT OF YOUNG CHILDREN</td>
<td>3.0</td>
<td>54 hours</td>
<td></td>
<td>California State University</td>
<td>This course focuses on creative art experiences for the child. Students explore the factors that affect children's development of creativity, artistic expression, and aesthetics. Developmentally appropriate art experiences are explored with emphasis on process rather than product. The role of the teacher and the importance of the environment are discussed. Understanding and analyzing children's art and its importance for the child's overall development is studied. Students design creative art experiences to further the child's creative expression and the role of art in STEM. Observation of children is required. Grade only.</td>
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<tr>
<td>CHD 015</td>
<td>OBSERVATION AND ASSESSMENT OF CHILDREN</td>
<td>3.0</td>
<td>54 hours</td>
<td>CHD 001 and CHD 002</td>
<td>California State University</td>
<td>Introduces the appropriate use of assessment and observation tools and strategies to document young children's development and learning. The use of findings to inform and plan learning environments and experiences are emphasized. Recording strategies, rating systems, portfolios, and multiple assessment tools will be discussed, along with strategies for collaboration with families and professionals. Grade only.</td>
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<tr>
<td>CHD 016</td>
<td>INFANT AND TODDLER DEVELOPMENT</td>
<td>3.0</td>
<td>54 hours</td>
<td></td>
<td>California State University</td>
<td>This course provides students with an in-depth study of the child from prenatal through the early childhood years. This course is an extension of CHD 001, Child Growth and Development, in the exploration of the development of the very young child. This course meets the Infant-Toddler state licensing requirement. Observation of children is required. Grade only.</td>
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<tr>
<td>CHD 017</td>
<td>CHILD HEALTH, SAFETY AND NUTRITION</td>
<td>3.0</td>
<td>54 hours</td>
<td></td>
<td>California State University</td>
<td>This course is an introduction to the laws, regulations, standards, policies and procedures and best practices of health, safety, and nutrition in care and education settings for children birth through middle childhood. The key components that ensure physical health, mental health and safety for both children and staff are identified along with the importance of collaboration with families and health professionals. The practice of integrating these concepts into everyday planning and program development with children is studied: teacher's role in prevention strategies, nutrition and meal planning, integrating health safety and nutrition experiences into daily routines, and overall risk management. Grade only. C-ID # ECE 220. CSUGE: E.</td>
</tr>
<tr>
<td>CHD 018</td>
<td>PARENTING ISSUES FOR TEACHERS</td>
<td>1.0</td>
<td>18 hours</td>
<td></td>
<td>California State University</td>
<td>This course is designed to give teachers or caregivers the skills to help parents develop positive attitudes, behaviors, and skills in their parent-child relationships. Students learn how to conduct parent/family meetings and parent/family conferences and make other parent/family contacts. Grade only.</td>
</tr>
<tr>
<td>CHD 020</td>
<td>THE CHILD WITH SPECIAL NEEDS IN THE COMMUNITY</td>
<td>3.0</td>
<td>54 hours</td>
<td>CHD 001 and CHD 002</td>
<td>California State University</td>
<td>This course provides an overview of atypical development, a variety of disabilities, and the relationships between the child, family, and community. Educational, historical, societal, and developmental issues are explored. The course examines special education laws, the identification and referral process, the development and implementation of an IFSP and an IEP, methods of intervention, and case management. Observation of children and conversations with family members and community agencies are encouraged. Grade only.</td>
</tr>
<tr>
<td>CHD 021</td>
<td>CHILDREN AND PLAY</td>
<td>3.0</td>
<td>54 hours</td>
<td></td>
<td>California State University</td>
<td>This course focuses on the classic and contemporary theories of play and the implications of play in relationship to the child's social-emotional, cognitive, language and physical development. Students observe children's play behavior in order to plan and implement developmentally appropriate experiences for young children in a group setting. Creating an inclusive play curricula and developing and implementing special techniques for children with special needs are discussed. Grade only.</td>
</tr>
<tr>
<td>CHD 022</td>
<td>ADULT SUPERVISION IN EARLY CHILDHOOD PROGRAMS</td>
<td>2.0</td>
<td>36 hours</td>
<td>CHD 001 and CHD 010</td>
<td>California State University</td>
<td>This course is a study of methods and principles of program and professional assessment, evaluation, and communication appropriate for individuals who supervise adult teachers, parents, and volunteers in early childhood programs. A variety of professional and program instruments, including the National Association for the Education of Young Children (NAEYC) Accreditation self-study materials, designed for use in assessing staff performance and program quality are thoroughly discussed in an in-depth analysis of ongoing assessment and its importance in program and professional development. In addition, self-assessment, leadership style, communication styles, and career development are examined. This course partially fulfills Child Development Permit requirements for Master Teacher, Site Supervisor, or Program Director. Grade only.</td>
</tr>
<tr>
<td>CHD 024</td>
<td>POSITIVE GUIDANCE IN EARLY CHILDHOOD PROGRAMS: MANAGING CHALLENGING BEHAVIORS</td>
<td>3.0</td>
<td>54 hours</td>
<td>CHD 001 and CHD 002</td>
<td>California State University</td>
<td>This course takes a comprehensive look at the genetic, environmental, and cultural factors that impact the behavior of young children. This includes stressors, child temperament, and disabilities. Positive guidance strategies, prevention techniques, supportive relationships, classroom management, observation, and intervention plans are discussed. Grade only.</td>
</tr>
</tbody>
</table>
CHD 025  INCLUSION STRATEGIES AND CURRICULUM IN EARLY CHILDHOOD EDUCATION  3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001 and CHD 002
Acceptable for credit: California State University
This course focuses on the theories, research, and practical applications from the fields of both early childhood education and special education. Topics covered include using observation and assessments and implementation of Individual Education Plans (IEP) and Individual Family Service Plans (IFSP). Curriculum modification strategies for children with disabilities are discussed with the goal of meeting their unique developmental needs in inclusive and natural environments. Specific attention is aimed at the role of the teacher as a professional working with families, collaborating with interdisciplinary teams, and creating cultural competence. Grade Only.

CHD 026  INTRODUCTION TO CURRICULUM  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001
Advisory: CHD 002
Acceptable for credit: California State University
This course teaches the developmentally appropriate curriculum and environments for children from birth through age eight. Students will use knowledge of children’s development, theories of learning and development, and examples from various models of developmentally appropriate practice to plan environments and curriculum in all content areas to support children’s development and learning integrated throughout indoor and outdoor settings. Grade only. C-ID # ECE 130.

CHI 001  FIRST SEMESTER CHINESE  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the basic oral and written structures of the Mandarin Chinese language. Emphasis is placed on communication and relevancy. Reading and writing is introduced and practiced. Aspects of the Chinese culture in China and Chinese-speaking countries are presented and discussed. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

CHI 002  SECOND SEMESTER CHINESE  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: CHI 001
Acceptable for credit: University of California, California State University
Chinese 002 is a continuation of Chinese 001 and is an elementary level course. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

CHINESE (CHI)

COURSES

COMMUNICATION STUDIES (COM)

COM 001  INTRODUCTION TO PUBLIC SPEAKING  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course helps students build confidence and skills in oral communication. Students prepare and deliver various types of presentations by learning to manage speech anxiety, present using multimedia, and effectively research, organize, and analyze speeches. Grade only. C-ID # COMM 110. CSUGE: A1; IGETC: 1C.

COM 001H  INTRODUCTION TO PUBLIC SPEAKING - HONORS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This honors course helps students build confidence and skills in oral communication. Students prepare and deliver various types of presentations by learning to manage speech anxiety, present using multimedia, and effectively research, organize, and analyze speeches, all at an enhanced level. Students cannot receive credit for both COM 001 and COM 001H. Enrollment in the Honors Program is required. Grade only. C-ID # COMM 110. CSUGE: A1; IGETC: 1C.

COM 004  TEAMWORK AND LEADERSHIP IN SMALL GROUPS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course prepares students with practical communication skills and knowledge to function effectively in various group contexts. Students will learn communication skills such as teamwork, leadership, conducting group meetings, creating cooperative groups, developing role flexibility, problem-solving, decision-making strategies, and conflict management. In addition, students will learn to deliver group presentations and demonstrate effective oral communication skills. Grade only. C-ID # COMM 140.

COM 008  INTERPERSONAL COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course involves practical communication skills useful for communicating in one’s personal life as well as in working relationships. Course content emphasizes communication skills and theory important in improving interpersonal relationships. Topic areas include listening, nonverbal communication, assertiveness, self-awareness, intercultural communication and conflict resolution. Pass/No Pass Option. C-ID # COMM 130. CSUGE: E.

COM 012  INTERCULTURAL COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course explores how culture and context can impact the way we use and interpret human communication. Students will learn the practical skills and knowledge to communicate effectively across global cultures and within co-cultures of various societies. Grade only. C-ID # COMM 150. CSUGE: C2, E; IGETC: 3B.

CHD 025  INCLUSION STRATEGIES AND CURRICULUM IN EARLY CHILDHOOD EDUCATION  3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001 and CHD 002
Acceptable for credit: University of California, California State University
This course focuses on the theories, research, and practical applications from the fields of both early childhood education and special education. Topics covered include using observation and assessments and implementation of Individual Education Plans (IEP) and Individual Family Service Plans (IFSP). Curriculum modification strategies for children with disabilities are discussed with the goal of meeting their unique developmental needs in inclusive and natural environments. Specific attention is aimed at the role of the teacher as a professional working with families, collaborating with interdisciplinary teams, and creating cultural competence. Grade Only.

CHD 026  INTRODUCTION TO CURRICULUM  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001
Advisory: CHD 002
Acceptable for credit: California State University
This course teaches the developmentally appropriate curriculum and environments for children from birth through age eight. Students will use knowledge of children’s development, theories of learning and development, and examples from various models of developmentally appropriate practice to plan environments and curriculum in all content areas to support children’s development and learning integrated throughout indoor and outdoor settings. Grade only. C-ID # ECE 130.

CHI 001  FIRST SEMESTER CHINESE  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the basic oral and written structures of the Mandarin Chinese language. Emphasis is placed on communication and relevancy. Reading and writing is introduced and practiced. Aspects of the Chinese culture in China and Chinese-speaking countries are presented and discussed. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

CHI 002  SECOND SEMESTER CHINESE  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: CHI 001
Acceptable for credit: University of California, California State University
Chinese 002 is a continuation of Chinese 001 and is an elementary level course. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

CHINESE (CHI)

COURSES

COMMUNICATION STUDIES (COM)

COM 001  INTRODUCTION TO PUBLIC SPEAKING  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course helps students build confidence and skills in oral communication. Students prepare and deliver various types of presentations by learning to manage speech anxiety, present using multimedia, and effectively research, organize, and analyze speeches. Grade only. C-ID # COMM 110. CSUGE: A1; IGETC: 1C.

COM 001H  INTRODUCTION TO PUBLIC SPEAKING - HONORS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This honors course helps students build confidence and skills in oral communication. Students prepare and deliver various types of presentations by learning to manage speech anxiety, present using multimedia, and effectively research, organize, and analyze speeches, all at an enhanced level. Students cannot receive credit for both COM 001 and COM 001H. Enrollment in the Honors Program is required. Grade only. C-ID # COMM 110. CSUGE: A1; IGETC: 1C.

COM 004  TEAMWORK AND LEADERSHIP IN SMALL GROUPS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course prepares students with practical communication skills and knowledge to function effectively in various group contexts. Students will learn communication skills such as teamwork, leadership, conducting group meetings, creating cooperative groups, developing role flexibility, problem-solving, decision-making strategies, and conflict management. In addition, students will learn to deliver group presentations and demonstrate effective oral communication skills. Grade only. C-ID # COMM 140.

COM 008  INTERPERSONAL COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course involves practical communication skills useful for communicating in one’s personal life as well as in working relationships. Course content emphasizes communication skills and theory important in improving interpersonal relationships. Topic areas include listening, nonverbal communication, assertiveness, self-awareness, intercultural communication and conflict resolution. Pass/No Pass Option. C-ID # COMM 130. CSUGE: E.

COM 012  INTERCULTURAL COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course explores how culture and context can impact the way we use and interpret human communication. Students will learn the practical skills and knowledge to communicate effectively across global cultures and within co-cultures of various societies. Grade only. C-ID # COMM 150. CSUGE: C2, E; IGETC: 3B.

Please refer to English as a Second Language found alphabetically in catalog.
COM 015  CAREER AND WORKPLACE COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course prepares students with practical communication skills and knowledge to navigate the workplace and other organizations. Students will be introduced to the fundamentals of communication in interpersonal, small group, organizational, and public speaking with emphasis on career building strategies. Students will learn skills such as networking, interviewing, teamwork, leadership, presentation skills, organizational culture, cross-cultural communication, and conflict management in career settings. Grade Only. CSUGE: A1.

COM 020  ARGUMENTATION, ADVOCACY, AND DEBATE  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course prepares students with practical communication skills and knowledge to effectively and ethically engage in argumentation and debate about socially relevant issues. Students will participate in hands-on learning (e.g., game formats) through various speaking and debate activities. Specific areas addressed include uses and misuses of reasoning, discovery and use of evidence, and critical analysis of persuasive strategies. Grade only. C-ID # COMM 120. CSUGE: A1, A3; IGETC: 1C.

COM 020H  ARGUMENTATION, ADVOCACY, AND DEBATE - HONORS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: California State University, University of California
This honors course prepares students with practical communication skills and knowledge to effectively and ethically engage in argumentation and debate about socially relevant issues. Students will participate in hands-on learning (e.g., game formats) through various speaking and debate activities. Specific areas addressed include uses and misuses of reasoning, discovery and use of evidence, and critical analysis of persuasive strategies. Students cannot receive credit for both COM 020 and COM 020H. Enrollment in the Honors Program is required. Grade only. C-ID # COMM 120. CSUGE: A1, A3; IGETC: 1C.

COM 080  INTERVIEWING SKILLS  1.0 UNIT
Total Lecture: 18 hours
Acceptable for credit: California State University
In this course students develop practical skills and strategic knowledge to effectively engage in various types of interviews (e.g., informational, employment, performance appraisals). Techniques include pre-interview preparation, dynamics of interviews, salary negotiations and follow-up. Students also learn to conduct interviews. Pass/No Pass Option.

COM 081  STORYTELLING  1.0 UNIT
Total Lecture: 18 hours
Acceptable for credit: California State University
Students learn strategies for discovering and crafting their personal stories for various occasions such as job interviews, professional events, special occasions, social gatherings, etc. The course provides guidance on how to structure, adapt, and confidently present stories that authentically connect with others. Pass/No Pass Option.

COM 090A  SELECTED TOPICS AND ACTIVITIES IN COMMUNICATION - SERIES 1  1.0 UNIT
Total Lecture: 18 hours
Acceptable for credit: California State University
In this course, students will contract with an instructor to complete one or more communication activities adapted to student interest. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

COM 090B  SELECTED TOPICS AND ACTIVITIES IN COMMUNICATION - SERIES 2  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: COM 090A
Acceptable for credit: California State University
In this course, students who completed COM090A will complete a new communication activity or an intermediate level of the previously completed COM 090A activity. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

COM 090C  SELECTED TOPICS AND ACTIVITIES IN COMMUNICATION - SERIES 3  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: COM 090A and COM 090B
Acceptable for credit: California State University
In this course, students who completed COM090A and COM090B will complete either a new communication activity or a significantly advanced level of the previously completed COM09A and COM09B activity. Examples include professional and/or community speaking, conversation group leader for ESL students, workplace/career skills and projects, speech competition, conflict management, and other communication topics of special interest to the student. Pass/No Pass Option.

COMPUTER APPLICATIONS (CAP)

CAP 010A  LEARNING THE KEYBOARD  1.0 UNIT
Total Lab: 54 hours
This course is designed for anyone who wants to learn the “touch” system of keyboarding on the computer. Proper techniques of keyboarding are emphasized to develop speed and accuracy. Pass/No Pass Only.

CAP 033A  MICROSOFT WORD - COURSE 1  3.0 UNITS
Total Lecture: 54 hours
Advisory: CAP 010A
Acceptable for credit: California State University
This course covers word processing features using Microsoft Word. The course includes text-editing, formatting, storage, retrieval, printing, tables, charts, document filing and management, columns, style sheets, spell check and thesaurus, and other basic word processing skills. Pass/No Pass Option.

CAP 044  USING PROJECT MANAGEMENT SOFTWARE TO MANAGE A PROJECT  1.0 UNIT
Total Lecture: 18 hours
Advisory: CAP 070
Acceptable for credit: California State University
This course covers the basic concepts of project management and the essential components of project management software. Students research and evaluate a number of project management software applications including but not limited to SmartSheet, Microsoft Planner, Microsoft Project, and Liquid Planner. Students will choose a project management software application to design and create a basic project plan. Pass/No Pass Option.
This noncredit course takes students through the basics of using a computer to perform essential tasks for workforce and academic survival. Highlights of the course include: operating system basics, applications software, e-mail basics, computer peripherals, and Internet basics. Satisfactory Progress.

**CAP 111 COLLABORATE AND INTEGRATE WITH SHAREPOINT AND MS OFFICE 365**

Total Lecture: 45 hours, Total Lab: 27 hours
Advisory: BUS 021L or CAP 062B
Acceptable for credit: California State University

This course provides students with the fundamental knowledge and skills required to collaborate with business teams using Microsoft SharePoint and Office 365 web apps and office software. Students create, edit and maintain collaboration sites, including webpages, user communities, wikis, calendars, and blogs in office environments that require multi-user access. This course is designed for students majoring in Business, Computer Applications, or Computer Information Systems as well as for business professionals seeking to update their technology skills. Pass/No Pass Option.

**COMPUTER INFORMATION SYSTEMS (CIS)**

**NOTE:** Maximum credit that can be transferred to UC is a total of six CIS courses.

**CIS 001 INTRODUCTION TO COMPUTER SCIENCE AND TECHNOLOGY**

Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University

This course is an introduction to the concepts of computer science and information technology. It covers computer architecture, the Internet and networking, and basic programming and data manipulation. Students develop a practical, realistic understanding of computer science and information technology. This course is recommended for students in any major who want to learn about computers and programming. Pass/No Pass Option.

**CIS 007 PYTHON PROGRAMMING**

Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University

This is an introductory course in programming using Python. No prior programming experience is required. Students learn to design, code, and execute programs using the Python programming language and tools. This class covers basic programming skills such as data types, control structure, algorithm development, and program design with functions. It also includes lists, object-oriented programming and graphics programming concepts and topics. Pass/No Pass Option. C-ID # COMP 112 and C-ID # ITIS 120.

**CIS 008 ADVANCED PYTHON PROGRAMMING**

Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 007
Acceptable for credit: University of California, California State University

This is an advanced course in Python programming that covers features of the language and its libraries. Students learn about advanced data structures such as linked lists, binary search trees, hash tables and directed and undirected graphs and design patterns in Python. Pass/No Pass Option.
COURSES

CIS 033  ROBOTICS AND EMBEDDED SYSTEMS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 033A
Acceptable for Credit: California State University
This course is an introduction to robotics and embedded systems. It covers basic hardware components such as LEDs, switches, motors and sensors needed to build a robot and introduce the components needed for the drone hardware. In addition, it includes programming of the microcontroller. Pass/No Pass Option.

CIS 034  INTERMEDIATE ROBOTICS AND EMBEDDED SYSTEM DESIGN  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 033
Acceptable for Credit: California State University
This is an intermediate course in Robotics and embedded systems. This course covers Raspberry Pi and Python programs to control the robot camera, get sensor information and send control signals to the robot. It covers remote communication using Zigbee, graphical LCD, locating robot using GPS, interfacing I2C and SPI devices. Robot Operating System (ROS) and artificial intelligence applied to robots is introduced. Pass/No Pass Option.

CIS 037A  INTRODUCTION TO C PROGRAMMING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the concepts and methods of computer programming using the C language. The course covers data types, expressions, control structures, functions, sequential files, arrays, pointers, strings, string library and ADTs. It also covers low-level programming elements such as memory manipulations, pass-by reference pointers, structs and bit-level manipulation. Pass/No Pass Option. C-ID # ITIS 130.

CIS 039  INTRODUCTION TO COMPUTER SYSTEMS AND ASSEMBLY LANGUAGE  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 037A
Acceptable for credit: University of California, California State University
This course provides a solid introduction to computer systems and machine language programming. Students learn the inner working of computer systems, instruction sets, assembly language programming, and data representation. Students also learn how to understand the code that a compiler generates, the memory layout and hierarchy, and the details of linking and loading. Pass/No Pass Option. C-ID # COMP 142.

CIS 040  C++ PROGRAMMING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 037A
Acceptable for credit: University of California, California State University
This is an introductory course in programming using C++. Students learn to design, code, and execute programs using the C++ programming language. This class includes control structures, functions, object-oriented programming concepts and topics. Pass/No Pass Option. C-ID # COMP 112, ITIS 130.

CIS 043  SOFTWARE DEVELOPMENT WITH JAVA  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 007 or CIS 037A
Acceptable for credit: University of California, California State University
This course is an introduction to the concepts and methods of computer programming with an emphasis on OOP. (Object-Oriented Programming). Java programming language concepts include data types, selection, loops, arrays objects and classes. This course also includes GUI (graphical user interface), Graphics, files and exception handling. Pass/No Pass Option. C-ID # COMP 122 and C-ID # ITIS 130, CID ITIS 130.

CIS 044  INTRODUCTION TO DATA STRUCTURES USING JAVA  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 043 and MAT 003A
Acceptable for credit: University of California, California State University
This course is an advanced course in Java Programming Language. It covers basic data structures such as stacks, lists, dynamic arrays, trees, and the algorithms of their implementation. Other topics introduced are the definition and terminology of graphs, internal and external sorting, merging, searching, Hashing, Big-O notation, and Standard collection of Classes. Pass/No Pass Option.

CIS 045  LINUX ESSENTIALS I  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This is an introductory course in the Linux operating system. Students learn the basic Linux commands and utilities, including files, editors and shell scripting. This course may be offered via distance learning. Pass/No Pass Option.

CIS 047  LINUX SYSTEM ADMINISTRATION  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 045
Acceptable for credit: University of California, California State University
This is a course in Linux system administration. Students learn hands-on skills for Linux administration, including system initialization, file system management, user and services administration and network configuration. It covers file systems, file sharing, mail server, LDAP, DNS, fire wall, web server and network security. Pass/No Pass Option. C-ID # ITIS 155.

CIS 051  INTRODUCTION TO DATA ANALYSIS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 007
Acceptable for credit: California State University
This is an introductory course on data analysis. It provides a foundation for understanding data analysis principles, tools and applications. Topics include data loading and storage, data manipulation, data cleaning and preparation, data wrangling, plotting, visualization and analysis. Students will use Python programming language and Python libraries such as NumPy, Pandas, Matplotlib in the course. Pass/No Pass Option.

CIS 052  DATA VISUALIZATION  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
In this course students will learn how to become a master at communicating business-relevant implications of data analyses. After finishing this course, students will be able to effectively import data, clean and transform it and convey the results of the analysis to the stakeholders. Students will learn how to best convey the story behind the data using the most effective visuals as well as using Tableau to make effective and interactive dashboards. Pass/No Pass Option.

CIS 053  INTRODUCTION TO MACHINE LEARNING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 051
Acceptable for credit: California State University
This course is an introductory course in machine learning and predictive analytics. Students will learn the fundamentals of developing models with cleaned and prepared data. They will gain an understanding of the algorithms of machine learning and learn to build predictive models using Python. Topics include supervised learning, forecasting numeric values with multiple linear regression, decision trees and unsupervised learning. Students will use machine learning Python libraries such as scikit-learn to implement machine learning algorithms. Pass/No Pass Option.
CIT 055  DATABASE MANAGEMENT SYSTEMS I  3.0 UNITS
Total Lecture: 45 hours, Total Lab: 27 hours
Advisory: CIS 001
Acceptable for credit: California State University
This course is the first of two courses that covers the current, classical database systems, database design, architecture, entity-relationship and enhanced entity models, relational model, normalization techniques, emerging standard of SQL (structured) query language, XML (Extensible Markup Language), embedded, and dynamic SQL. It introduces students to widely used database systems such as Oracle, Microsoft SQL server, and MySQL. Students will work in groups to implement and design a commercial database application project. Pass/No Pass Option. C-ID # ITIS 180.

CIT 056  DATABASE MANAGEMENT SYSTEMS II  3.0 UNITS
Total Lecture: 45 hours, Total Lab: 27 hours
Advisory: CIS 055
Acceptable for credit: California State University
This course is the second of two courses that covers database management and SQL programming, stored procedures, functions, packages, and database triggers, relational database systems, object-oriented data model, database trends, web database topics, architectures, introduction to interface languages. Students will work in groups to implement a commercial database application project. Pass/No Pass Option.

CIT 063  MOBILE APPS PROGRAMMING - ANDROID  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 043
Acceptable for credit: California State University
This course is an introduction to programming applications for the Android operating system. Students learn to develop simple to more advanced applications using the latest Java technologies and the Android SDK. Pass/No Pass Option.

COMPUTER INFORMATION TECHNOLOGY (CIT)

CIT 011  INTRODUCTION TO COMPUTER HARDWARE AND SOFTWARE (A+)  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This course covers the fundamentals of computer hardware and software and advanced concepts such as security, networking, mobile devices such as tablets and smartphones, client-side virtualization, and the responsibilities of an IT professional. The fundamentals of processor, memory, video, storage, I/O ports, and other peripherals including the basic concepts of BIOS, Windows/Linux/Mac operating systems are also covered. It helps students prepare for entry-level career opportunities in ICT and the CompTIA A+ certification. It also provides a learning pathway to Cisco CCNA. Hands-on lab activities are an essential element of the course. The VirtualBox and Virtual Desktop are stand-alone tools designed to supplement classroom learning and provide an interactive “hands-on” experience in learning environments with limited physical equipment. Pass/No Pass Option. C-ID # ITIS 110.

CIT 012  INTRODUCTION TO NETWORKING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This course introduces the fundamental building blocks that form the modern network, such as protocols, media, topologies and hardware. It then provides in-depth coverage of the most important concepts in contemporary networking, such as TCP/IP, Ethernet, wireless transmission, virtual networks, security and troubleshooting. This course helps students prepare for entry-level career opportunities in ICT and the CompTIA Network+ certification. It also provides a learning pathway to Cisco CCNA. Pass/No Pass Option. C-ID # ITIS 150.

CIT 013  AWS 1 CLOUD PRACTITIONER - FOUNDATIONAL  3.0 UNITS
Total Lecture: 45 hours, Total Lab: 27 hours
Prerequisite: CIT 021
Acceptable for credit: California State University
This introductory course provides an overall understanding of cloud computing concepts, AWS core services, security, architecture, storage, networking, pricing, and support. Pass/No Pass Option.

CIT 014  AWS 2 SOLUTIONS ARCHITECT - ASSOCIATE  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 013
Acceptable for credit: California State University
This course will help students develop technical expertise in cloud computing and prepare them for the AWS Certified Solutions Architect – Associate certification exam. The curriculum is delivered through instructor-led classes, knowledge assessments, hands-on labs, and project work. The course covers AWS Cloud, management console, S3 storage, Networking and VPC, cloud migration, continuity, Scalability, database. Pass/No Pass Option.

CIT 016  CYBERSECURITY AND ETHICAL HACKING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This course is an introduction to IT security and ethical hacking using the latest operating systems, security techniques, and wireless standards. It also covers the fundamentals of system security, network infrastructure, access control, assessments and audits, cryptography, and organizational security. Students gain hands-on experience with various ethical hacking methods and techniques. Pass/No Pass Option. C-ID # ITIS 160.

CIT 017  CYBER SECURITY ESSENTIALS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 021
Acceptable for credit: California State University
The Cybersecurity Essentials course develops foundational understanding of cybersecurity and how it relates to information and network security. This course explores the importance of cybersecurity, data confidentiality, and best practices for using the internet and social media safely. This course introduces students to characteristics of cybercrime, security principles, technologies, and procedures to defend networks. Through interactive, multimedia content, lab activities, and multi-industry case studies, students build technical and professional skills to pursue careers in cybersecurity. Pass/No Pass Option.

CIT 018  CCNA CYBER SECURITY OPERATIONS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 017
Acceptable for credit: California State University
The CCNA Cybersecurity Operations course introduces the knowledge and skills needed for a Security Analyst working with a Security Operations Center team. It teaches core security skills needed for monitoring, detecting, investigating, analyzing, and responding to security events, thus protecting systems and organizations from cybersecurity risks, threats, and vulnerabilities. Pass/No Pass Option.
CIT 021  INTRODUCTION TO CISCO NETWORKS (CISCO-1)  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Acceptable for credit: California State University
Introduction to Cisco Networks (ITN) is the first course in the CCNA curriculum. It covers the architecture, structure, functions and components of the Internet and other computer networks. Students achieve a basic understanding of how networks operate and how to build simple local area networks (LAN), perform basic configurations for routers and switches, and implement Internet Protocol (IP). Pass/No Pass Option. C-ID # ITIS 150.

CIT 022  SWITCHING, ROUTING, AND WIRELESS ESSENTIALS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 021
Acceptable for credit: California State University
Switching, Routing, and Wireless Essentials (SRWE) course is the second course in the CCNA curriculum. It covers the architecture, components, and operations of routers and switches in small networks and introduces wireless local area networks (WLAN) and security concepts. Students learn how to configure and troubleshoot routers and switches for advanced functionality using security best practices and resolve common issues with protocols in both IPv4 and IPv6 networks. Pass/No Pass Option. C-ID # ITIS 151.

CIT 023  ENTERPRISE NETWORKING, SECURITY, AND AUTOMATION  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 022
Acceptable for credit: California State University
Enterprise Networking, Security, and Automation (ENSA) is the third course in the CCNA curriculum. It describes the architecture, components, operations, and security to scale for large, complex networks, including wide area network (WAN) technologies. The course emphasizes network security concepts and introduces network virtualization and automation. Students learn how to configure, troubleshoot, and secure enterprise network devices and understand how application programming interfaces (API) and configuration management tools enable network automation. Pass/No Pass Option.

CIT 024  IMPLEMENTING AND ADMINISTERING CISCO NETWORKING TECHNOLOGIES  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: CIT 023
Acceptable for credit: California State University
The course is advanced course that provides students with the required knowledge to develop a comprehensive foundation for designing, securing, operating, and troubleshooting modern computer networks, on the scale from small business networks to enterprise networks, with an emphasis on hands-on learning and essential career skills like problem solving and collaboration. Pass/No Pass Option.

CIT 078  MICROSOFT SERVER ESSENTIALS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIT 011
Acceptable for credit: California State University
This course focuses primarily on the installation, storage, “compute features and functionality” and the “networking features and functionality” available in Windows Server 2019. It covers general installation tasks, creation and management of images for deployment. It also covers local and server storage solutions, including the configuration of disks and volumes, Data Deduplication, High Availability and Disaster Recovery. The course also covers Hyper-V and containers, along with the maintenance and monitoring of servers, DNS, DHCP, in addition to remote access solutions, such as VPN and Direct Access. It also covers DFS and BranchCache solutions, high performance network features and functionality. Pass/No Pass Option. C-ID # ITIS 155.

COUNSELING (COU)

COU 000A  ORIENTATION TO MISSION COLLEGE  0.5 UNITS
Total Lecture: 9 hours
This course provides new students with basic information needed to attend college. It includes an orientation to Mission College programs and services, assessment information, registration procedures, an overview of general education requirements, and educational planning. Pass/No Pass Only.

COU 005  STRATEGIES FOR SUCCESS  3.0 UNITS
Total Lecture: 54 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: University of California, California State University
This is a comprehensive course that integrates critical and creative thinking proficiency, personal growth and values, and academic study strategies. This survey course includes a study of the following topics: role of education in life, college systems, effective learning strategies, academic survival, career information, awareness of personal development and techniques of interpersonal communication. Emphasis is on the attainment of life-long success in academic, professional and personal development. Pass/No Pass Option. CSUGE: E.

COU 007  UNIVERSITY TRANSFER PLANNING  1.0 UNIT
Total Lecture: 12 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: University of California, California State University
This course provides in-depth information and assistance with the transfer process to four-year colleges/universities. It is designed to enable students to actively participate in planning their educational and career goals by providing information about the process and requirements for transferring from a community college to a university. Lower division major and general education requirements, college/university selection, admission procedures, competitive selection criteria, application deadlines, financial aid and scholarship information are covered. Use of college catalogs, printed directories and the Internet are necessary to complete assignments. Pass/No Pass Option.
The course assists students in exploring individual interests through the use of a variety of career assessments. The focus is on career, personal and educational awareness as they relate to the process of career choice and major selection. Students identify personal interests, values, abilities and skills and use self-assessment instruments to help them identify career options. Lifestyles and personal satisfaction are discussed as related to the world of work. Decision-making strategies, resume writing, interviewing skills and job search techniques are reviewed. Pass/No Pass Option. CSUGE: E.

**COU 012A CAREERS AND LIFESTYLES**

Total Lecture: 18 hours

Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: California State University

This course assists students in exploring individual interests through the use of a variety of career assessments. The focus is on career, personal and educational awareness as they relate to the process of career choice and major selection. Students identify personal interests, values, abilities and skills and use self-assessment instruments to help them identify career options. Lifestyles and personal satisfaction are discussed as related to the world of work. Decision-making strategies, resume writing, interviewing skills and job search techniques are reviewed. Pass/No Pass Option.

**COU 017 TRANSFER SUCCESS AND LIFE TRANSITIONS**

Total Lecture: 54 hours

Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University

The course assists students in exploring individual interests through the use of a variety of career assessments. The focus is on career, personal and educational awareness as they relate to the process of career choice and major selection. Students identify personal interests, values, abilities and skills and use self-assessment instruments to help them identify career options. Lifestyles and personal satisfaction are discussed as related to the world of work. Decision-making strategies, resume writing, interviewing skills and job search techniques are reviewed. Pass/No Pass Option. CSUGE: E.
ENGLISH (ENG)

EGR 010 INTRODUCTION TO ENGINEERING 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: University of California, California State University
This course exposes students to the field of engineering and the various engineering disciplines. Course presents the basic skills necessary to succeed as an engineering student. The nature of engineering work and the roles of engineers are explored. The Engineering Design Process is addressed through multiple team-based projects and engineering problem-solving topics. Communication skills for technical presentations and reports are developed through practical engineering scenarios. Guest speakers from local engineering firms and tours to local companies are included. Pass/No Pass Option. C-ID # ENGR 110.

EGR 010H INTRODUCTION TO ENGINEERING - HONORS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: Elementary Algebra Skills
Acceptable for Credit: California State University, University of California
This course is the honors version of Introduction to Engineering. This course exposes students to the field of engineering and the various engineering disciplines. Course presents the basic skills necessary to succeed as an engineering student. The nature of engineering work and the roles of engineers are explored. The Engineering Design Process is addressed through multiple team-based projects and engineering problem-solving topics. Communication skills for technical presentations and reports are developed through practical engineering scenarios. Guest speakers from local engineering firms and tours to local companies are included. Students may not receive credit for both EGR 010 and EGR 010H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # ENGR 110.

EGR 023 MECHANICS - STATICS 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: (MAT 003B or any higher level math) and PHY 004A
Acceptable for credit: University of California, California State University
This course applies the principles of mechanics to evaluate the static equilibrium of two- and three-dimensional engineering structures. Topics include the equilibrium of particles, equivalent force systems, equilibrium of rigid bodies, distributed loads, internal forces in beams, shear and bending moment diagrams, truss analysis, and friction. This course is primarily for engineering transfer students. Grade only. C-ID # ENGR 130.

EGR 024 INTRODUCTION TO CIRCUIT ANALYSIS 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MAT 003B and PHY 004B
Advisory: MAT 004A
Acceptable for credit: University of California, California State University
This is an introductory course in the analysis of electric circuits. The emphasis is on analysis and setting up equations arising from the applications of Kirchhoff's Laws, Ohm's Law, and Thevenin's & Norton's Theorems, both in DC and AC circuits. Topics include mesh and nodal analysis, periodic forcing functions, phasors, frequency response, resonant circuits, transient responses, dependent sources, and operational amplifiers. This course is primarily for engineering transfer students. Grade only.

EGR 024L INTRODUCTION TO CIRCUIT ANALYSIS LABORATORY 1.0 UNIT
Total Lab: 54 hours
Prerequisite: MAT 003B and PHY 004B
Corequisite: EGR 024
Acceptable for credit: University of California, California State University
Introduction to Circuit Analysis Lab. This course is an introduction to the construction and measurement of electrical circuits. Basic use of electrical test and measurement instruments including multimeters, oscilloscopes, power supplies, and function generators. Use of circuit simulation software. Interpretation of measured and simulated data based on principles of circuit analysis for DC, transient, and sinusoidal steady-state (AC) conditions. Construction and measurement of basic operational amplifier circuits. This course is primarily for engineering transfer students. Grade only. C-ID # ENGR 260L.

EGR 025 ENGINEERING GRAPHICS AND DESIGN 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 000D or MAT 002 or MAT 003A or MAT 003AH
Acceptable for credit: University of California, California State University
This course develops graphical visualization and design skills by applying graphics based engineering methods. The course also teaches engineering design by applying the conceptual design process and integrating graphics into design projects. Graphics assignments develop sketching, manual drafting, and computer aided drafting (CAD) skills. This course is primarily for engineering transfer students. Grade only. C-ID # ENGR 150.

EGR 026 ENGINEERING MATERIALS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: (CHM 001A or CHM 001AH) and PHY 004A
Acceptable for credit: University of California, California State University
This course presents the internal structures and resulting behaviors of materials used in engineering applications, including metals, ceramics, polymers, composites, and semiconductors. The emphasis is upon developing the ability both to select appropriate materials to meet engineering design criteria and to understand the effects of heat, stress, imperfections, and chemical environments upon material properties and performance. Laboratories provide opportunities to directly observe the structures and behaviors discussed in the course, to operate testing equipment, to analyze experimental data, and to prepare reports. Grade only. C-ID # ENGR 140B.

EGR 030 INTRODUCTION TO COMPUTING FOR ENGINEERS 4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 001 or MAT 002
Acceptable for credit: University of California, California State University
This course introduces software development using a high level language such as C or C++. Engineering problems are solved through software programming techniques and by interfacing software to hardware circuits. A microcontroller system such as Arduino is used. Pass/No Pass Option. C-ID # COMP 122.
ENG 001A  ENGLISH COMPOSITION  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College Placement Process.
Acceptable for credit: University of California, California State University
This course emphasizes the techniques of English composition with emphasis on the process of learning to write clearly and effectively and to read analytically. English 001 fulfills the English requirement for the Associate degree; this is a baccalaureate course. Pass/No Pass Option. C-ID # ENGL 100. CSUGE: A2; IGETC: 1A.

ENG 001AX  ENGLISH COMPOSITION WITH ADDITIONAL SUPPORT  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: Completion of the Mission College Placement Process
Acceptable for credit: University of California, California State University
This course introduces the techniques of collegiate English composition with emphasis on clear, effective writing and analytical reading. Students will learn to think critically about their own writing and will receive extensive support throughout the writing process. Areas of support will include close reading, textual analysis, finding and correctly incorporating credible, relevant source material, and acclimating to a college academic environment. English 1AX fulfills the English requirement for the Associate degree. This course also satisfies the composition requirement for baccalaureate degrees. Pass/No Pass Option. C-ID # ENGL 100. CSUGE: A2; IGETC: 1A.

ENG 001B  ENGLISH COMPOSITION AND LITERATURE  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course continues emphasis on English composition skills with an introduction to techniques of reading and writing about literature and acquiring skills in analysis and interpretation. Pass/No Pass Option. C-ID # ENGL 120. CSUGE: A3; C2; IGETC: 1B.

ENG 001C  CLEAR THINKING IN WRITING  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course continues an emphasis on English composition skills and enhancing critical thinking, particularly in the reading and writing of arguments. Course content includes analytical reading skills and methods of analysis, principles of logic, techniques of reasoning and style, and research skills. Pass/No Pass Option. C-ID # ENGL 105. CSUGE: A3; IGETC: 1B.

ENG 005A  ENGLISH LITERATURE THROUGH 18TH CENTURY  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course is a survey of English literature that begins with Anglo-Saxon writings and the epic “Beowulf” and extends through the works of the eighteenth century ending with the writings of Samuel Johnson. Pass/No Pass Option. C-ID # ENGL 160. CSUGE: C2; IGETC: 3B.

ENG 005B  ENGLISH LITERATURE FROM 19TH CENTURY TO PRESENT  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course is a chronological survey of the second half of English literature, beginning with the Romantic Period of the nineteenth century and continuing to the present. Pass/No Pass Option. C-ID # ENGL 165. CSUGE: C2; IGETC: 3B.

ENG 006B  SURVEY OF WORLD LITERATURE  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
World Literature is the study of representative works of world literature from the seventeenth century to the present. The course emphasizes the literary and cultural significance of selected great works of Western and non-Western literary traditions, including women, minority, and ethnic literature from around the world. Pass/No Pass Option. C-ID # ENGL 145. CSUGE: C2; IGETC: 3B.

ENG 007A  AMERICAN LITERATURE TO 1865  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course covers major American writers and literary traditions through 1865. It begins with Native American works and ends with the work of Walt Whitman. Pass/No Pass Option. C-ID # ENGL 130. CSUGE: C2; IGETC: 3B.

ENG 007B  AMERICAN LITERATURE 1865 TO PRESENT  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: California State University, University of California
This course covers major American writers and literary traditions from 1865 to the present. Pass/No Pass Option. C-ID # ENGL 135. CSUGE: C2; IGETC: 3B.

ENG 012  AFRICAN AMERICAN LITERATURE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course explores major themes/literary issues in the development of African American literature during the periods of slavery, reconstruction, and the Harlem Renaissance, as well as contemporary writing. Among the literary forms covered in this course are the oral tradition, poetry, slave narratives, short stories, and novels. While linking them to political, cultural, and social issues from their historical period, the course examines issues such as: African oral traditions; blues, jazz, and the relationship between music and African American writing; the performance of literary text on the abolitionist stage; racial categorization and mixed-race identity; the literature of slavery; and the influences of African American writing on American literature. The course is crosslisted as ETH 012. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.
English Course Progression

Degree and transfer seeking students must complete English composition course work as indicated in the chart below:

**ENG 001AX**
**English Composition with Additional Support**
Provides additional support to help students be successful. Fulfills English requirement for A.A./A.S. Degree; required for transfer to a four-year university. Fulfills CSU GE-B and IGETC requirement.

3 units

**OR**

**ENG 001A**
**English Composition**
Fulfills English requirement for A.A./A.S. Degree; required for transfer to a four-year university. Fulfills CSU GE-B and IGETC requirement.

3 units

**ENG 001B**
**English Composition and Literature**
Recommended for B.A./B.S. Degree at a four-year university. Fulfills CSU GE-B and IGETC requirement.

3 units

**OR**

**ENG 001C**
**Clear Thinking in Writing**
Recommended for B.A./B.S. Degree at a four-year university. Fulfills CSU GE-B and IGETC requirement.

3 units

Students are advised to consult with a counselor prior to enrollment in English composition courses to ensure students select courses to best meet their needs and transfer requirements.
ENG 013 - LATINA/O LITERATURE 3.0 UNITS
Total Lecture: 54 hours
Acceptable for Credit: University of California, California State University
This course provides an introduction to authors, topics, and societal issues in Latina/o literature from the 19th century to the present. Readings cover a variety of literary forms: novels, short stories, poems, drama, autobiography, and/or essays. This course will review Latina/o literature in relation to political movements and consider how Latina/o literature engages issues of race, gender, class, sexuality, immigration, colonialism, and decolonialism, while exploring diverse spaces in which Latina/os make community in the United States. A variety of critical lenses will be used in the study of literature, including critical race, gender, and sexuality studies, and critical and comparative ethnic studies. We will consider how literature is fundamental in working through social justice issues within the Latina/o communities and at large. The course is cross listed as ETH 013. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

ENG 015 - INTRODUCTION TO FILM ANALYSIS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
Critical analysis of film as a literary art form is covered in this course. Exemplary motion pictures are viewed and examined with special attention to film technique, thematic content, and aesthetic values. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

ENG 043 - CLASSICAL MYTHOLOGY 3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University.
Classical Mythology is an examination of the major classical myths of Western heritage for an appreciation of their literary representation in both source material and literary criticism. But not limited to gender, sexuality, and race as they are covered. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

ENG 048 - INTRODUCTION TO SHAKESPEARE 3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University.
Introduction to Shakespeare is a study of selected plays and sonnets. The course emphasizes detailed analysis of representative tragic, comic, romance, and history plays, as well as the cultural contexts, dramatic conventions, poetics, and critical theory relevant to understanding Shakespeare's works. The course also focuses on critical analysis of issues including, but not limited to gender, sexuality, and race as they are represented in both source material and literary criticism. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

ENG 070 - CREATIVE WRITING 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
Creative Writing focuses on imaginative writing, specifically on fiction, poetry, creative nonfiction and drama. Students learn and practice various strategies associated with these genres, read and workshop each other's writing, and read/analyze the work of professional writers. Other activities may include attending literary events, hearing visiting writers, and making book presentations. Pass/No Pass Option. C-ID # ENGL 200, ENGL-CW 100. CSUGE: C2.

ENGLISH AS A SECOND LANGUAGE (ESL)

ESL 930LC - HIGH BEGINNING LANGUAGE AND CULTURE 3.0 UNITS
Total Lecture: 54 hours
Advisory: Appropriate placement by multiple measures.
This is the first of a two course sequence designed to help the high-beginning student develop strategies for communicating in the English language. Although some strategies for speaking are included, the emphasis is on developing skills in listening, reading, vocabulary and writing. Topics of American culture are covered. Pass/No Pass Option, Non-degree applicable course.

ESL 940LC - LOW INTERMEDIATE LANGUAGE AND CULTURE 3.0 UNITS
Total Lecture: 54 hours
Advisory: ESL 930LC or appropriate placement by multiple measure.
This is the second semester of a one-year course. It is designed to help the low-intermediate student develop and strengthen strategies for communicating in the English language. Although strategies for speaking are covered, the emphasis is on developing skills in listening, writing, and reading. Topics of American culture are covered. Pass/No Pass Option, Non-degree applicable course.

ESL 940LS - LOW INTERMEDIATE LISTENING AND SPEAKING 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College ESL Placement process.
This course continues the development of listening comprehension and speaking skills. Listening focuses on the clear pronunciation of common words and phrases and the development of basic English pronunciation patterns of stress and intonation. Pass/No Pass Option, Non-degree applicable course.

ESL 940PL - LOW INTERMEDIATE PRONUNCIATION AND LISTENING 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College ESL Placement process.
High-beginning level students receive guidance and extensive practice on the most important aspects of American English pronunciation. These include basic sound-spelling patterns, important vowel and consonant contrasts, syllables, word stress, and key intonation patterns. Pass/No Pass Option, Non-degree applicable course.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 940RW</td>
<td>LOW INTERMEDIATE READING AND WRITING</td>
<td>6.0</td>
<td>This course develops students' reading, writing, grammar and vocabulary skills at the low-intermediate level. Students develop strategies to comprehend level-appropriate texts and write fluent and accurate simple and compound sentences as well as paragraphs. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 945GE</td>
<td>INTERMEDIATE GRAMMAR AND EDITING</td>
<td>2.0</td>
<td>In this intensive intermediate level ESL course students review and apply level-appropriate grammatical structures to develop sentence accuracy and fluency in standard written and spoken English. The course focuses on the understanding and practice of sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 950EC</td>
<td>ESL FOR CHILD DEVELOPMENT: INTRODUCTION</td>
<td>3.0</td>
<td>This intermediate course develops oral and written English language skills necessary to introduce young children, to objectively describe their actions, and to identify and reflect on individual children's needs and preferences. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 955EC</td>
<td>ENGLISH FOR CHD: FACTORS IN CHILD DEVELOPMENT</td>
<td>3.0</td>
<td>This intermediate course develops oral and written English language skills to describe a child’s development, appearance, and environment as well as to identify and reflect on factors that affect development. (Crosslisted with NCE 955EC). Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 960EC</td>
<td>ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART I</td>
<td>3.0</td>
<td>This high intermediate course develops oral and written English language skills necessary to identify, describe and support a child’s socio-emotional and motor development. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 960LS</td>
<td>HIGH INTERMEDIATE LISTENING AND SPEAKING</td>
<td>3.0</td>
<td>This high intermediate course continues to develop ESL students’ oral communication skills in a variety of academic, business, and social contexts. Students increase their knowledge of vocabulary, idiomatic expressions, and communication strategies as well as improve their listening comprehension and note-taking skills. The course emphasis is on the development of oral fluency and the appropriate use of complex language functions in small and large group communication and presentations. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 960RW</td>
<td>HIGH INTERMEDIATE READING AND WRITING</td>
<td>6.0</td>
<td>This course develops fluency in reading, writing, grammar and vocabulary skills for English language learners at the high-intermediate level. Students develop strategies to comprehend and analyze level-appropriate fiction and nonfiction texts and write developed, well-organized, and grammatically correct sentences and paragraphs on familiar and abstract topics. Pass/No Pass Option, Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 965EC</td>
<td>ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART II</td>
<td>3.0</td>
<td>This high intermediate course develops oral and written English language skills to identify, describe, and support children’s cognitive and language development. (Crosslisted with NCE965EC) Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>ESL 965GE</td>
<td>ADVANCED GRAMMAR AND EDITING</td>
<td>2.0</td>
<td>In this intensive advanced level ESL course students review and refine level-appropriate grammatical structures to develop sentence variety, and strengthen accuracy and fluency in academic English. The course focuses on the study and usage of complex sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
</tbody>
</table>
ESL 970AM  ACCENT MODIFICATION  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College ESL Placement process.
Advanced ESL speakers receive guidance and extensive practice in refining oral production and listening skills. Listening focuses on discrimination of sounds in English and on comprehension of connected spoken discourse. Oral production focuses on increasing control of the English sound system. The course emphasis is on overall pronunciation improvement so as to minimize miscommunication or misperception due to foreign accent. Pass/No Pass Option, Non-degree applicable course.

ESL 970LS  ADVANCED LISTENING AND SPEAKING  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College ESL Placement process.
This advanced course focuses on developing oral proficiency needed to participate in academic discourse and cross-cultural communication by means of interviews, large group discussions, debates, and presentations. Students receive guidance and extensive practice in listening to academic lectures and multimedia recordings. Students increase their knowledge of various communication styles as well as effective note-taking strategies including recognizing organizational patterns and outlining main ideas. Pass/No Pass Option, Non-degree applicable course.

ESL 970RW  ADVANCED READING AND WRITING  6.0 UNITS
Total Lecture: 108 hours
Prerequisite: Completion of the Mission College ESL Placement process.
This course develops reading, writing, vocabulary, grammar and editing skills for advanced English language learners. Students develop strategies to comprehend, analyze, and evaluate level-appropriate texts, and they read and write paragraphs and essays in a variety of rhetorical styles. Students gain skills for writing thesis statements and paragraphs with appropriate topic sentences, supporting ideas, and details. Pass/No Pass Option, Non-degree applicable course.

ESL 980  EFFECTIVE WRITING FOR ADVANCED ESL STUDENTS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 970GW and ESL 970RV)
Corequisite: ESL 970LS
This course is for students whose native language is not English. Students write academic essays and a short research paper. Emphasis is on the writing process, academic essay writing, and introductory research skills. The course also provides intensive practice with the sentence patterns, grammatical structures, and academic vocabulary necessary to produce clear, accurate prose. Pass/No Pass Option, Non-degree applicable course.

ESL 985  WRITING FOR ESL STUDENTS IN ENGLISH 001A AND ENGLISH 001AX  2.0 UNITS
Total Lecture: 36 hours
Corequisite: ENG 001A or ENG 001AX
This course is for students taking English 001A or English 001AX whose native language is not English. This course provides intensive instruction and practice in writing coherent paragraphs and essays for specific audiences. This course includes the drafting, revision, and editing processes as well as instruction in grammar, mechanics, and usage. The course focuses on the sentence patterns, grammatical structures and academic vocabulary necessary to be successful in English 001A / 001AX. Pass/No Pass Option, Non-degree applicable course.

NONCREDIT ENGLISH AS A SECOND LANGUAGE (NCE)

NCE 010  ENGLISH FOR CITIZENSHIP  NONCREDIT
Total: 48 Hours
In this course, students develop the English speaking, listening, and literacy skills necessary to pass an oral and written U.S. citizenship exam. Topics include a general survey of U.S. history, government, and civics, including culture, institutions, and ideals. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 910A  FOUNDATIONS IN ESL I  NONCREDIT
Total: 64 Hours
This noncredit course develops very basic level oral and written communication skills of standard written English. This course provides basic functional practice in reading, writing, listening, speaking, and grammar for very low beginning level ESL students. Oral communication tasks involve the comprehension and production of basic verbal instructions and requests, communication strategies, monologues, dialogues, pronunciation patterns, and vocabulary usage. Written communication tasks include completion of grammar exercises and in-class writing assignments of 50 words or less. Grade Options: Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 910B  FOUNDATIONS IN ESL II  NONCREDIT
Total: 64 Hours
This course is a continuation of NCE 910A. This course continues to develop very low beginning students’ skills in basic reading, writing, listening, speaking, and grammar. In 910B, students further develop the grammar of present tense and begin to learn present continuous and simple past. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 920A  BEGINNING ESL I  NONCREDIT
Total: 64 Hours
This noncredit course provides basic functional practice in reading, writing, listening, speaking, and grammar for beginning ESL students. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 920B  BEGINNING ESL II  NONCREDIT
Total: 64 Hours
This course is a continuation of NCE 920A. It builds on the topics learned in 920A, but also introduces more complex structures and provides more practice in reading, writing, listening, speaking, and grammar for beginning ESL students. It also provides preparation for placement in Level 930 ESL classes. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 920EC  NC ESL FOR CHILD CARE: INTRO  NONCREDIT
Total: 32 Hours
This beginning level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating about a child’s day-to-day care, needs, and interests. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 920GW  BEGINNING GRAMMAR AND WRITING  NONCREDIT
Total: 54 Hours
This course is for beginning-level ESL students with minimal knowledge of English grammar and writing conventions. The course is designed to provide an introduction to English grammar and opportunities to practice basic sentence-level writing skills. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.
NCE 920PL  BEGINNING PRONUNCIATION AND LISTENING  NONCREDIT
Total: 54 Hours
Beginning level students develop and practice basic aspects of American English pronunciation in order to speak more clearly, confidently, and accurately. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 924  BEGINNING ESL COLLEGE SKILLS  NONCREDIT
Total: 32 Hours
This course is designed for beginning level ESL students who wish to improve their academic preparation and study skills for greater success in ESL courses. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 930EC  NC ESL FOR CHILD CARE: HEALTH AND SAFETY  NONCREDIT
Total: 64 Hours
This high-beginning level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating about a child's health and safety. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 930FD  ENGLISH FOR FOOD PREPARATION  NONCREDIT
Total: 72 Hours
This high-beginning ESL course develops oral and written communication skills within the context of food preparation and kitchen safety. Students study and practice vocabulary for communicating about food preparation at work and at home. Students learn about American workplace culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 931  HIGH BEGINNING LISTENING AND SPEAKING  NONCREDIT
Total: 72 Hours
This is the first course in a noncredit certificate program in High Beginning ESL. Students develop listening skills necessary for comprehension of vocabulary, sentences, and short lectures on academic and day-to-day topics. Students also develop pronunciation and speaking skills necessary for clearly expressing themselves. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 932  HIGH BEGINNING GRAMMAR AND WRITING  NONCREDIT
Total: 72 Hours
This is the second course in a noncredit certificate program in High Beginning ESL. Students develop basic writing and grammar skills of standard written English. Students also practice and write simple and compound sentences using correct word forms, word order, articles, prepositions, spelling, and punctuation within their written compositions. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 933  HIGH BEGINNING READING AND VOCABULARY  NONCREDIT
Total: 72 Hours
This is the third course in a noncredit certificate program in High Beginning ESL. In this course, students develop reading and vocabulary skills necessary for comprehension of simplified articles and stories in English. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 934  BRIDGE TO ESL COLLEGE SUCCESS  NONCREDIT
Total: 32 Hours
This is the fourth course in the series of noncredit courses that make up the certificate in High Beginning ESL. Students develop their English language skills as they acquire successful strategies for the credit-level ESL program and other academic college classes. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 940EC  NC ESL FOR CHILD CARE: AGES AND STAGES  NONCREDIT
Total: 64 Hours
Advisory: ESL 930 EC
This low-intermediate level course develops oral and written communication skills in English within the context of child care and parenting. Students develop listening, speaking, reading and writing skills for communicating with and about infants, toddlers, preschoolers, and school-age children. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 940FD  ENGLISH FOR FOOD SERVICE  NONCREDIT
Total: 72 Hours
This noncredit low-intermediate level ESL course develops oral and written communication skills in English within the context of food service industry. Students study and practice vocabulary for communicating about ordering and serving food. Students learn about American customer service culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 940LS  LOW INTERMEDIATE LISTENING AND SPEAKING  NONCREDIT
Total: 54 Hours
Prerequisite: Completion of the Mission College ESL Placement process.
This course continues the development of listening comprehension and speaking skills. Listening focuses on comprehension of oral instructions and questions, of high-frequency vocabulary in context, and of main ideas and details in conversations and lectures. Speaking focuses on the clear pronunciation of common words and phrases and continues the development of basic English pronunciation patterns of stress and intonation. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 940RV  LOW INTERMEDIATE READING AND VOCABULARY  NONCREDIT
Total: 54 Hours
Prerequisite: Completion of the Mission College ESL Placement process.
This course continues the development of reading and vocabulary skills at the low intermediate level. It emphasizes vocabulary expansion and comprehension of short texts, including finding main ideas and details. Students gain knowledge of word forms, parts of speech, affixes, and the relationship of meaning and form. Students develop skills for using a monolingual dictionary. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 940RW  LOW INTERMEDIATE READING AND WRITING  NONCREDIT
Total: 108 Hours
Prerequisite: Completion of the Mission College ESL Placement process.
This course develops students' reading, writing, grammar and vocabulary skills at the low-intermediate level. Students develop strategies to comprehend level-appropriate texts and write fluent and accurate simple and compound sentences as well as paragraphs. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.

NCE 945GE  INTERMEDIATE GRAMMAR AND EDITING  NONCREDIT
Total: 36 Hours
Prerequisite: Completion of the Mission College ESL Placement process.
In this intensive intermediate level ESL course, students review and apply level-appropriate grammatical structures to develop sentence accuracy and fluency in standard written and spoken English. The course focuses on the understanding and practice of sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.
<table>
<thead>
<tr>
<th>COURSES</th>
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<tr>
<td><strong>NCE 950EC</strong> ENGLISH FOR CHILD DEVELOPMENT: INTRODUCTION NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This intermediate course develops oral and written English language skills necessary to introduce young children, to objectively describe their actions, and to identify and reflect on individual children’s needs and preferences. (Cross-Listed with ESL 950EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<td><strong>NCE 950LS</strong> INTERMEDIATE LISTENING AND SPEAKING NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. Intermediate level ESL students practice effective oral communication for a variety of social, academic, and professional situations. Students develop skills to express ideas effectively focusing on vocabulary, syntax and idioms. The course emphasis is on improving listening and speaking skills leading to oral fluency in one-on-one and small group situations. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td>**NCE 950RW INTERMEDIATE READING AND WRITING NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This course develops writing fluency and reading, grammar and vocabulary skills at the intermediate level. Students develop strategies to comprehend level-appropriate texts using fiction and nonfiction reading materials and increase their ability to write accurate compound and complex sentences and effective paragraphs on familiar and academic topics. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td><strong>NCE 955EC</strong> ENGLISH FOR CHD: FACTORS IN CHILD DEVELOPMENT NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This intermediate course develops oral and written English language skills to describe a child’s development, appearance, and environment as well as to identify and reflect on factors that affect development. (Cross-Listed with ESL 955EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<td><strong>NCE 960EC</strong> ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART I NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This high intermediate course develops oral and written English language skills necessary to identify, describe and support a child’s socio-emotional and motor development. (Cross-Listed with ESL 960EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td><strong>NCE 960LS</strong> HIGH INTERMEDIATE LISTENING AND SPEAKING NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This high intermediate course continues to develop ESL students' oral communication skills in a variety of academic, business, and social contexts. Students increase their knowledge of vocabulary, idiomatic expressions, and communication strategies as well as improve their listening comprehension and note-taking skills. The course emphasis is on the development of oral fluency and the appropriate use of complex language functions in small and large group communication and presentations. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td>**NCE 960RW HIGH INTERMEDIATE READING AND WRITING NONCREDIT Total: 108 Hours Prequisite: Completion of the Mission College ESL Placement process. This course develops fluency in reading, writing, grammar and vocabulary skills for English language learners at the high-intermediate level. Students develop strategies to comprehend and analyze level-appropriate fiction and nonfiction texts and write developed, well-organized, and grammatically correct sentences and paragraphs on familiar and abstract topics. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td><strong>NCE 965EC</strong> ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART II NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This high intermediate course develops oral and written English language skills to identify, describe, and support children’s cognitive and language development. (Cross-Listed with ESL 965EC). Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td>**NCE 965GE ADVANCED GRAMMAR AND EDITING NONCREDIT Total: 36 Hours Prequisite: Completion of the Mission College ESL Placement process. In this intensive advanced level ESL course students review and refine level-appropriate grammatical structures to develop sentence variety, and strengthen accuracy and fluency in academic English. The course focuses on the study and usage of complex sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td><strong>NCE 970LS</strong> ADVANCED LISTENING AND SPEAKING NONCREDIT Total: 54 Hours Prequisite: Completion of the Mission College ESL Placement process. This advanced course focuses on developing oral proficiency needed to participate in academic discourse and cross-cultural communication by means of interviews, large group discussions, debates, and presentations. Students receive guidance and extensive practice in listening to academic lectures and multimedia recordings. Students increase their knowledge of various communication styles as well as effective note-taking strategies including recognizing organizational patterns and outlining main ideas. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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<tr>
<td>**NCE 970RW ADVANCED READING AND WRITING NONCREDIT Total: 108 Hours Prequisite: Completion of the Mission College ESL Placement process. This course develops reading, writing, vocabulary, grammar and editing skills for advanced English language learners. Students develop strategies to comprehend, analyze, and evaluate level-appropriate texts, and they read and write paragraphs and essays in a variety of rhetorical styles. Students gain skills for writing thesis statements and paragraphs with appropriate topic sentences, supporting ideas, and details. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
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ETHNIC STUDIES (ETH)

ETH 012   AFRICAN AMERICAN LITERATURE   3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course explores major themes/literary issues in the development of African American literature during the periods of slavery, reconstruction, and the Harlem Renaissance, as well as contemporary writing. Among the literary forms covered in this course are the oral tradition, poetry, slave narratives, short stories, and novels. While linking them to political, cultural, and social issues from their historical period, the course examines issues such as: African oral traditions; blues, jazz, and the relationship between music and African American writing; the performance of literary text on the abolitionist stage; racial categorization and mixed-race identity; the literature of slavery; and the influences of African American writing on American literature. The course is crosslisted as ENG 012. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

ETH 013   LATINA/O LITERATURE   3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides an introduction to authors, topics, and societal issues in Latina/o literature from the 19th century to the present. Readings cover a variety of literary forms: novels, short stories, poems, drama, autobiography, and/or essays. This course will review Latina/o literature in relation to political movements and consider how Latina/o literature engages issues of race, gender, class, sexuality, immigration, colonialism, and decolonialism, while exploring diverse spaces in which Latina/o make community in the United States. A variety of critical lenses will be used in the study of literature, including critical race, gender, and sexuality studies, and critical and comparative ethnic studies. We will consider how literature is fundamental in working through social justice issues within the Latina/o communities and at large. The course is cross listed as ENG 013. Pass/No Pass Option. CSUGE: C2, F; IGETC: 3, 7.

ETH 044   AFRICAN AMERICAN HISTORY   3.0 UNITS
Total Lecture: 54 hours
Anti-Prerequisite: ETH 044H and HIS 044 and HIS 044H
Acceptable for credit: University of California, California State University
This course surveys the political, economic, and social developments of African Americans from the 1619 to the present. Topics include African Americans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWI, WWII, the Civil Rights movement, and the present state of African Americans. The course is cross listed as HIS 044. Pass/No Pass Option. CSUGE: D, F, US-1; IGETC: 4, 7.

ETH 044H   AFRICAN AMERICAN HISTORY-HONORS   3.0 UNITS
Total Lecture: 54 hours
Anti-Prerequisite: ETH 044 and HIS 044 and HIS 044H
Acceptable for credit: University of California, California State University
This course surveys the political, economic, and social developments of African Americans from 1619 to the present. Topics include African Americans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWI, WWII, the Civil Rights movement, and the present state of African Americans. This course is cross-listed with HIS 044H. Students cannot get credit for both ETH 044 and ETH 044H. Enrollment in the Honors Program is required. Pass/No Pass Option. CSUGE: D, F, US-1; IGETC: 4, 7.

FIRE PROTECTION TECHNOLOGY (FPT)

FPT 051   FIRE PROTECTION ORGANIZATION   3.0 UNITS
Total Lecture: 54 hours
Advisory: Elementary Algebra Skills
Acceptable for credit: California State University
This course provides a general introduction to the field of Fire Protection, including: career opportunities; philosophy and history of fire protection; the organization and function of fire protection services; and a basic introduction to the chemistry and physics of fire and fire control techniques, with an introduction to fireground hazards, strategy, and tactics. Pass/No Pass Option.

FPT 052   FIRE BEHAVIOR AND COMBUSTION   3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051 and Elementary Algebra Skills
Acceptable for credit: California State University
This course focuses on the theory and fundamentals of how and why fires start, the spread and fire control methods; an in-depth study of fire chemistry, fire behavior and physics; fire characteristics of materials and compounds and the use of extinguishing agents and fire control techniques. Pass/No Pass Option.

FPT 053   FIRE PROTECTION SYSTEMS   3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051 or FPT 052
Acceptable for credit: California State University
This course focuses on fire protection systems including: utilization of portable fire extinguishing equipment including inspection and maintenance procedures; fundamentals of design and operation of various types of sprinkler systems; fundamentals of design and operation of special hazard protection systems and associated fire detection and signaling systems; water supply requirements for standpipe, sprinkler and other fire protection systems. Pass/No Pass Option.

FPT 054   BUILDING CONSTRUCTION FOR FIRE PROTECTION   3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051 and Elementary Algebra Skills
Acceptable for credit: California State University
This course provides instruction regarding the theory and fundamentals of building construction: laws, regulations and standards; the Uniform Building Code requirements for fire safety in buildings; classification of buildings by occupancy; elements of building construction and design; and fire protection requirements for buildings, special occupancy areas and open areas. Pass/No Pass Option.
COURSES

FPT 055 FIRE PREVENTION TECHNOLOGY 3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051
Acceptable for credit: California State University
This course provides instruction on the following: organization and function of fire prevention; fire and life safety inspections; utilization of the Uniform Fire Code and related standards in determining requirements for fire safety; surveying and mapping procedures; recognition of fire and life hazards; engineering and enforcing a solution of a fire hazard; public education aspects of fire prevention; and firefighters' responsibility in determining the cause of fire. Pass/No Pass Option.

FPT 056 HAZARDOUS MATERIALS TECHNOLOGY 3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051, FPT 052 and Elementary Algebra Skills
Acceptable for credit: California State University
This course provides an in-depth study of materials presenting special problems in firefighting operations, including the identification of hazardous materials and the handling procedures utilized for emergencies, and enables first responders to recognize a hazardous materials incident and implement actions to protect themselves, the public, the environment and nearby property while responding in a defensive fashion. Students may obtain a First Responder Operations Certification from California Specialized Training Institute (CSTI) or State Fire Training. Additional costs will be assessed for certification. Pass/No Pass Option.

FPT 057 RESCUE PRACTICES 3.0 UNITS
Total Lecture: 27 hours, Total Lab: 81 hours
Advisory: FPT 051
Acceptable for credit: California State University
This course is designed to prepare the student to evaluate basic rescue situations and establish a plan of action to safely eliminate the hazard and/or remove the victim(s) taking proper precautions for possible injuries. Pass/No Pass Option.

FPT 060 WILDLAND FIRE SUPPRESSION 3.0 UNITS
Total Lecture: 27 hours, Total Lab: 81 hours
Advisory: FPT 051
Acceptable for credit: California State University
This course focuses on the organizational skills necessary for Wildland Fire Suppression. The course is designed to provide the student with the basic knowledge and skills needed prior to emergency response and preparation for the 2019 Firefighter 1 Requirement for Wildland Fire Suppression. Certifications to be announced and optional are: S190 Intro to Wildland Fire Behavior, and S130 Firefighter Training; additional costs will be assessed for certifications. The minimum safety equipment required for the field evolutions consists of an OSHA-approved helmet with chin strap # 44 impact goggles and leather gloves. Pass/No Pass Option.

FPT 061 STRUCTURAL FIRE SUPPRESSION FIREFIGHTER 2A 3.0 UNITS
Total Lecture: 27 hours, Total Lab: 81 hours
Advisory: FPT 051
Acceptable for credit: California State University
This course provides instruction in: manipulative skill and technical training in the identification and operation of fire service tools and equipment; the tying and employment of fire service knots and hitches; identification, actuation and employment of portable fire service extinguishers; donning and testing of protective breathing apparatus; basic hose evolutions; laying of multiple lines; operating hose lines above and below street level; fire service ladder evolutions; and basic salvage and overhaul techniques. Pass/No Pass Option.

FPT 065 EMERGENCY MEDICAL TECHNICIAN THEORY 6.0 UNITS
Total Lecture: 108 hours
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.
Corequisite: FPT 065C and FPT 065L
Acceptable for credit: California State University
This EMT training program is designed to prepare individuals to render pre-hospital basic life support at the scene of an emergency, during transport of the sick and injured, or during interfacility transfer within an organized EMS system. This course meets all the theory requirements for certification as an Emergency Medical Technician-I as specified in the regulations approved by the State of California Emergency Medical Services Authority in July 2017. Students must also successfully complete FPT 065L and FPT 065C concurrently with FPT 065 to be eligible for certification. Grade only.

FPT 065C EMERGENCY MEDICAL TECHNICIAN CLINICAL EXPERIENCE 0.5 UNITS
Total Lab: 4 hours, Total Arranged Lab Hours: 23
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.
Corequisite: FPT 065 and FPT 065L
The purpose of this EMT training course is to prepare individuals to render pre-hospital basic life support at the scene of an emergency, during transport of the sick and injured, or during inter-facility transfer within an organized EMS system. This course meets all the clinical requirements for certification as an Emergency Medical Technician as specified in the regulations approved by the State of California Emergency Medical Services Authority in July 2017. This course allows the student to experience “hands-on” skills while caring for patients under the supervision of a preceptor. The student needs to show proof of a current Tuberculosis (TB) skin test. Pass/No Pass Option.

FPT 065L EMERGENCY MEDICAL TECHNICIAN LABORATORY 1.5 UNITS
Total Lab: 81 hours
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.
Corequisite: FPT 065C and FPT 065L
Advisory: Elementary Algebra Skills.
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.
Total Lab: 4 hours, Total Arranged Lab Hours: 23
Corequisite: FPT 065L
Acceptable for credit: California State University
The purpose of this EMT training course is to prepare individuals to render pre-hospital basic life support at the scene of an emergency, during transport of the sick and injured, or during inter-facility transfer within an organized EMS system. This course meets all the clinical requirements for certification as an Emergency Medical Technician as specified in the regulations approved by the State of California Emergency Medical Services Authority in July 2017. Students must successfully complete concurrently FPT 065 and FPT 065C to be eligible for certification. Pass/No Pass Option.

FPT 180 EMERGENCY MEDICAL TECHNICIAN - 1 REFRESHER COURSE 2.0 UNITS
Total Lecture: 36 hours
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.
Advisory: Elementary Algebra Skills.
Acceptable for credit: California State University
The purpose of this EMT Refresher Course is to review topics to prepare individuals to render prehospital basic life support at the scene of an emergency, during transport of the sick and injured, or during inter-facility transfer within an organized EMS system. This course meets all the refresher course requirements for recertification as an Emergency Medical Technician as specified in the regulations approved by the State of California Emergency Medical Services Authority in July 2017. Pass/No Pass Option.
FPT 200 FIRE FIGHTER 1 FIRE ACADEMY 14.5 UNITS
Total Lecture: 144 hours, Total Lab: 360 hours
Prerequisite: (FPT 065 and FPT 065C and FPT 065L and HOC 002 and KIN 039A) or (FPT 065 and FPT 065C and FPT 065L and HOC 002 and KIN 039B) or (FPT 065 and FPT 065C or FPT 065L and HOC 002 and KIN 039C)
Co-requisite: KIN 039D
Acceptable for credit: California State University
This course provides the skills and knowledge needed for the entry level Professional and Volunteer Fire Fighter to perform his/her duties safely, effectively, and competently. The curriculum is based on the most current edition of NFPA 1001 Standard for Fire Fighter Professional Qualifications, the most current edition of NFPA 1051 Standard for Wildland Fire Fighter Professional Qualifications, and the most current edition of NFPA 472 Standard for Competence of Responders to Hazardous Materials/Weapons of Mass Destruction Incidents. The seven overarching themes of the California State Fire Fighter I curriculum are: general knowledge germane to the profession, fire department communications, fire ground operations, rescue operations, preparedness and maintenance, wild land suppression activities, and hazardous materials/WMD. Grade Only.

FPT 300A FIRE PREVENTION INTERNSHIP COURSE 1 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: FPT 055
Corequisite: WRK 300FP
Acceptable for credit: California State University
This is the first course in the Fire Prevention Internship Program. Students will cover the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered include: Assigned Department Information, Authority and Duties Standards, Codes and Permits, Fire Behavior, Building Construction, and the Inspection process. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300B FIRE PREVENTION INTERNSHIP COURSE 2 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: FPT 300A
Corequisite: WRK 300FP
Acceptable for credit: California State University
This is the second course in the Fire Prevention Internship Program. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. The subject areas involved are: Means of Egress, Portable Fire Extinguishers, Hazardous Conditions, Site Access & Emergency Access, Water Supply, Fire Hydrants, Occupancy Classifications & Load. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300C FIRE PREVENTION INTERNSHIP COURSE 3 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: FPT 300B
Corequisite: WRK 300FP
Acceptable for credit: California State University
This is the third course in the Fire Prevention Internship Program. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered: Fire Suppression Systems, Fire Detection and Alarm Systems, Plan Review, WUI (Wildland Urban Interface) Inspections, Hazardous Materials, Tent Inspections, and Complaints. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 300D FIRE PREVENTION INTERNSHIP COURSE 4 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: FPT 300C
Corequisite: WRK 300FP
Acceptable for credit: California State University
This is the fourth and final course in the Fire Prevention Internship Program and is the capstone course. Students will continue the process and documentation required for annual fire and life safety inspections in business, residential and recreational settings. Topics covered are: Hood & Duct Systems, Private Underground Systems, Fire Investigation, Knox Box Inspections, Community Education, Emergency Planning and Preparedness Measures and Fire ground Operations. Fire Prevention Interns are required to take WRK 300FP as a co-requisite to this course and will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Grade Only.

FPT 301 FIRE INSPECTOR 1A: DUTIES AND ADMINISTRATION 1.5 UNITS
Total Lecture: 27 hours
Advisory: FPT 051 or FPT 055
Acceptable for credit: California State University
This course provides students with a basic knowledge of the roles and responsibilities of a Fire Inspector I including legal responsibilities and authority, codes and standards, the inspection process, confidentiality and privacy requirements, and ethical conduct, and administrative tasks including preparing inspection reports, recognizing the need for a permit or plan review, investigating common complaints, and participating in legal proceedings. Grade Only.

FPT 302 FIRE INSPECTOR 1B: FIRE AND LIFE SAFETY 1.5 UNITS
Total Lecture: 27 hours
Prerequisite: FPT 301
Advisory: FPT 055
Acceptable for credit: California State University
This course provides students with a basic knowledge of fire and life safety aspects related to the roles and responsibilities of a Fire Inspector I including building construction, occupancy classifications, occupancy load, means of egress, hazardous conditions, fire growth potential, fire flow, and emergency planning and preparedness measures. Grade Only.

FPT 303 FIRE INSPECTOR 1C: FIELD INSPECTION 1.5 UNITS
Total Lecture: 27 hours
Prerequisite: FPT 302
Advisory: FPT 055
Acceptable for credit: California State University
This course provides students with a basic knowledge of the field inspection roles and responsibilities of a Fire Inspector I including basic plan review, emergency access for an existing system, hazardous materials, and the operational readiness of fixed fire suppression systems, existing fire detection and alarm systems, and portable fire extinguishers. Grade Only.

FPT 304 FIRE INSPECTOR 1D: FIELD INSPECTION CA 1.0 UNIT
Total Lecture: 18 hours
Prerequisite: FPT 303
Advisory: FPT 055
Acceptable for credit: California State University
This course provides students with a basic knowledge of a Fire Fighter I's field inspection roles and responsibilities specific to California including tents, canopies, and temporary membrane structures; fireworks and explosives; and wildland urban interface environments. Grade Only.
FOOD SERVICE AND RESTAURANT MANAGEMENT (FDR)

**FDR 050 INTRODUCTION TO THE HOSPITALITY INDUSTRY** 3.0 UNITS

Total Lecture: 54 hours
Acceptable for credit: California State University

This course is an overview of the structure and relationship of components within the hospitality and tourism industry with an emphasis on career opportunities, customer service, and cultural and economic trends. Students survey the economic and employment impact of food service, lodging, resorts, recreation, meetings and conventions, attractions, cruise, and travel-related businesses. Information about the Hospitality Management Program is explained. Pass/No Pass Option. C-ID # HOSP 100.

**FDR 051 BASIC FOOD PREPARATION** 6.0 UNITS

Total Lecture: 54 hours, Total Lab: 162 hours
Prerequisite: FDR 051 and INF 050
Acceptable for credit: California State University

This is a lecture and laboratory course dealing with the fundamentals of food preparation. Students practice the basic principles of food preparation and prepare small quantities from standard recipes, and international cuisines are introduced. This class covers beginning recipes including appetizers, soups, salads, main courses, breads, desserts and pastries. Pass/No Pass Option. C-ID # HOSP 160.

**FDR 051S INTRODUCTORY CATERING OPERATIONS LAB** 0.5 UNITS

Total Lab: 27 hours
Corequisite: FDR 051
Acceptable for credit: California State University

The purpose of this class is to increase students' skills, speed, and competence in hands-on food production. Pass/No Pass Option.

**FDR 052 QUANTITY FOODS AND AUXILIARY SERVICES OPERATIONS** 6.0 UNITS

Total Lecture: 18 hours, Total Lab: 270 hours
Prerequisite: FDR 051 and FDR 058 and INF 050.
Advisory: FDR 059
Acceptable for credit: California State University

In this course students engage in a real cafeteria operation and are rotated through all jobs. The emphasis is on management, quantity food preparation, and teamwork. Action station preparation and catering and banquet operations are emphasized as well. Menu planning, purchasing, commercial kitchen organization, sanitation and safety, and cost accounting are reinforced. Catering preparation for resale and mobile food operations will be introduced. A chef's uniform is required. Pass/No Pass Option.

**FDR 052S QUANTITY FOODS CATERING LAB** 0.5 UNITS

Total Arranged Lab: 27 hours
Prerequisite: FDR 051

Students must fulfill 24-27.5 hours working on department on-site and off-site banquet and catering events. Activities include, but are not limited to: client contact and communication, event planning, service and execution, breakdown and follow-up. Pass/No Pass Option.

**FDR 053 RESTAURANT OPERATIONS** 7.0 UNITS

Total Lecture: 36 hours, Total Lab: 270 hours
Prerequisite: FDR 051 and FDR 058 and INF 050
Advisory: FDR 059
Acceptable for credit: California State University

The students engage in an actual restaurant operation. Students rotate through all positions typically found in a full service restaurant. Additionally, each student is responsible for planning and managing two operational day's and/or live on-site or off-site catering events. The emphasis is on management, planning, food preparation, service, and evaluation. Cost accounting, purchasing, supervision, sanitation and safety, and marketing are reinforced. Uniforms are required, a lab fee applies. Pass/No Pass Option. C-ID # HOSP 160.

**FDR 053S RESTAURANT OPERATIONS CATERING LAB** 0.5 UNITS

Total Lab: 27 hours
Prerequisite: FDR 051
Restaurant Operation. Students must fulfill 27.5 hours working on department on-site and off-site banquet and catering events. Activities include, but are not limited to: client contact and communication, event planning, service and execution, breakdown and follow up. Pass/No Pass Option.

**FDR 054 HOTEL AND RESTAURANT ACCOUNTING** 3.0 UNITS

Total Lecture: 54 hours
Advisory: FDR 050
Acceptable for credit: California State University

This is a study of accounting principles and how hospitality managers use financial statements and accounting information for decision-making purposes. This course covers basic accounting concepts, the accounting cycle, the application of generally accepted accounting principles, the application of the Uniform System of Accounts for hospitality service industries, and the critical analysis and interpretation of financial statements. Also included are the issues relating to assets, liabilities, and owner’s equity, cash flow, revenue and expenses, managing cash, accounts receivable and accounts payable, forecasting, budgeting and internal controls, and assessing actual performance. Pass/No Pass Option.

**FDR 055 PROCUREMENT FOR FOODSERVICE OPERATIONS** 3.0 UNITS

Total Lecture: 54 hours
Advisory: FDR 050
Acceptable for credit: California State University

This course is a comprehensive study of the procurement systems applicable to any food service operation. “Value added” is a prevalent theme throughout the course as well as the ways in which value is added throughout the distribution channel. The definition of and focus on the control-cycle points within the purchasing process are reinforced. The concept of market-form, current trends, available technology, sustainable purchasing opportunities, and distributor and operator ethics are also covered. Pass/No Pass Option. C-ID # HOSP 130 (with FDR 075).

**FDR 058 COST CONTROL FOR FOODSERVICE ORGANIZATIONS** 3.0 UNITS

Total Lecture: 54 hours
Advisory: FDR 051 and FDR 075
Acceptable for credit: California State University

The purpose of this course is to provide students, practicing managers and supervisors a practical foundation that can be utilized to plan and control their operations. The primary objective is to present applications and activities to help students and managers understand the complexities of controlling products, labor, and revenue in food and beverage operations. The students will come to understand that with today's emphasis on cost reduction, quality, service optimization along with the guests demand for increased value for their dollars spent, the management function of control is increasingly significant to operational survival. Pass/No Pass Option. C-ID # HOSP 120.

**FDR 059 SUPERVISION, MANAGEMENT AND LEADERSHIP** 4.0 UNITS

Total Lecture: 72 hours
Advisory: FDR 050A
Acceptable for credit: California State University

Traditional and contemporary management theories, principles and practices of supervising and leading people will be discussed. The unique challenges faced by supervisors of front-line and entry level employees will be discussed, as well as the shared & distinct variances in duties between a manager and a leader. Emphasis is placed on effectively directing today's diverse workforce, as well as on the exploration of legal/ethical boundaries, and the socio-political and sustainable dynamics that exists in this post Covid-19, environment. An inventory of personal supervisory and managerial traits and the development of a leadership action plan are also course highlights. Pass/No Pass Option.
FDR 060  FOOD SERVICE FACILITIES PLANNING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
The course is designed to familiarize the student with the complexities of planning, designing and equipping a food service operation. Pass/No Pass Option.

FDR 072  INTERMEDIATE CUISINE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: FDR 051
This is a continuation of Basic Food Preparation FDR 051. Advanced preparation techniques of gourmet foods are demonstrated. Complete meals and international cuisines are covered. A chef's uniform is required. A fee is charged, check schedule for exact amount. Materials Fee. Grade Only.

FDR 073  FUNDAMENTALS OF BAKING AND CONFECTIONERY  2.0 UNITS
Total Lecture: 18 hours, Total Lecture: 54 hours
Advisory: INF 050
This course introduces the student to baking and confectionery work. Students have an opportunity to observe baking and decorating demonstrations and participate in the preparation of cakes, pies, pastries and desserts. A uniform is required. A fee is charged: check schedule of classes for exact amount. Materials Fee. Grade Only.

FDR 074  INTERMEDIATE BAKING AND CONFECTIONERY  2.0 UNITS
Total Lecture: 18 hours, Total Lecture: 54 hours
Prerequisite or Corequisite: FDR 073 and INF 050
This course is a continuation of FDR 073 with an emphasis on advanced baking techniques and skills and confectionery design. A uniform is required. A fee is charged: check schedule of classes for exact amount. Materials Fee. Grade Only.

FDR 075  MENU PLANNING  2.0 UNITS
Total Lecture: 36 hours
Acceptable for credit: California State University
This course covers the principles of menu planning for commercial, institutional, and industrial food service operations. Since the menu is the primary marketing tool and controlling document that affects every area of operation in the food service facility, all aspects of planning and execution are visited. Special attention is placed on menu psychology and menu price calculation. Pass/No Pass Option. C-ID # HOSP 130 (with FDR 055).

FDR 076  SALES AND MARKETING IN THE HOSPITALITY INDUSTRY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course provides students with the knowledge and practical experiences to understand and develop short term and strategic operating plans for food and lodging segments of the industry. Marketing is emphasized as a management philosophy that guides the design and delivery of guest services. Grade only.

FDR 078  ADVANCED BAKING AND PASTRY  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Prerequisite: FDR 073 and FDR 074 and INF 050
This class is the third in the series of hands-on baking classes offered for the Baking and Pastry certificate or A.S. Degree. It covers the most advanced baking and decorating techniques. Multiple layer cakes, wedding cake decoration, royal icing, fondant and gum paste decoration are practiced. Advanced piping and other decorative techniques are introduced to advanced pastry students. Materials Fee. Grade Only.

FDR 079  INTRODUCTION TO FOOD AND WINE PAIRING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: FDR 051 and INF 050
This course introduces students to the fundamentals of food and wine pairing using traditional and non-traditional approaches. Students produce foods from various ethnic cuisines including French, Italian, Spanish, Mexican, Middle Eastern, Asian, and American to pair with wines from around the world. Why good pairings work is examined from a chemical interaction perspective. How to market wines with various menus is also covered. Pass/No Pass Option.

FDR 081  INTRODUCTION TO WINES AND SPIRITS OF THE WORLD  2.0 UNITS
Total Lecture: 36 hours
This course introduces students to the wide variety of wines, beers, and spirits available in today's market. It covers how food service operations can use their wine, beer, and spirit sales to increase revenues. Liability issues in alcohol service are also discussed. The major wine, beer and spirit production areas of the world are examined. The techniques of production of these beverages are identified. Students taking this course must be over 21; I.D. showing proof of age is requested at the first class meeting. Pass/No Pass Option.

FDR 082  INTRODUCTION TO CHOCOLATE AND CONFECTIONARY  2.0 UNITS
Total Lecture: 18 hours, Total Lab 54 hours
Advisory: FDR 073 and INF 050
This class introduces students to the fundamentals of chocolate and sugar confectionary work. Chocolate and sugar confectionary techniques, as well as the production of both traditional and contemporary delights, are integral aspects of this course. Tempering, molding and decorating with chocolate and sugar confections and decorations are practiced. Pass/No Pass Option.

FDR 085  FOUNDATIONS FOR SUSTAINABILITY IN HOSPITALITY, TOURISM AND LEISURE SERVICES  3.0 UNITS
Total Lecture: 54 hours
In this course students are introduced to concepts and principles that explore methods whereby the leisure, tourism and hospitality industries, and related businesses can mitigate some of the impact on the environment and reduce their environmental footprints. Sustainable initiatives and practices that might favorably impact local communities, national and global hospitality, tourism and tourism developments are researched and assessed. Topics addressed include: energy and water usage, waste management and minimizing waste creation, sustainable procurement across the industry, packaging and marketing, and related topics. A focus is placed on impact on management: guest/customer impact and sentiment, and positive and adverse impact on tourism development. Socio-cultural, socioeconomic and the general advancement of sustainable initiatives are discussed. Pass/No Pass Option.

FDR 086  BEGINNING BREAD MAKING  2.0 UNITS
Total Lecture: 18 hours Total Lab: 54 hours
Advisory: FDR 073 and INF 050
Beginning Bread Making introduces students to the functions of baking ingredients (such as yeast, flour, and shortening) and mixing methods for doughs, to fermentation techniques, heat transfer methods, and hearth bread baking. Special emphasis is placed on lean dough production and ways to enrich dough (laminating, rubbing, and cut-in). Students taste and test products that they create, keep a dedicated research notebook to record their end results, as well as complete a research assignment. Materials Fee. Grade Only...
MODERN LANGUAGES

Please refer to courses in the following languages found alphabetically in the catalog.

Arabic (ARB)
Chinese (CHI)
French (FRN)
Japanese (JPN)
Spanish (SPA)
Vietnamese (VIE)

FRENCH (FRN)

FRN 001     FIRST SEMESTER FRENCH (ELEMENTARY LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Advisory: FRN 001L
Acceptable for credit: University of California, California State University
Students acquire the basic skills for communication in French: listening, speaking, reading, and writing. Students are also exposed to a general overview of Francophone civilization and culture. It is strongly recommended that the student take FRN 001L along with FRN 001. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

FRN 001L    FRENCH LABORATORY  0.5 UNITS
Total Lab: 27 hours
Advisory: FRN 001
Acceptable for credit: California State University
This is a laboratory course offered online. The class is designed to improve language skills and reinforce grammar. Students review the cultures of French-speaking countries through films, current publications, Internet research and listening activities. This course is recommended for students enrolled in FRN 001 and is designed to further enhance class material. FRN 001L may also be taken independently by students who are not enrolled in a foreign language course. Pass/No Pass Option. CSUGE: C2.

FRN 002     SECOND SEMESTER FRENCH (ELEMENTARY LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Prerequisite or Corequisite: INF 050
FRN 002 is a continuation of FRN 001. The student continues to develop basic skills for communication in French: listening, speaking, reading, and writing. The student is exposed to a general overview of francophone civilization and culture. It is highly recommended that the student takes FRN 002L with FRN 002. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

FRN 002L    FRENCH LABORATORY  0.5 UNITS
Total Lab: 27 hours
Advisory: FRN 001 and FRN 001L and FRN 002
Acceptable for credit: California State University
This class is a continuation of FRN 001L with further development of basic skills and structure. The class is designed to continue to improve language skills and reinforce grammar. Students review the cultures of French-speaking countries through films, current publications, Internet research and listening activities. This course is recommended for students enrolled in FRN 002 and is designed to further enhance class material. FRN 002L may also be taken independently by students who are not enrolled in a foreign language course. Pass/No Pass Option. CSUGE: C2.
FRN 003  THIRD SEMESTER FRENCH  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: FRN 002
Acceptable for credit: University of California, California State University
FRN 003 is a continuation of FRN 002. The student continues to develop proficiency in French language skills through a review of grammar, vocabulary-building exercises, culturally relevant dialogues and readings regarding Francophone civilization. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

FRN 004  FOURTH SEMESTER FRENCH  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: FRN 003
Acceptable for credit: University of California, California State University
FRN 004 is a continuation of FRN 003. The students continue to develop proficiency in French language skills through a review of grammar, vocabulary-building exercises, culturally relevant activities and readings regarding Francophone culture and civilization. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A.

GEOGRAPHY (GEO)

GEO 001  INTRODUCTION TO PHYSICAL GEOGRAPHY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a survey of the physical earth and its impact upon human utilization of the environment. The earth is depicted as the home of people: the inter-relationship of weather and climate, soil and vegetation patterns, landforms, minerals and ocean basins are stressed as they relate to human activities. The various types of maps, their development through geospatial technology, and their practical application are also considered. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: B1; IGETC: 5A.

GRAPHIC DESIGN AND MULTIMEDIA (GDS)

GDS 011  THE HISTORY OF MODERN DESIGN  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This introductory survey course focuses on the history, perception and development of design during the Twentieth Century. The students will develop an understanding of the evolution and role of the Modern Movement and how it affects society. The students will also learn about the evaluation criteria of two-dimensional and three dimensional design while examining examples of architecture, industrial, graphic, fashion and interior design. The students will be introduced to influential Twentieth Century design figures and their work. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

GDS 012  HISTORY OF PHOTOGRAPHY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University.
This course surveys the history of photography from its origins to the present. Students examine the practice of photography as an art form and as a form of visual communication in historical, socio-political and cultural contexts. Pass/No Pass Option. CSUGE: C1, C2; IGETC: 3A, 3B.

GDS 015  PHOTO-MEDIA AND SOCIAL CHANGE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University.
This course examines the impact of a wide range of new photographic genres on global social change. This includes analysis of the historical and social context of photojournalism, art photography, and internet multi-media and their influence on culture. Students identify how photography in new media affects human rights and current perceptions of race, gender, sexual orientation, ethnicity and cultural identity. Pass/No Pass Option. CSUGE: C1.

GDS 022  DIGITAL MEDIA FOR MARKETING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This is a beginning digital media course to prepare students to produce material to be used for marketing purposes, especially social media marketing. Students will create images, videos and other media used in online marketing. Techniques, skills, hardware and software accessible to small business owners and entrepreneurs will be emphasized. The basic principles of photography, lighting, video production and layout are explored. Pass/No Pass Option. CSUGE: C1.

GDS 035  GRAPHIC DESIGN I  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
In this introductory course, students learn about the practical, artistic, and technical sides of Graphic Design. Students also begin to gain the necessary critical thinking and technical skills required across the various professional careers within Graphic Design. Students are evaluated through a series of hands-on projects. Multiple software packages within Adobe Creative Cloud (CC) are explored. This course is approved for credit by exam. Pass/No Pass Option.

GDS 039A  3D ANIMATION AND MODELING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 064
Acceptable for credit: California State University, University of California
This is an introductory course in learning to make 3D art assets for animation. Students learn animation techniques using 3D modeling and animation software, including texture mapping and lighting effects. Students analyze the historical and contemporary trends in computer animation films. Pass/No Pass Option. CSUGE: C1.

GDS 040  GAME DESIGN I  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 039A
Acceptable for credit: California State University
This course presents techniques for the development of interactive game environments. Students will create multiple levels, integrate game mechanics, and apply visual design concepts in the development process. The course follows basic industry production structure to immerse students in the game design process and will introduce node based programming tool sets to be applied to level designs. Pass/No Pass Option.

GDS 041  MOBILE GAME DESIGN AND DEVELOPMENT  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: CAP 088A
Acceptable for credit: California State University
This class focuses on creating mobile games using third party developer tools. Students learn how to design, program, test, and publish their mobile game to various mobile platforms. Pass/No Pass Option.
MOBILE APPLICATION AND WEB DEVELOPMENT

GDS 043A  3D GAME CHARACTER ANIMATION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: ART 031A and GDS 039A
Acceptable for credit: California State University
This is an introductory course in character animation using Maya to generate animation. Using pre-built 3D characters, students learn basic animation principles such as squash and stretch, and anticipation. Students learn the controls for 3D mesh characters, and generate walk cycles, run cycles, and action sequences. Students develop concepts for short movies for 3D characters in action sequences, and add lighting and textures to their scenes in making their animated movie shorts. Pass/No Pass Option.

GDS 045  WEB DESIGN AND DEVELOPMENT 1  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This introductory course focuses on the design and technical skills required to create effective web designs using HTML, CSS and a variety of software packages. The basic principles of type, color, and layout are explored, along with necessary basic coding skills. Emphasis is placed on using industry standard workflows and techniques to create compelling designs. Pass/No Pass Option.

GDS 046  WEB DESIGN AND DEVELOPMENT 2  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 045
Acceptable for credit: California State University
This intermediate-level course is a continuation of the GDS 045 Web Design and Development 1 course. The focus is both on the creative design and the appropriate software and coding skills required in web design and front-end web development. Advanced design principles of type, color, illustration, and layout are explored along with intermediate to advanced HTML, CSS, and an introduction to JavaScript and other relevant technologies. A basic understanding of computer system operation is required. Pass/No Pass Option.

GDS 047  WEB ANIMATION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 045
Acceptable for credit: University of California. California State University
This introductory course focuses on the skills required to create effective web animations using a variety of software applications. Principles of animation, visual communication, user interface design and web optimization are explored. The student develops an understanding of the role of animation on the internet in a series of hands-on exercises. A basic understanding of computer systems is assumed. Pass/No Pass Option.

GDS 049  WORDPRESS AND CONTENT MANAGEMENT SYSTEMS  3.0 UNITS
Total Lecture: 36 hours, Total Lecture: 54 hours
Advisory: GDS 046
Acceptable for credit: California State University
In this advanced web design and development class, students use WordPress to build dynamic websites that can be updated easily. Students are also introduced to PHP & MySQL, theme customization, child themes, and an overview of popular CMS platforms. Pass/No Pass Option.

GDS 051  MOBILE APPLICATION AND WEB DEVELOPMENT WITH WEB STANDARDS  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 045 and GDS 046
Acceptable for credit: California State University
This class focuses on using web technologies like HTML and CSS to create rich web applications as well as native mobile applications. Students learn to develop media using web standards. Current options for delivery methods on mobile devices are explored. Pass/No Pass Option.

GDS 055A  DESIGN AGENCY AND BRANDING  3.0 UNITS
Total Lecture: 36 hours, Total Lecture: 54 hours
Advisory: GDS 035 and GDS 062
Acceptable for credit: California State University
In a real-world environment, this course is designed to increase the skills and abilities needed by students in the design industry, with an emphasis on creating brands and promoting brand awareness across all media, including interactive and print. The course includes project-based exploration of creative ideas in logo design, concept work, layout, package design, advertising, and more. The students, with active faculty involvement and supervision, work on real-world projects responding to design needs of clients. Pass/No Pass Option.

GDS 056  PRESENTATION DESIGN  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: CAP 046D and CAP 046E
Acceptable for Credit: California State University
This class focuses on the visual communication skills necessary to produce compelling presentations. Topic include color design, animation, interaction, storytelling, and advanced technical skills used in the production of assets for presentation. The class assumes an existing intermediate knowledge of Microsoft Powerpoint. Pass/No Pass Option.

GDS 060  PAGE LAYOUT  3.0 UNITS
Total Lecture: 36 hours, Total Lecture: 54 hours
Advisory: GDS 035
Acceptable for credit: California State University
This introductory level course in page layout and design uses Adobe InDesign software. Students assemble a variety of pieces such as booklets, brochures, magazines, newspapers, newsletters, and other communication materials. Emphasis is on learning techniques used by graphics professionals to create full-color pieces integrating text, photos, and illustrations. Pass/No Pass Option.

GDS 061  PAGE LAYOUT  3.0 UNITS
Total Lecture: 36 hours, Total Lecture: 54 hours
Advisory: GDS 035
Acceptable for credit: California State University
This introductory level course provides instruction in page layout and design as well as training in software such as Adobe InDesign. Students assemble a variety of pieces such as booklets, brochures, magazines, newspapers, newsletters, and other communication materials. Emphasis is on learning techniques used by graphics professionals to create full-color pieces integrating text, photos, and illustrations. Pass/No Pass Option.

GDS 062  DIGITAL ILLUSTRATION WITH ADOBE ILLUSTRATOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Acceptable for credit: California State University
This is a beginning digital illustration course for artists, illustrators and graphic designers. Students learn how to create original art, illustrations, and graphic designs using a variety of software applications. Basic art and design principles are explored. This course is approved for credit by exam. Pass/No Pass Option.

GDS 063  TYPOGRAPHY  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Advisory: GDS 064
Acceptable for credit: California State University
This is a course for graphic designers on the study and demonstration of letterforms and typography. Practical design projects examine the interaction of form and message, with emphasis on fundamental theory, i.e., elements, principles, and attributes of typographical design. Students may create work for inclusion in a portfolio. This course requires both non-digital attention to hands-on craftsmanship and basic knowledge of Adobe CC software. Pass/No Pass Option.
GDS 064  INTRODUCTION TO ADOBE PHOTOSHOP  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Acceptable for credit: California State University
This is a beginning digital imaging course for graphic designers, artists, and photographers. Students learn how to create original artwork, refine photographs and manipulate digital imagery using Adobe Photoshop. Basic art and design principles are explored. This course is approved for credit by exam. Pass/No Pass Option.

GDS 065  TYPOGRAPHY  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 035 and GDS 061
Acceptable for credit: California State University
This is a course for graphic designers on the study and demonstration of letterforms and typography. Practical design projects examine the interaction of form and message, with emphasis on fundamental theory, i.e., elements, principles, and attributes of typographical design. Students may create work for inclusion in a portfolio. This course requires both non-digital attention to hands-on craftsmanship and basic knowledge of Adobe CC (Creative Cloud) software. Pass/No Pass Option.

GDS 066  ADVANCED ADOBE ILLUSTRATOR  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Advisory: GDS 062
Acceptable for credit: California State University
This advanced level course uses Adobe Illustrator software. Designed for the student who wishes to continue with techniques and methods beyond the GDS 062 beginning course, students produce a variety of sophisticated digital illustrations. Emphasis is on technique as well as methodologies for creating illustrations with a distinctive style. Pass/No Pass Option.

GDS 067  GRAPHIC DESIGN II  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Advisory: GDS 035 and GDS 061 and GDS 065
Acceptable for credit: California State University
This mid-level design course will develop the students’ confidence and competence in form and concept for visual communication. Projects emphasize the creation of professional level pieces using industry standard techniques and best practices. This course assumes competency in Adobe Photoshop, Illustrator, and InDesign. Pass/No Pass Option.

GDS 068  PORTFOLIO PRODUCTION STUDIO  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Advisory: GDS 062 and GDS 064
Acceptable for credit: California State University
In this course students create original portfolio content necessary for graduation and for procuring employment. Students develop and showcase their individual design/illustration approach, demonstrated via intermediate to advanced-level creative projects. Visual communication principles, processes and methods are explored in lecture and in lab. Previous experience with Adobe Photoshop and Adobe Illustrator is advised. Pass/No Pass Option.

GDS 070  USER EXPERIENCE, INTERFACE AND MULTIMEDIA DESIGN  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Acceptable for credit: University of California, California State University
In this course students are introduced to the fields of User Experience Design and Interface Design. Key topics covered in this course are interaction design, mobile and desktop interface design, information architecture, user research, as well as UX planning documents such as wireframes and personas. Students learn many of the principles, processes, and techniques used to develop effective user interfaces. Pass/No Pass Option.

GDS 072  DIGITAL IMAGING AND USER INTERFACE DESIGN  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 Hours
Advisory: GDS 070
Acceptable for credit: California State University
In this course, students apply design principles to the creation of digital product designs using industry standard software. Students design interfaces and other assets used in User Interface Design and User Experience Design. Pass/No Pass Option.

GDS 073  DIGITAL PHOTOGRAPHY  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This introductory course focuses on photography as a creative medium. Emphasis is placed on aesthetics, composition, content and the technical and creative skills required to create effective digital images using digital cameras and a variety of software packages. Students also critically evaluate photographic images according to the principles of photographic theory. A basic understanding of computer system operation is required. Students must have access to a digital camera. Pass/No Pass Option.

GDS 074  DIGITAL VIDEO PRODUCTION 1  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This introductory course focuses on video production and related hardware and software. The students develop an understanding of video production and post-production in a series of hands-on exercises. Camera operation, video and audio production techniques, special effects, the basic principles of motion graphics, video editing and audio editing are explored. Access to a camera capable of recording video, and a basic understanding of computer system operation are required. Pass/No Pass Option.

GDS 076  EMERGING TRENDS IN INTERACTION DESIGN  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 070
Acceptable for credit: California State University
In this course, students will apply interaction design principles to the design and prototyping of emerging technologies in mobile, wearable, voice activated and smart appliances. Students will explore trends and best practice for interaction and interface design for emerging technology. Pass/No Pass Option.

GDS 077  INTERACTIVE PROJECTS & EXPLORATIONS IN UXD  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 070 and GDS 072
Acceptable for credit: California State University
In this capstone course, students will utilize UXD (User Experience Design) and Interaction design principles to rapidly design and prototyping projects to include in a UX Design portfolio. Students will design and develop hi-fidelity mobile, wearable, voice activated and smart appliances in project-based setting. Pass/No Pass Option.

GDS 080  PACKAGING DESIGN  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 035
Acceptable for credit: California State University
This course introduces the student to the skills required to create effective packaging designs, finished comps, and delivering professional oral presentations. The role of typography, color, and the use of materials such as paper, plastics, and other materials are examined, and design solutions created using both traditional and computer-generated techniques. Composing skills are sharpened by these experiences. The variety of packaging styles available and the environmental implications of packaging are discussed. Pass/No Pass Option.
GDS 081 MOTION GRAPHICS 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 064 and GDS 074
Acceptable for credit: California State University
This course focuses on the planning and production of motion graphics/visual effects for video, film and the internet. The student develops an understanding of the principles of type in motion, keyframe animation, masking/keying, tracking, color correction and compositing. The focus is on creative visual communication. The student develops skill in the use of After Effects, as well as other appropriate software. Access to a camera capable of recording video, and a basic understanding of Adobe Photoshop and computer system operation are recommended. Pass/No Pass Option.

GDS 082 GAME DESIGN AND ARCHITECTURE 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This introductory course focuses on the planning and methodology of game design. Students develop an understanding of the conceptual game development process and, game architecture. Students also examine and evaluate a number of case studies. A basic understanding of computer system operation is required. Pass/No Pass Option.

GDS 084 PORTFOLIO PRODUCTION STUDIO 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: (GDS 062 and GDS 064) or (GDS 862 and GDS 864)
Acceptable for credit: California State University
This course creates original portfolio content necessary for graduation and for procuring employment. Students complete intermediate to advanced-level capstone projects, i.e. case studies, showcasing their individual creative approach and technical abilities. Originality, communication, and presentation are subjects of emphasis. As a group, students assist one another with extensive constructive criticism via regular lab critiques. This course is approved for credit by exam. Pass/No Pass Option.

GDS 085 PROFESSIONAL PORTFOLIO AND DESIGN CAREER PREPARATION 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: ENG 001A and GDS 035 and GDS 055A
Acceptable for credit: California State University
This capstone course focuses on assembling a professional portfolio, as well as preparing for work as a freelance designer. The course includes portfolio development using projects created in prior art and design classes, self-promotional and interviewing techniques, and the process of working as an independent contractor. The students also interact with professionals in the field of design across multiple disciplines. Pass/No Pass Option.

GDS 086 VISUAL EFFECTS I 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This hands-on course introduces students to visual effects in film and digital media production. Creative projects explore visual effects techniques including keyframing, compositing, and shooting for visual effects. Pass/No Pass Option.

GDS 087 VIRTUAL PRODUCTION I 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Acceptable for credit: California State University
This course introduces many aspects of 3D Virtual Film and TV Production: Motion Capture, Cinematography, Lighting, Props, Art Direction, Technical and Visual aspects of 3D Virtual Production, including pre-production, storyboards, blocking, lighting, sets and props; technical skills, including Realtime 3D engines, workflows, camera functions and movement, industry terminology, duties; and responsibilities of the camera, lighting and art teams. Pass/No Pass Option.

GDS 089 JAVASCRIPT 1 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 045
Acceptable for credit: California State University
This is an introductory course on using JavaScript to develop applications for the web. Students learn to develop interactive web pages using JavaScript. This course covers JavaScript basics, arrays, objects, an introduction to DOM scripting and debugging. Intermediate topics include advanced objects, Web forms, DOM Scripting dynamic content, cookies and Web storage, and an introduction to advanced topics such as AJAX and JavaScript libraries. Pass/No Pass Option.

GDS 089B JAVASCRIPT II AND WEB DEVELOPMENT 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Advisory: GDS 089
Acceptable for credit: California State University
This course provides an intermediate to advanced level content continuation of the GDS 089 JavaScript 1 course. The course also provides instruction on other aspects of web development, such as server interactions and version control. Topics include: Review of JavaScript basics, DOM scripting, front-end frameworks, asynchronous programming, JavaScript on the back end, APIs and Web Services. Technologies may include: JSON, React, XML, REST, jQuery, Angular, Node.js, package managers and AJAX. Pass/No Pass Option.

GDS 862 DIGITAL ILLUSTRATION WITH ADOBE ILLUSTRATOR NONCREDIT
Total Lecture: 36 hours, Total Lab: 54 hours
This is a beginning digital illustration course for artists, illustrators and graphic designers. Students learn how to create original art, illustrations, and graphic designs using a variety of software applications. Basic art and design principles are explored. Students examine the history and application of illustration, in a variety of cultures and times, as a medium for social change, self-expression and marketing purposes. Pass/No Pass Option.

GDS 864 INTRODUCTION TO ADOBE PHOTOSHOP NONCREDIT
Total Lecture: 36 hours, Total Lab: 54 hours
This is a beginning digital imaging course for graphic designers, artists, and photographers. Students learn how to create original artwork, refine photographs and manipulate digital imagery using Adobe Photoshop. Basic art and design principles are explored. Students examine the history and application of graphic design, in a variety of cultures and times, as a medium for social change, self-expression and marketing purposes. Pass/No Pass Option.

GDS 869 3D FOR DESIGNERS AND ILLUSTRATORS NONCREDIT
Total Lecture: 36 hours, Total Lab: 54 hours
This is a beginning 3D course for illustrators and designers. Students will learn the fundamentals of working within a 3D space including modeling, sculpting, rigging, texturing, lighting, and rendering. Special areas of focus include character design, packaging design, typographic illustration, and animation. Pass/No Pass Option.

GDS 873 DIGITAL PHOTOGRAPHY NONCREDIT
Total Lecture: 36 hours, Total Lab: 54 hours
This introductory course focuses on photography as a creative medium. Emphasis is placed on aesthetics, composition, content and the technical and creative skills required to create effective digital images using digital cameras and a variety of software packages. Students also critically evaluate photographic images according to the principles of photographic theory. A basic understanding of computer system operation is required. Students must have access to a digital camera. Pass/No Pass Option.
This introductory course focuses on video production and related hardware and software. The students develop an understanding of video production and post-production in a series of hands-on exercises, camera operation, video and audio production techniques, special effects, the basic principles of motion graphics, video editing and audio editing are explored. Access to a camera capable of recording video, and a basic understanding of computer system operation are required. Pass/No Pass Option.

This course focuses on the preparation and production of motion graphics/visual effects for video, film and the internet. The student develops an understanding of the principles of type in motion, keyframe animation, masking/keying, tracking, color correction and compositing. The focus is on creative visual communication. The student develops skill in the use of After Effects, as well as other appropriate software. Access to a camera capable of recording video, and a basic understanding of Adobe Photoshop and computer system operation are recommended. Pass/No Pass Option.

This introductory course focuses on video production and related hardware and software. The students develop an understanding of video production and post-production in a series of hands-on exercises, camera operation, video and audio production techniques, special effects, the basic principles of motion graphics, video editing and audio editing are explored. Access to a camera capable of recording video, and a basic understanding of computer system operation are required. Pass/No Pass Option.

This course is designed to prepare the potential Health Occupations student for entry into and successful completion of a Health Occupations program. The course content focuses on competencies expected upon entry, study skills, test-taking strategies, stress management, mathematics for dosage calculation, critical thinking, critical reasoning, and introduction to the nursing process. Pass/No Pass Option.

This course is designed to prepare the student to provide rescue breathing and closed chest compression (Basic Life Support) as well as use of AED to a victim of sudden death. This course is taught according to guidelines of the American Heart Association. AHA CPR/AED course completion cards are issued to students who successfully meet course objectives. The student is required to read the textbook “BLS for Healthcare Providers” prior to attending class. Pass/No Pass Option.

This course focuses on the preparation and production of motion graphics/visual effects for video, film and the internet. The student develops an understanding of the principles of type in motion, keyframe animation, masking/keying, tracking, color correction and compositing. The focus is on creative visual communication. The student develops skill in the use of After Effects, as well as other appropriate software. Access to a camera capable of recording video, and a basic understanding of Adobe Photoshop and computer system operation are recommended. Pass/No Pass Option.
HOC 005  INTRODUCTION TO COMMUNITY HEALTH WORKER 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
Learn the various roles, skills, and functions of Community Health Workers. This course introduces important core competencies for providing direct services, including access to health care, cultural humility, the scope of practice, ethics, client-centered coaching, care management, and patient advocacy. Pass/No Pass Option.

HOC 006  PERSONAL HEALTH AND LIFESTYLE 3.0 UNITS
Total Lecture: 54 hours
Advisory: CAP 033A
California State University, University of California
This course is designed to provide the student with learning experiences that will lead to a better understanding of the concept of a healthy lifestyle. The emphasis is on changing unhealthy behaviors to healthy ones. Major topics covered in the class are: understanding behavior and change, relationships, cardiovascular health, fitness, nutrition, weight control, stress management, drug and alcohol abuse, reproductive issues, global health, the impact of the social determinants of health, and the use of the health care system. Pass/No Pass Option.

HOC 008  COMMUNITY HEALTH PROBLEMS 3.0 UNITS
Total Lecture: 54 hours
This is an introductory community health course with a focus on community health problems and issues facing consumers today. Included are identified community health problems and agencies related to the elderly, maternal and child health, communicable disease, substance abuse, occupational safety, health and the environment. This course is required for students who are pre-health professionals, in the community health worker program, and persons working in residential care agencies. Grade Only.

HOC 010  HEALTH COMMUNICATION: HEALTH LITERACY, HEALTH COACHING, AND MOTIVATIONAL INTERVIEWING 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
Students will learn methods of communication in healthcare: health literacy, health coaching, group dynamics, and motivational interviewing. In addition, students will demonstrate an understanding of how one’s culture affects health behavior and will develop a client-informed plan. Grade Only.

HOC 012  COMMUNITY HEALTH WORKER INTERNSHIP 3.0 UNITS
Total Lecture: 18 hours, Total Arranged Lab: 108 hours
Prerequisite: HOC 005
This internship course provides students with an opportunity to learn in a work setting while obtaining practical experience in community health work. Students will contract for a minimum of 100 hours at an internship placement and participate in a weekly seminar to discuss their fieldwork and apply academic theory to practice. Pass/No Pass Option.

HOC 019A  NURSING ASSISTANT FUNDAMENTALS 4.0 UNITS
Total Lecture: 72 hours
Corequisite: HOC 019B and HOC 019AL
Advisory: HOC 004
Acceptable for credit: California State University
This beginning course in nursing fundamentals gives the student a foundation in the basic scientific principles required to provide health care in a skilled nursing facility. Students who successfully complete this course, along with HOC 019AL and HOC 019B, are eligible to apply for the California Certified Nurse Assistant (CNA) examination. Grade only.

HOC 019AL  NURSING ASSISTANT FUNDAMENTALS LABORATORY 0.5 UNITS
Total Lab: 27 hours
Corequisite: HOC 019A and HOC 019B
Acceptable for credit: California State University
This laboratory course provides hands-on skills training to support HOC 019H, Nursing Assistant Fundamentals and gives the student a foundation in the basic skills required to provide health care in a skilled nursing facility. Students who successfully complete this course, along with HOC 019H and HOC 019B, are eligible to apply for the California Certified Nurse Assistant (CNA) examination. Pass/No Pass Only.

HOC 019B  NURSING ASSISTANT CLINICAL EXPERIENCE 2.0 UNITS
Total Lab: 108 hours
Corequisite: HOC 019A and HOC 019AL
Acceptable for credit: California State University
This clinical practicum provides the student with experience in the application of basic patient care skills in a skilled nursing facility. Students who successfully complete this course, along with HOC 019H and HOC 019H, are eligible to apply to take the National Nurses Aide Assessment Program (NNAAP) examination. Pass/No Pass Only.

HOC 019F  HOME HEALTH AIDE FUNDAMENTALS 1.5 UNITS
Total Arranged Lab: 27 hours
Co-requisite: HOC 019F
This clinical practicum provides the student with experience in basic nursing skills in a skilled nursing facility/home setting. Students who successfully complete this course along with HO 019F are eligible to apply for the California Home Health Aide Certificate. Pass/No Pass Only.

HOC 019G  HOME HEALTH AIDE CLINICAL 0.5 UNITS
Total Arranged Lab: 27 hours
Corequisite: HOC 019F
This clinical practicum provides the student with experience in basic nursing skills in a skilled nursing facility/home setting. Students who successfully complete this course along with HOC 019F are eligible to apply for the California Home Health Aide Certificate. Pass/No Pass Only.

HOC 020  INTRODUCTION TO PROFESSIONAL HEALTH CARE 0.5 UNITS
Total Lecture: 9 hours
Advisory: (HOC 001 and HOC 001A and HOC 905) or (HOC 001 and HOC 001A and Elementary Algebra Skill).
This course helps acquaint incoming vocational nursing students with Mission College, available student services, and the Health Occupations career tracks. It covers college orientation and information regarding Health Occupations policies and procedures, study skills, assignments, time management, and career opportunities. Pass/No Pass Only.

HOC 022  PATIENT NURSING CARE FUNDAMENTALS 1.5 UNITS
Total Lecture: 27 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H)
Co-requisite: HOC 023A and HOC 023B and HOC 024 and HOC 025A and HOC 026A and HOC 027
Acceptable for credit: California State University
This is a foundation course in which beginning Health Occupations students gain knowledge of fundamental principles and techniques necessary to provide basic nursing care to patients. Ethical and legal responsibilities of the vocational nurse are explored. Students utilize the nursing process and therapeutic communication while gaining competence in performing basic nursing procedures and skills, including administration of medications and enemas; performing physical assessments of
body systems; collecting and ensuring integrity of diagnostic specimens; insertion of nasogastric tube; enteral feedings; airway suctioning; tracheostomy care; wound assessment and care, including application of dressings; as well as documentation of assessment findings, care provided and patient’s responses. Grade only.

**HOC 023A BEG. MEDICAL-SURGICAL NURSING THEORY** 2.5 UNITS

Total Lecture: 45 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023B and HOC 024 and HOC 025A and HOC 026A and HOC 027
Acceptable for credit: California State University
This course focuses on beginning level nursing care and interventions for patients with diseases or disorders of particular body systems. The nursing process is used as a critical thinking tool in understanding diagnostics, assessing manifestations experienced by the patient, identifying and implementing evidence-based nursing interventions, and evaluating outcomes. Students identify the role of vocational nurses in collaborating with other health team members and planning therapeutic management of patients with conditions affecting the musculoskeletal, neurological, neurosensory, and reproductive systems. Includes six hours of related pharmacology content. Grade only.

**HOC 023B BEG. COGNITIVE DISABILITIES–MENTAL HEALTH THEORY** 1.0 UNIT

Total Lecture: 18 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023A and HOC 024 and HOC 025A and HOC 026A and HOC 027
Acceptable for credit: California State University
This beginning course is designed to present theoretical concepts of mental health disorders, legal and ethical principles, and approaches to assist the vocational nursing students to identify and understand therapeutic communication skills, psycho-pharmacological concepts and assessment skills in caring for persons with psychiatric disorders. Among these skills are objective and subjective observations and data collection through assessment of strengths and abnormalities in function and behavior across the lifespan. Includes two hours of related pharmacology content. Grade only.

**HOC 024 PHARMACOLOGY A** 1.0 UNIT

Total Lecture: 18 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023A and HOC 023B and HOC 025A and HOC 026A and HOC 027
Acceptable for credit: California State University
This beginning course in pharmacology presents the vocational nursing student with the basic principles of pharmacology. The emphasis is on defining pharmacological agents, the use of reference books, and the nursing implications in pharmacological therapy. The course covers the uses of pharmacological agents, precautions for use, side effects, medication interactions, contraindications, and patient teaching for safe and proper pharmacological agent use for patients with disorders of the musculoskeletal, neurological, neurosensory, and reproductive systems. Grade only.

**HOC 025A FUNDAMENTALS SKILLS/ SIMULATION LAB** 1.0 UNIT

Total Lab: 54 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC 026A and HOC 027
Acceptable for credit: California State University
This course allows the beginning vocational nursing student the opportunity to integrate the concepts of the nursing process, clinical reasoning, nursing theory, and nursing skills in a laboratory setting which simulates the clinical experience. Focus is placed on developing competence in performing basic nursing procedures and skills through practice on manikins, return demonstration of skills and participation in simulated clinical scenarios aimed to meet the needs of the medical-surgical and geriatric patients with musculoskeletal, neurological, neurosensory, reproductive and mental health disorders in inpatient and outpatient settings. Pass/No Pass Only.

**HOC 026A BEG. CLINICAL PRACTICUM** 5.0 UNITS

Total Lab: 270 hours
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC 026A and HOC 027
Acceptable for credit: California State University
This is a foundation course which provides the Vocational Nursing student clinical experiences during which they integrate standards of professional practice, theoretic principles of nursing, therapeutic communication, nursing process and basic nursing skills during supervised care to patients with acute or chronic medical-surgical concerns and mental illnesses. Students spend approximately seventeen hours each week in community agencies. Pass/No Pass Only.

**HOC 027 NURSING PROCESS AND COMMUNICATION** 2.0 UNITS

Total Lecture: 36 hours
Prerequisite: HOC 028
Prerequisite or Co-requisite: HOC 028 and (PSY 001 or PSY 001H) Co-requisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC 025A and HOC 026A
Acceptable for credit: California State University
This course is designed to provide the beginning health care practitioner with an introduction to the framework of nursing process and basic communication concepts. Both are essential to development of problem-solving and critical thinking abilities as well as the formation of trusting interpersonal relationships necessary to meet individualized needs of the client, family, and community. Vocational nursing students participate in activities designed to integrate therapeutic communication through each step of the nursing process that facilitates active engagement of the patient and family in health care management while supporting effective, collaborative teamwork among interdisciplinary healthcare members. Grade only.
HOC 028  CARE OF THE GERIATRIC PATIENT  1.0 UNIT  
Total Lecture: 18 hours  
Acceptable for credit: California State University  
This course is designed to give the vocational nursing student an introduction to the care of the elderly client in both an institutional and a community setting. The focus is on viewing the last developmental stage of the adult as a normal progression of life, including the basic hierarchy of human needs. This stage is explored to prepare the vocational nurse for the adaptations associated with the aging process. This course is a required course that must be completed prior to students beginning the Health Occupations VN career track second semester. Non-Health Occupations students may enroll in this course as well. Grade only.

HOC 032  CARE OF OBSTETRICAL AND NEONATAL PATIENTS  2.0 UNITS  
Total Lecture: 36 hours  
Prerequisite or Co-requisite: HOC 034 and HOC 033B and HOC 034 and HOC 035A and HOC 036A  
Acceptable for credit: California State University  
This course is designed to educate the vocational nursing student about their role in providing care as a member of the healthcare team in meeting the needs of patients during pregnancy, in labor and delivery, and during the postpartum periods. This course focuses on the intermediate level concepts of the nursing process as it relates to the child-bearing family, including the care of neonates. This course includes assessing, developing, implementing and evaluating a plan of care that respects the individual’s cultural and ethnic child-bearing beliefs that have an impact on the mother and family. The course includes 3.5 hours of relevant pharmacology content. Grade only.

HOC 033A  INT. MEDICAL/SURGICAL NURSING THEORY  2.0 UNITS  
Total Lecture: 36 hours  
Prerequisite or Co-requisite: NTR 015 or NTR 040  
Co-requisite: HOC 033A and HOC 033B and HOC 034 and HOC 035A and HOC 036A  
Acceptable for credit: California State University  
This course focuses on nursing care and interventions for patients with diseases or disorders of particular body systems. The nursing process is used as a critical thinking tool in understanding diagnostics, assessing manifestations experienced by the patient, identifying and implementing evidence-based nursing interventions, and evaluating outcomes. Students identify the role of vocational nurses in collaborating with other health team members and planning therapeutic management of patients with conditions affecting the respiratory, cardiac, vascular, and urinary systems. Includes six hours of related pharmacology content. Grade only.

HOC 033B  INT. PROJECT-BASED MEDICAL/SURGICAL REASONING  1.5 UNITS  
Total Lecture: 27 hours  
Prerequisite or Co-requisite: NTR 015 or NTR 040  
Co-requisite: HOC 032 and HOC 033A and HOC 034 and HOC 035A and HOC 036A  
Acceptable for credit: California State University  
This course is designed to provide vocational nursing students opportunities to develop problem-solving and critical reasoning while practicing their professional roles as members of the health care team caring for patients with cardiac, vascular, respiratory, and urinary disorders. This is achieved through a variety of group activities and projects such as reviewing, analyzing, and formulating plans of care, concept mapping, case studies, research of evidence-based best practices, professional journal article critique, and patient teaching plans. The course includes 2.5 hours of relevant pharmacology content. Grade only.

HOC 034  PHARMACOLOGY B  1.0 UNIT  
Total Lecture: 18 hours  
Prerequisite or Co-requisite: NTR 015 or NTR 040  
Co-requisite: HOC 032 and HOC 033A and HOC 033B and HOC 035A and HOC 036A  
Acceptable for credit: California State University  
This is an intermediate continuation course in pharmacology that presents the basic principles of pharmacology to the vocational nursing. The emphasis is on defining pharmacological agents and analyzing the nursing implications in pharmacological therapy. The course covers the uses of pharmacological agents, precautions for use, side effects, medication interactions, contraindications, and patient teaching for safe and proper pharmacological agents use for patients with disorders of the cardiac, vascular, respiratory and urinary systems. Grade only.

HOC 035A  INT. NURSING SKILLS/SIMULATION LAB  1.0 UNIT  
Total Lab: 54 hours  
Prerequisite or Co-requisite: NTR 015 or NTR 040  
Co-requisite: HOC 032 and HOC 033A and HOC 033B and HOC 034 and HOC 036A  
Acceptable for credit: California State University  
This course allows the intermediate vocational nursing student the opportunity to integrate the concepts of the nursing process, clinical reasoning, nursing theory, and nursing skills in a laboratory setting which simulates the clinical experience. Focus is placed on developing competence in performing basic nursing procedures and skills through practice on manikins, return demonstration of skills, and participation in simulated clinical scenarios aimed to meet the needs of the medical-surgical and geriatric patients with respiratory, cardiac, vascular, and urinary disorders, and obstetrical and neonatal patients in inpatient and outpatient settings. Pass/No Pass Only.
HOC 036A  INT. CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Prerequisite or Co-requisite: NTR 015 or NTR 040
Co-requisite: HOC 032 and HOC 033A and HOC 033B and HOC 034 and HOC 035A
Acceptable for credit: California State University
This is an intermediate level experiential course which provides the vocational nursing student with clinical experiences during which they integrate standards of professional practice, theoretical principles of nursing, therapeutic communication, nursing process and basic nursing skills during supervised care to adult and neonatal clients with acute or chronic medical-surgical/obstetrical concerns. Students spend approximately fifteen hours each week in inpatient and/or community health facilities. Pass/No Pass Only.

HOC 042  CARE OF THE PEDIATRIC PATIENT  2.0 UNITS
Total Lecture: 36 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 046A and HOC 047
Acceptable for credit: California State University
This course is designed to give the vocational nursing student a working knowledge of the principles and skills necessary in the care of pediatric clients. The course focuses on advanced level concepts of the nursing process as it relates to the child and family, and includes client/family education, discharge planning, home care, and adaptations of nursing care to both hospital and home, including 3.5 hours of relevant pharmacology content. Grade only.

HOC 043A  ADVANCED MEDICAL/ SURGICAL THEORY  2.0 UNITS
Total Lecture: 36 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043B and HOC 044 and HOC 045A and HOC 046A and HOC 047
Acceptable for credit: California State University
This course focuses on advanced level nursing care and interventions for clients with diseases or disorders of particular body systems. The nursing process is used as a critical thinking tool in understanding diagnostics, assessing manifestations experienced by the patient, identifying and implementing evidence-based nursing interventions, and evaluating outcomes. Students identify the roles of vocational nurses and psychiatric technicians in collaborating with other health team members and planning therapeutic management of patients with conditions affecting the gastrointestinal, integumentary, endocrine, and hematological systems. Includes six hours of related pharmacology content. Grade only.

HOC 043B  ADVANCED PROJECT-BASED MEDICAL SURGICAL REASONING  1.5 UNITS
Total Lecture: 27 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043A and HOC 044 and HOC 045A and HOC 046A and HOC 047
Acceptable for credit: California State University
This course is designed to provide vocational nursing students opportunities to develop problem-solving and critical reasoning skills while practicing their professional roles as members of the health care team caring for patients with gastrointestinal, integumentary, endocrine, and hematological disorders. This is achieved through a variety of group activities and projects such as care planning, concept mapping, case studies, research of evidence-based best practices, professional journal article critique, and patient teaching plans. The course includes 2.5 hours of relevant pharmacology content. Grade only.

HOC 044  PHARMACOLOGY C  1.0 UNIT
Total Lecture: 18 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043A and HOC 043B and HOC 045A and HOC 046A and HOC 047
Acceptable for credit: California State University
This course is designed to provide vocational nursing students opportunities to develop problem-solving and critical reasoning skills while practicing their professional roles as members of the health care team caring for patients with gastrointestinal, integumentary, endocrine, and hematological disorders. This is achieved through a variety of group activities and projects such as care planning, concept mapping, case studies, research of evidence-based best practices, professional journal article critique, and patient teaching plans. The course includes 2.5 hours of relevant pharmacology content. Grade only.

HOC 045A  ADVANCED SKILLS/SIMULATION LAB 1.0 UNIT
Total Lab: 54 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043A and HOC 043B and HOC 044 and HOC 046A and HOC 047
Acceptable for credit: California State University
This course allows the advanced vocational nursing student the opportunity to integrate the concepts of the nursing process, clinical reasoning, nursing theory, and nursing skills in a laboratory setting which simulates the clinical experience. Focus is placed on developing competence in performing basic nursing procedures and skills through practice on manikins, return demonstration of skills and participation in simulated clinical scenarios aimed to meet the needs of the medical-surgical and geriatric patients with gastrointestinal, integumentary, endocrine, and hematological disorders and pediatric patients and their families in inpatient and outpatient settings. Pass/No Pass Only.

HOC 046A  ADVANCED CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 047
Acceptable for credit: California State University
This course is designed to give the vocational nursing student a working knowledge of the principles and skills necessary for providing nursing care in a variety of settings. Clinical experience is correlated with classroom learning and includes an emphasis on integrating the critical elements of nursing into the care of medical-surgical, geriatric and pediatric clients. Emphasis is placed on continued competence in critical thinking skills and in performing vocational nursing functions. The focus is on developing beginning leadership skills and transitioning from a student level to a novice level of practice. Pass/No Pass Only.

HOC 047  LEADERSHIP AND PROFESSIONAL PRACTICE  1.5 UNITS
Total Lecture: 27 hours
Prerequisite or Corequisite: PSY 012
Co-requisite: HOC 042 and HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 046A
Acceptable for credit: California State University
The focus of this course is to prepare the vocational nursing student for application for the licensure/NCLEX examination and the transition to entry level professional practice. Course content includes: securing and maintaining licensure; exploration of employment opportunities; interviewing techniques/strategies; legal, ethical and socio-cultural aspects of client care; the effect of current issues and trends on clinical practice; and the development of leadership roles. Grade only.
HOC 050  ROLE TRANSITION LVN TO RN  2.0 UNITS
Total Lecture: 36 hours
Corequisite: HOC 050A
Acceptable for credit: California State University
This course is designed to prepare the licensed vocational nurse for entry into an associate degree nursing (ADN) program. The course content focuses on competencies expected of the graduate ADN (critical thinking skills, review of medical-surgical nursing concepts, role change, research skills, teaching-learning principles, development of the nursing teaching role, pharmacology principles, medication calculation) to prepare the student for success in an AND program. Grade Only.

HOC 050A  ROLE TRANSITION CLINICAL  1.0 UNIT
Total Lab: 54 hours
Corequisite: HOC 050
Acceptable for credit: California State University
This course involves directed clinical experiences in a simulated acute hospital and simulated community healthcare agencies that provide services for perioperative and medical/surgical clients. Through the use of the nursing process, the student provides care, teaching, support and rehabilitation to perioperative and medical/surgical clients. Emphasis is on the role of the registered nurse caring for clients with acute and chronic problems. Pass/No Pass Only.

HOC 051  COMMUNITY MENTAL HEALTH NURSING  2.0 UNITS
Total Lecture: 36 hours
Prerequisite: HOC 050 and HOC 050A
Corequisite: HOC 052 and HOC 053 and HOC 054
Acceptable for credit: California State University
This course is designed to present mental health principles to assist the RN nursing student in developing an increased understanding of human behavior in the areas of anxiety disorders, psychiatric disorders, chemical dependency, personality disorders, domestic violence and sexual assault issues. Instruction regarding the application of therapeutic communication skills, psychopharmacological concepts and mental status assessment skills is also emphasized with the discussion of the above issues. This course is designed to provide theoretical and clinical approaches in providing nursing care to individuals of varying ages, with complex health care needs in the community setting. Students must achieve 75% overall in order to pass the course. Grade Only.

HOC 052  INTERMEDIATE MEDICAL-SURGICAL NURSING THEORY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: HOC 050 and HOC 050A
Corequisite: HOC 051 and HOC 053 and HOC 054
Acceptable for credit: California State University
This course provides the student with the opportunity to synthesize and correlate nursing knowledge and skills necessary in the provision of care to multiple patients who have complex, multi-system illnesses. The focus is for the students to learn to identify and anticipate patient needs and priorities, and evaluate outcomes of care. The nursing care of adult and geriatric clients with acute and chronic illnesses is addressed, in addition to integrating and practicing associated psycho-motor skills. Students must earn 75% or better overall in course assignments to earn a passing grade in this course. Grade Only.

HOC 053  INTRODUCTION TO CLINICAL JUDGMENT  1.0 UNIT
Total Lab: 54 hours
Prerequisite: HOC 050 and HOC 050A
Corequisite: HOC 051 and HOC 052 and HOC 054
Acceptable for credit: California State University
This course allows the registered nursing student to integrate the concepts of critical thinking, critical reasoning, nursing theory, and nursing skills in a laboratory setting which simulates the clinical experience. This course integrates nursing theory and clinical learning experiences through the use of case studies, clinical narratives, participation in clinical simulation scenarios with computerized manikins, and class discussion. This simulated clinical experience enhances the student’s nursing theory course classroom learning. The emphasis is on the role of the registered nurse caring for acute medical-surgical and geriatric patients with acute and chronic problems in the nursing simulation lab. Emphasis is on developing competence in critical thinking and in leadership skills. Pass/No Pass Only.

HOC 054  INTERMEDIATE CLINICAL PRACTICUM  4.0 UNITS
Total Lab: 216 hours
Prerequisite: HOC 050 and HOC 050A
Corequisite: HOC 051 and HOC 052 and HOC 053
Acceptable for credit: California State University
This course provides the nursing student with directed clinical experiences in acute care hospitals and a variety of community healthcare agencies for adult and geriatric patients/clients. The nursing student provides comprehensive, holistic patient/client care and teaching to assist the individuals who have acute or chronic illness in the medical-surgical and mental health/psychiatric settings to meet their health needs while incorporating the standards of professional practice and the Neuman Systems Model. Pass/No Pass Only.

HOC 060  ADVANCED MATERNAL-CHILD NURSING  2.0 UNITS
Total Lecture: 36 hours
Prerequisite: HOC 050 and HOC 050A and HOC 051 and HOC 052 and HOC 053 and HOC 054
Corequisite: HOC 061 and HOC 062 and HOC 064
Acceptable for credit: California State University
This course focuses on the nursing process as it relates to the child-bearing and child-rearing family. The nurse’s roles of provider, manager of care, and member of the profession are explored in meeting the needs of patients in labor and delivery, mother-baby, and pediatrics. This course focuses on assessing, developing, implementing and evaluating a plan of care that respects the individual’s cultural and ethnic child-bearing and child-rearing beliefs that have an impact on the hospitalized child and family. Simulated practice of nursing skills in a nursing simulation laboratory is required. Grade Only.

HOC 061  ADVANCED MEDICAL-SURGICAL NURSING THEORY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: HOC 050 and HOC 050A and HOC 051 and HOC 052 and HOC 053 and HOC 054
Corequisite: HOC 060 and HOC 062 and HOC 064
Acceptable for credit: California State University
This course focuses on advanced application of the nursing process in the care of critically ill adult and geriatric patients. The students have an opportunity to integrate and apply previously learned skills and knowledge from all areas of nursing practice. Content includes leadership theory and application, delegation, priorities, and time management. Grade Only.
HOC 062  LEADERSHIP AND ETHICS  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: HOC 050 and HOC 050A and HOC 051 and HOC 052 and HOC 053 and HOC 054
Corequisite: HOC 060 and HOC 061 and HOC 064
Acceptable for credit: California State University
This course introduces principles of leadership and supervision as they apply to the registered nurse. The focus is on the role of the registered nurse as a member of the health care team and supervisor of vocational nurses and unlicensed health care team caregivers. Students address basic ethical concepts, principles, justification, and reasoning and apply them to ethical issues and cases involving professionalism, confidentiality, veracity, paternalism, and informed consent in the context of nursing situations. Grade Only.

HOC 064  ADVANCED CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Prerequisite: HOC 050 and HOC 050A and HOC 051 and HOC 052 and HOC 053 and HOC 054
Corequisite: HOC 060 and HOC 061 and HOC 064
Acceptable for credit: California State University
This course provides the nursing student with directed clinical experiences for maternal-child and pediatric patient/clients as well as adult and geriatric patients/clients in acute care hospitals and a variety of community healthcare agencies. The nursing student provides comprehensive, holistic patient/client care and teaching to assist the individuals who have acute or chronic illness in the medical-surgical setting as well as provide maternal-child nursing care for patients in labor and delivery, mother-baby, and pediatrics settings to meet their health needs while incorporating the standards of professional practice and the Neuman Systems Model. Pass/No Pass Only.

HOC 905  MATH FOR HEALTH OCCUPATIONS  1.0 UNIT
Total Lecture: 18 hours
Advisory: Elementary Algebra Skills.
This course is an introduction to math calculations for health occupations students. It provides the learner with the opportunity to explore the math functions within the health field. Students become competent with performing accurate calculations for the delivery of medications. Pass/No Pass Option. Non-degree applicable course.

HIS 004A  HISTORY OF WESTERN CIVILIZATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a survey of Western Civilization from prehistoric times to 1600. Emphasis is on the major political, economic, social, cultural and intellectual movements that have molded Western society. Pass/No Pass Option. C-ID # HIST 170. CSUGE: D; IGETC: 3B, 4, C2.

HIS 004AH  HISTORY OF WESTERN CIVILIZATION - HONORS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course is a survey of Western Civilization from 1600 to the present. Emphasis is on major political, economic, social, and intellectual movements that have shaped Western society. Pass/No Pass Option. C-ID # HIST 180. CSUGE: D; IGETC: 3B, 4, C2.

HIS 015  WORLD HISTORY TO 1500  3.0 UNITS
Total Lecture: 54 Hours
Acceptable for credit: University of California, California State University
This course is a survey of World Civilization from prehistoric times to 1500. Emphasis is on the major political, economic, social, cultural and intellectual movements that have molded world societies. Pass/No Pass Option. C-ID # HIST 150. CSUGE: D; IGETC: 4, C2.
HIS 015H  WORLD HISTORY TO 1500 - HONORS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course is a survey of World Civilization from prehistoric times to 1500. Emphasis is on the major political, economic, social, cultural, and intellectual movements that have molded world civilizations. Students cannot get credit for both HIS 015 and HIS 015H. Enrollment in the Honors Program is required. Pass/No Pass Option. C-ID # HIST 150. CSUGE: D; IGETC: 4, C2, 3B.

HIS 016  WORLD HISTORY SINCE 1500 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a survey of world civilizations from 1500 to the present. Emphasis is on the major political, economic, social, and intellectual movements that have molded world civilizations. Pass/No Pass Option. C-ID # HIST 160. CSUGE: D; IGETC: 4, C2, 3B.

HIS 016H  WORLD HISTORY SINCE 1500 - HONORS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course is a survey of world civilizations from 1500 to the present. Emphasis is on the major political, economic, social, and intellectual movements that have molded world civilizations. Students cannot get credit for both HIS 016 and HIS 016H. Enrollment in the Honors Program is required. Pass/No Pass Option. C-ID # HIST 160. CSUGE: D; IGETC: 4, C2, 3B.

HIS 017A  HISTORY OF THE UNITED STATES TO 1877 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
History 017A is a survey of the political, economic, social and cultural development of the United States from native American settlement in America through Reconstruction. Topics covered include the interaction between the indigenous peoples and European settlers in the development of the colonies, origins and consequences of the American Revolution, the development of democracy and constitutional government in America, westward expansion, the early factory system, institutionalism and American foreign policy, slavery and its impact on race relations, antebellum reforms, abolitionism and sectional conflict, causes and consequences of the Civil War and Reconstruction. Pass/No Pass Option. C-ID # HIST 130. CSUGE: D; US-2; IGETC: 4, C2, 3B.

HIS 017AH  HISTORY OF THE UNITED STATES TO 1877 - HONORS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course is a survey of the political, economic, social and cultural history of the United States from 1877 to the present with more rigorous assignments and research than HIS 017B. Topics covered include industrialization and urbanization, the rise of big business, completion of westward expansion, Native American cultures, the Progressive Era, World War I, the 1920s and Franklin Roosevelt’s New Deal, World War II, the Cold War, Vietnam War, the Civil Rights and other social, ethnic, and gender movements of the post-World War II era, and post-Cold War American domestic and foreign policy. Students cannot get credit for both HIS 017B and HIS 017BH. Enrollment in the Honors Transfer Project is required. (History 017AH is not a Prerequisite: to History 017BH.) Pass/No Pass Option. C-ID # HIST 140. CSUGE: D; IGETC: 4, C2, 3B.

HIS 017B  HISTORY OF THE UNITED STATES SINCE 1877 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a survey of the political, economic, social and cultural history of the United States from 1877 to the present. Topics covered include industrialization and urbanization, the rise of big business, completion of westward expansion, Native American cultures, the Progressive Era, World War I, the 1920s and Franklin Roosevelt’s New Deal, World War II, the Cold War, the Vietnam War, the Civil Rights and other social, ethnic, and gender movements of the post-World War II era, and post-Cold War American domestic and foreign policy. (History 017A is not a Prerequisite: to History 017BH.) Pass/No Pass Option. C-ID # HIST 140. CSUGE: D; IGETC: 4, C2, 3B.

HIS 017BH  HISTORY OF THE UNITED STATES SINCE 1877 - HONORS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course is a survey of the political, economic, social and cultural history of the United States from 1877 to the present with more rigorous assignments and research than HIS 017B. Topics covered include industrialization and urbanization, the rise of big business, completion of westward expansion, Native American cultures, the Progressive Era, World War I, the 1920s and Franklin Roosevelt’s New Deal, World War II, the Cold War, the Vietnam War, the Civil Rights and other social, ethnic, and gender movements of the post-World War II era, and post-Cold War American domestic and foreign policy. Students cannot get credit for both HIS 017B and HIS 017BH. Enrollment in the Honors Transfer Project is required. (History 017AH is not a Prerequisite: to History 017BH.) Pass/No Pass Option. C-ID # HIST 140. CSUGE: D; IGETC: 4, C2, 3B.

HIS 020  HISTORY AND GEOGRAPHY OF CALIFORNIA 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course examines California’s geographic regions, Native Americans of California, institutions of Spanish California, developments during Mexican and early American period, economic foundations of the state, political growth and institutions of American California, diversity in California history through the 20th Century, and state and local government. This course may be offered via distance learning. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: D; IGETC: 4

HIS 031  HISTORY OF EAST ASIA 3.0 UNITS
Total Lecture: 54 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: University of California, California State University
This course is a survey of the history of China, Japan, Korea, Vietnam and related countries and regions in East Asia with emphasis on the political, social, and economic development of these countries and their interaction with the West. Students will explore the origins of the cultural traditions, major religions in the area, the unifying forces of Chinese culture, and Western intrusion into the region. Pass/No Pass Option. CSUGE: D; IGETC: 4
HIS 033  WOMEN’S ISSUES PAST AND PRESENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course examines the social, economic, cultural and political history of women in the U.S., from colonial times to the modern era. An emphasis is placed on movements which enhanced women’s political and economic rights, the social roles which defined women primarily by their gender, and the legal realities that women faced. Significant moral, political, and economic issues are assessed. Pass/No Pass Option. CSUGE: D; IGETC: 4, C2, 3B.

HIS 033H  WOMEN’S ISSUES PAST AND PRESENT - HONORS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This honors course examines the social, economic, cultural and political history of women in the U.S. from colonial times to the modern era. An emphasis is placed on movements which enhanced women’s political and economic rights, the social roles which defined women primarily by their gender and the legal realities that women faced. Significant moral, political and economic issues are assessed. Students cannot get credit for both HIS 033 and HIS 033H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. CSUGE: C2, D; IGETC: 3B, 4.

HIS 044  AFRICAN AMERICAN HISTORY  3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 044 and ETH 044H and HIS 044H
Acceptable for credit: University of California, California State University
This course surveys the political, economic, and social developments of African Americans from the 1619 to the present. Topics include Africans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWII, the Civil Rights movement, and the present state of African Americans. The course is cross listed as ETH044. Pass/No Pass Option. CSUGE: D, F, US-1; IGETC: 4, 7.

HIS 044H  AFRICAN AMERICAN HISTORY - HONORS  3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 044 and ETH 044H and HIS 044
Acceptable for credit: University of California, California State University
This course surveys the political, economic, and social developments of African Americans from the 1619 to the present. Topics include Africans before European contact and slavery in the US, abolitionism, the Civil War, Reconstruction, the rise and resistance to Jim Crow, WWII, the Civil Rights movement, and the present state of African Americans. This course is cross listed with ETH 044H. Students cannot get credit for both HIS 044 and HIS 044H. Enrollment in the Honors Program is required. Pass/No Pass Option. CSUGE: D,F, US-1; IGETC: 4, 7.

HOSPITALITY MANAGEMENT

Please refer to the courses in the following disciplines found alphabetically in the catalog.

Food Service and Restaurant Management (FDR)
Hotel and Motel Management (HMT)
Institutional Foods (INF)

HOTEL AND MOTEL MANAGEMENT (HMT)

HMT 075  HOUSEKEEPING IN HOTELS, MOTELS AND INSTITUTIONS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is an introduction to the principles of effective housekeeping management in hotels, motels, and institutions, such as hospitals and nursing homes. Topics include the role of housekeeping, planning and organizing the department, environmental and energy management, sustainability and green lodging facilities, interactions between housekeeping and other departments. Students examine safety and security, the cleaning function, budgeting labor, equipment and supplies, managing inventories, and effective diversity management. Pass/No Pass Option.

HMT 076  HOTEL AND MOTEL FRONT OFFICE MANAGEMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is an introduction to the principles of effective front office management. Topics include hotel organization, forecasting, revenue management, budgeting, front office interaction with sales, housekeeping, and human resources. Students examine the guest services role, reservations, registration, account settlement, the audit process, and evaluate a hotel operation. Pass/No Pass Option. C-ID # HOSP 140.
HUMANITIES (HUM)

HUM 001A HUMAN VALUES IN AND FROM THE ARTS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an integrated, interdisciplinary survey of the art, music, literature, history, religion, and philosophy of the Western world from ancient Greek and Roman times through the Medieval period. The class consists of illustrated lectures and discussions. A field trip to a museum, theater performance or concert is required. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 001B HUMAN VALUES IN AND FROM THE ARTS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an integrated, interdisciplinary survey of the art, music, literature, history, religion and philosophy of the Western world from Renaissance to modern times. The course consists of illustrated lectures and discussions. A field trip to a museum, theater performance, or concert is required. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 007 INTERNATIONAL FILMS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a critical look at the world and its problems through some of the finest international films. Films from Asia, Africa, Europe, and the Americas are viewed and analyzed to explore such topics as nationalism, sovereignty, war and peace, ethnic conflict, economics and immigration. This course is cross-listed as Political Science 007 (POL 007). Pass/No Pass Option. CSUGE: C2, D7; IGETC: 3B.

HUM 015 INTRODUCTION TO FILM ANALYSIS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
Critical analysis of film as a literary art form is covered in this course. Exemplary motion pictures are viewed and examined with special attention to film technique, thematic content, and aesthetic values. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 016A HISPANIC ROOTS AND CULTURE 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 016A
Acceptable for credit: University of California, California State University
This course undertakes a chronological study of Hispanic culture beginning with the Pre-Colombian civilizations and continuing to the present. Emphasis is placed on understanding today’s Hispanic world view which has resulted from the unique cultural and historical heritage of indigenous and Spanish, as well as Northern American cultures. Aspects of culture and values reflected in art, literature, and music are examined. The course is cross-listed as ETH 016A. Pass/No Pass Option. CSUGE: C2, D3; IGETC: 3B, 4C.

HUM 018 AFRICAN AMERICAN CULTURE AND HUMANITIES 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 018 and ETH 018H and HUM 018
Acceptable for credit: University of California, California State University
This course is designed to provide the student with an overview of the humanities through the culture and life experiences of African Americans. Content focuses on significant themes such as literary expressions, folklore, visual arts, music, dance, theater, religion, and philosophical thought. The course provides an examination of the historic, economic, and social forces that have inspired creativity among African Americans. This course is cross-listed as ETH018. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 018H AFRICAN AMERICAN CULTURE AND HUMANITIES – HONORS 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 018 and ETH 018H and HUM 018
Acceptable for Credit: University of California, California State University
This honors course is designed to provide the student with an overview of the humanities through the culture and life experiences of African Americans. Content focuses on significant themes such as literary expressions, folklore, visual arts, music, dance, theater, religion, and philosophical thought. The course provides an examination of the historic, economic, and social forces that have inspired creativity among African Americans. Students may not receive credit for both HUM 018 and HUM 018H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. CSUGE: C2, D3; IGETC: 3B, 4C.

HUM 020 ASIAN ROOTS AND CULTURE 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides an introduction and overview to the lands, peoples, languages and cultures of Asia beginning with the prehistoric times and continuing to the present. Emphasis is placed on understanding the Asian world view. Aspects of culture and values reflected in art, literature, philosophy/religion, and music are examined. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 022 INTRODUCTION TO ISLAM 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides an introduction to Islam as a religious system focusing on its origins, basic sources, history, culture and values. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

HUM 024 THE ASIAN-AMERICAN EXPERIENCE 3.0 UNITS
Total Lecture: 54 hours
Anti-Requisite: ETH 024
Acceptable for credit: California State University, University of California
The Asian-American Experience is a multi-disciplinary survey course that introduces students to the historical and contemporary experiences of different groups of Asian-Americans including the Chinese, Japanese, Korean, Vietnamese, Indian, Filipino, and Pacific Islander communities. Students will read, view, and discuss materials related to topics such as immigration, exclusion, imperialism, race, class, gender, sexuality, language, social identity and other issues related to Asian-American life including cultural expression through various art forms. This course is cross listed as ETH024. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.
HUM 030  CULTURAL STUDIES  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course exposes students to the cultures and civilizations of people around the world. Through field trips students learn about the art, music, language, customs, food, and daily life of people in other countries. Students have the opportunity to practice language skills acquired in foreign language courses, and look at art/architecture learned about in art history and humanities classes. Music concert attendance is also encouraged in order for students to have a multi-cultural, multi-disciplinary foreign travel experience. Pass/No Pass Option.

INSTITUTIONAL FOODS (INF)

INF 050  SANITATION AND SAFETY  2.0 UNITS
Total Lecture: 36 hours
Acceptable for credit: California State University
This class uses the National Restaurant Association Education Foundation’s ServSafe® materials to certify students as food service safety managers. This course includes personal hygiene, types of hazards in food service, prevention and control of pathogens and other contaminants in food. Proper storage and cleaning and sanitizing are also covered. Systems for tracking food safety including HACCP and responding to outbreaks and inspections are taught. Students completing the final exam with 75% correct will be certified food safety managers in all 50 states for 5 years. Pass/No Pass Option. C-ID # HOSP 110.

INSTRUCTIONAL SUPPORT (INS)

INS 010  PEER TUTOR AND MENTOR TRAINING  1.5 UNITS
Total Lecture: 27 hours
Acceptable for Credit: California State University
This course provides students with effective learning strategies and academic assistance techniques for peer tutoring and mentoring in a community college setting. This course also emphasizes skills in communication, problem solving, critical thinking, handling challenging tutoring situations, and online tutoring. Pass/No Pass Option.

INS 015  ADVANCED TRAINING FOR PEER TUTORS AND MENTORS  1.5 UNITS
Total Lecture: 27 hours
Prerequisite: INS 010
Acceptable for Credit, California State University
This is a second level peer tutor and mentor training course. Topics include use of probing questions, intercultural communication, strategies for working with adult students and assessing their needs, establishing positive study behaviors, communication strategies, group facilitation strategies, and tutoring in subject areas and/or specific Skills. This course is cross-listed with INS 015. Pass/No Pass Only.

INS 815  ADVANCED PEER TUTORS AND MENTORS TRAINING  NONCREDIT
Total Lecture: 27 hours
This is a second level peer tutor and mentor training course. Topics include use of probing questions, intercultural communication, strategies for working with adult students and assessing their needs, establishing positive study behaviors, communication strategies, group facilitation strategies, and tutoring in subject areas and/or specific Skills. This course is cross-listed with INS 015. Pass/No Pass Only.

INS 947  SUPERVISED TUTORING  NONCREDIT
Total Maximum: 54 hours
This non-credit, open entry/open exit course provides learning assistance in the form of tutoring. Students are assigned to tutoring by an instructor or a counselor based on an identified learning need, followed by registration in the tutoring course. Under direction of a faculty coordinator in the tutoring center, students receive assistance from tutors in areas of identified academic need and in appropriate study skills to develop their ability to learn independently and become more successful students. Non-degree applicable course. Satisfactory Progress.

INS 949  COLLEGE STUDY SKILLS  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: ESL 960RW
This course is designed to help students analyze their study skills needs and to help students learn and apply needed study skills techniques. Techniques and strategies to be explored may include time management, preparation for examinations, textbook study strategies, and using campus support systems effectively. Science, Math and Statistics disciplines require the interpretation of technical texts and the ability to clearly communicate these complex concepts to others verbally and in writing. In this course, there is a strong focus on helping Science and Math students to read academic texts for greater understanding. The emphasis is on metacognition and mastering and applying the skills needed in order to facilitate successful studying and independent learning. Pass/No Pass Option. Non-degree applicable course.

JAPANESE (JPN)

JPN 001  FIRST SEMESTER JAPANESE  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
Students learn the fundamentals of Japanese grammar, pronunciation, and two written syllabary systems, Hiragana and Katakana. Emphasis is placed on communication and relevancy. Students are personally involved in a variety of activities which encourage use of language creatively in meaningful situations. In addition, the students are exposed to the basics of Japanese culture. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

INS 947  SUPERVISED TUTORING  NONCREDIT
Total Maximum: 54 hours
This non-credit, open entry/open exit course provides learning assistance in the form of tutoring. Students are assigned to tutoring by an instructor or a counselor based on an identified learning need, followed by registration in the tutoring course. Under direction of a faculty coordinator in the tutoring center, students receive assistance from tutors in areas of identified academic need and in appropriate study skills to develop their ability to learn independently and become more successful students. Non-degree applicable course. Satisfactory Progress.

INS 949  COLLEGE STUDY SKILLS  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: ESL 960RW
This course is designed to help students analyze their study skills needs and to help students learn and apply needed study skills techniques. Techniques and strategies to be explored may include time management, preparation for examinations, textbook study strategies, and using campus support systems effectively. Science, Math and Statistics disciplines require the interpretation of technical texts and the ability to clearly communicate these complex concepts to others verbally and in writing. In this course, there is a strong focus on helping Science and Math students to read academic texts for greater understanding. The emphasis is on metacognition and mastering and applying the skills needed in order to facilitate successful studying and independent learning. Pass/No Pass Option. Non-degree applicable course.

JAPANESE (JPN)

JPN 001  FIRST SEMESTER JAPANESE  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
Students learn the fundamentals of Japanese grammar, pronunciation, and two written syllabary systems, Hiragana and Katakana. Emphasis is placed on communication and relevancy. Students are personally involved in a variety of activities which encourage use of language creatively in meaningful situations. In addition, the students are exposed to the basics of Japanese culture. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.

INS 947  SUPERVISED TUTORING  NONCREDIT
Total Maximum: 54 hours
This non-credit, open entry/open exit course provides learning assistance in the form of tutoring. Students are assigned to tutoring by an instructor or a counselor based on an identified learning need, followed by registration in the tutoring course. Under direction of a faculty coordinator in the tutoring center, students receive assistance from tutors in areas of identified academic need and in appropriate study skills to develop their ability to learn independently and become more successful students. Non-degree applicable course. Satisfactory Progress.

INS 949  COLLEGE STUDY SKILLS  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: ESL 960RW
This course is designed to help students analyze their study skills needs and to help students learn and apply needed study skills techniques. Techniques and strategies to be explored may include time management, preparation for examinations, textbook study strategies, and using campus support systems effectively. Science, Math and Statistics disciplines require the interpretation of technical texts and the ability to clearly communicate these complex concepts to others verbally and in writing. In this course, there is a strong focus on helping Science and Math students to read academic texts for greater understanding. The emphasis is on metacognition and mastering and applying the skills needed in order to facilitate successful studying and independent learning. Pass/No Pass Option. Non-degree applicable course.

JAPANESE (JPN)

JPN 001  FIRST SEMESTER JAPANESE  5.0 UNITS
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
Students learn the fundamentals of Japanese grammar, pronunciation, and two written syllabary systems, Hiragana and Katakana. Emphasis is placed on communication and relevancy. Students are personally involved in a variety of activities which encourage use of language creatively in meaningful situations. In addition, the students are exposed to the basics of Japanese culture. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.
JPN 002  SECOND SEMESTER JAPANESE  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: JPN 001 or proof of transcript reflecting 2 years of High School Japanese
Acceptable for credit: University of California, California State University
Japanese 002 is a continuation of Japanese 001. Students acquire the basic skills for communication in Japanese: listening, speaking, reading, and writing. Students are exposed to a general overview of Japanese civilization and culture. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, IGETC 6A.

KINESIOLOGY (KIN)

KIN 001A  ADAPTED WEIGHT TRAINING  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed for students with verifiable disabilities. A personalized exercise plan (PEP) is developed to meet each student’s needs. Focus is on increasing overall muscular strength and endurance based on each individual’s ability. Pass/No Pass Option. CSUGE: E.

KIN 001C  ADAPTED AEROBICS  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce skills needed for daily cardiovascular activity for students with verifiable disabilities through the use of aerobic exercise. Exercises performed develop the cardiovascular system and enable students to function more efficiently and effectively within their own abilities. Appropriate low and mid impact aerobics are developed collaboratively with the instructor to meet each student’s needs. Pass/No Pass Option. CSUGE: E.

KIN 014A  VOLLEYBALL - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce students to the fundamental skills of volleyball. Players learn to serve, pass, set, and employ the basic strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 014B  VOLLEYBALL - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 014A
Acceptable for credit: California State University, University of California
This course is designed to review the fundamental skills of volleyball and add spiking, blocking and the dink to the players' repertoire. Players work on improving the depth and accuracy of their shots while employing the strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 014C  VOLLEYBALL - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 014B
Acceptable for credit: University of California, California State University
This course is designed to enhance the fundamental skills of volleyball and add jump-serving hitting, swing-blocking, setting, and tipping to the players' repertoire. Players work on improving the depth and accuracy of their skills while employing specific strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 014D  VOLLEYBALL - ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 014C
Acceptable for credit: University of California, California State University
This course is designed to enhance the fundamental skills of volleyball and add jump-serving hitting, swing-blocking, jump-setting and tipping techniques to the players' repertoire. Players work on fine tuning the depth and accuracy of their skills while employing specific, advanced strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 015A  BASKETBALL- INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to teach the basic rules, skills, techniques and history of basketball. Drills are included to develop or enhance shooting, passing, rebounding, and defensive skills. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 015B  BASKETBALL- BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 015A
Acceptable for credit: California State University, University of California
This course is designed to teach the basic skills and techniques of basketball. Building upon skills learned in KIN 015A, drills are used to develop or enhance shooting, passing, rebounding, and defensive skills. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 015C  BASKETBALL- INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 015B
Acceptable for credit: University of California, California State University
This course is designed to teach the intermediate skills and techniques of basketball. Building upon skills learned in KIN 015B, drills are used to develop or enhance shooting, passing, rebounding, and defensive skills. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 015D  BASKETBALL- ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 015C
Acceptable for credit: University of California, California State University
This course is designed to teach the advanced skills and techniques of basketball. Building upon skills learned in KIN 015C, drills are used to develop or enhance shooting, passing, rebounding, advanced footwork, and ball-handling skills. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 017A  PICKLEBALL - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This class is an Introductory pickleball class. Throughout this class we will focus on developing basic skills and implementing them into game situations. We will cover skills such as ball control, forehand/backhand drive, drive/lob serve, forehand/backhand volley, smash, and strategy. Pass/No Pass Option. CSUGE: E.
KIN 017B PICKLEBALL - BEGINNING 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 017A
Acceptable for credit: University of California, California State University
This class is a beginning pickleball class. Throughout this class we will focus on developing beginning level skills and implementing them into game situations. We will cover skills such as ball control, forehand/backhand drive, drive/lob serve, forehand/backhand volley, smash, and beginning level strategy. Pass/No Pass Option. CSUGE: E.

KIN 019A SOCCER - INTRODUCTION 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to the fundamentals and techniques of soccer. Drills are included to introduce the student to soccer, passing, trapping, and dribbling. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 019B SOCCER - BEGINNING 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the basic rules, skills, techniques and history of soccer. Drills are included to introduce the student to shooting, passing, trapping, and dribbling. Scrimmages are utilized to develop team play concepts. Pass/No Pass Option. CSUGE: E.

KIN 020A BADMINTON - INTRODUCTION 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course introduces the student to the fundamentals and strategies of the game of badminton. The main emphasis of this course is on basic skills, drills and the rules of badminton. Pass/No Pass Option. CSUGE: E.

KIN 020B BADMINTON - BEGINNING 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 020A
Acceptable for credit: California State University, University of California
This course continues the development of the fundamental skills and strategies of the game of badminton. The main emphasis of this course is to refine the techniques and improve the proficiency of the basic skills of the game. Pass/No Pass Option. CSUGE: E.

KIN 020C BADMINTON - INTERMEDIATE 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 020B
Acceptable for credit: California State University, University of California
This course introduces the student to the intermediate skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement. Pass/No Pass Option. CSUGE: E.

KIN 020D BADMINTON - ADVANCED 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 020C
Acceptable for credit: University of California, California State University
This course introduces the student to the advanced skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement, court position, and singles and doubles strategy. Pass/No Pass Option. CSUGE: E.

KIN 021A TENNIS - INTRODUCTION 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to teach the fundamentals of tennis to students. Mastery of these skills enables students to progress to the next level of tennis. Pass/No Pass Option. CSUGE: E.

KIN 021B TENNIS - BEGINNING 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 021A
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to tennis. Mastery of these skills enables the student to progress to the next level of tennis. Pass/No Pass Option. CSUGE: E.

KIN 021C TENNIS - INTERMEDIATE 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 021B
Acceptable for credit: California State University, University of California
This course provides the student with the opportunity for further development of their skills. This course includes a review of the basic rules, skills, and strategies of the game. Pass/No Pass Option. CSUGE: E.

KIN 021D TENNIS - ADVANCED 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 021C
Acceptable for credit: California State University, University of California
This course is designed for the student who has played or desires to play tournament tennis. Advanced skills and strategy are reviewed and practiced to increase mastery for tournament play. Pass/No Pass Option. CSUGE: E.

KIN 021E TENNIS - TOURNAMENT 2.0 UNITS
Total Lab: 108 hours
Advisory: KIN 021D
Acceptable for credit: California State University, University of California
This course is designed for the student who has played or desires to play tournament tennis. Advanced skills and strategy are reviewed and practiced to increase mastery for tournament play. Pass/No Pass Option. CSUGE: E.

KIN 023A ARCHERY: INTRODUCTION 1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce students to the sport of archery. Students learn about safety guidelines, choosing proper equipment, target shooting, scoring, etiquette, and the rules of archery. Pass/No Pass Option. CSUGE: E.

KIN 023B ARCHERY: BEGINNING 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 023A
Acceptable for credit: University of California, California State University
This course is designed to refine the shooting skills of the beginning archery student. Emphasis is placed on shooting techniques, form, and concentration. Safety guidelines, etiquette, and rules of archery are reviewed. Pass/No Pass Option. CSUGE: E.

KIN 023C ARCHERY - INTERMEDIATE 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 023B
Acceptable for credit: University of California, California State University
This course is designed to improve the shooting technique, targeting systems, and knowledge of the intermediate Archery student. Archery requires repetition and feedback to refine and master these skills. Intermediate students will continue to develop their archery skills by shooting longer distances and using various targeting strategies. Pass/No Pass Option. CSUGE: E.
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| **KIN 023D  ARCHERY - ADVANCED  1.0 UNIT**  
Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
This course is designed for the advanced archery student to further improve their skills by applying various shooting techniques and by increasing the distances when target shooting.  
Pass/No Pass Option. CSUGE: E. | **KIN 032B  CARDIO AND CORE FITNESS - BEGINNING  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 032A  
Acceptable for credit: California State University, University of California  
This is a beginning level course is designed for students to satisfy the needs for cardiovascular activity including maintaining and improving cardiovascular fitness through the use of continuous aerobic movements. Students will engage in a comprehensive fitness program which includes aerobic activity, core strengthening exercises that help develop agility, improve coordination, and increase core and overall body strength. Pass/No Pass Option. CSUGE: E. |
| **KIN 030A  PILATES MATWORK - INTRODUCTION  1.0 UNIT**  
Total Lab: 54 hours  
Acceptable for credit: California State University, University of California  
This course is an introduction to Joseph Pilates’ Physicalmind Conditioning Method. The matwork provides the ideal physical fitness for the attainment and maintenance of a uniformly developed body and sound mind. The study of Pilates improves flexibility, strength, and breathing techniques. Pass/No Pass Option. CSUGE: E. | **KIN 032C  CARDIO AND CORE FITNESS - INTERMEDIATE  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 032B  
Acceptable for credit: University of California, California State University  
This is an intermediate level course is designed for students to satisfy the needs for cardiovascular activity including developing and maintaining cardiovascular fitness through the use of continuous aerobic movements. Students will engage in a comprehensive fitness program which includes aerobic activity, core strengthening exercises that help develop agility, improve coordination, and increase core and overall body strength. Pass/No Pass Option. CSUGE: E. |
| **KIN 030B  PILATES MATWORK - BEGINNING  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 030A  
Acceptable for credit: California State University, University of California  
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at a beginning level. Through the study of matwork, the student improves physical well-being including flexibility, strength, and breathing techniques. Pass/No Pass Option. CSUGE: E. | **KIN 032D  CORE AND CARDIO FITNESS - ADVANCED  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 032C  
Acceptable for credit: University of California, California State University  
This advanced level course is designed for students to satisfy the needs for cardiovascular activity including maintaining and improving cardiovascular fitness through the use of continuous aerobic movements. Students will engage in a comprehensive fitness program which includes aerobic activity, core strengthening exercises that help develop agility, improve coordination, and increase core and overall body strength. Pass/No Pass Option. CSUGE: E. |
| **KIN 030C  PILATES MATWORK - INTERMEDIATE  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 030B  
Acceptable for credit: University of California, California State University  
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at an intermediate level. Through the study of Matwork, the student improves physical well-being including flexibility, strength and breathing techniques. Pass/No Pass Option. CSUGE: E. | **KIN 033A  KICKBOXING FITNESS - INTRODUCTION  1.0 UNIT**  
Total Lab: 54 hours  
Acceptable for credit: California State University, University of California  
This course introduces the student to kickboxing for aerobic fitness. Basic punches, kicks and stances are taught. Techniques are taken from karate, tai chi, and boxing as ways to improve cardiovascular fitness. Pass/No Pass Option. CSUGE: E. |
| **KIN 030D  PILATES MATWORK - ADVANCED  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 030C  
Acceptable for credit: University of California, California State University  
This course is the study and practice of Joseph Pilates’ Physicalmind Conditioning Method at an advanced level. Pilates practice is strongly recommended. Pass/No Pass Option. CSUGE: E. | **KIN 033B  KICKBOXING FITNESS - BEGINNING  1.0 UNIT**  
Total Lab: 54 hours  
Advisory: KIN 033A  
Acceptable for credit: California State University, University of California  
Students build upon the kickboxing movements learned in KIN 033A, with an emphasis on proper body alignment and a more advanced level of cardiovascular fitness. Techniques are from karate, tai chi and boxing as ways to improve overall fitness. Pass/No Pass Option. CSUGE: E. |
| **KIN 032A  CARDIO AND CORE FITNESS - INTRODUCTION  1.0 UNIT**  
Total Lab: 54 hours  
Acceptable for credit: California State University, University of California  
This course is designed for students to satisfy the needs for cardiovascular activity including developing and maintaining cardiovascular fitness through the use of continuous aerobic movements. Students will engage in a comprehensive fitness program which includes aerobic activity, core strengthening exercises that help develop agility, improve coordination, and increase core and overall body strength. Pass/No Pass Option. CSUGE: E. |
KIN 033C  KICKBOXING FITNESS - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: University of California, California State University
This course advances students' kickboxing skills for aerobic fitness. Basic punches, kicks and stances are taught. Techniques are taken from karate, tai chi and boxing as ways to improve cardiovascular fitness. Pass/No Pass Option. CSUGE: E.

KIN 035A  WEIGHT TRAINING - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to enhance the development of muscular strength and muscular endurance at an intermediate level. Training protocols such as pyramid and super set training are taught. Additional information is provided to increase student understanding of various aspects of weight training including safety, proper lifting techniques, and beginning training protocols. Pass/No Pass Option. CSUGE: E.

KIN 035B  WEIGHT TRAINING - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 035A
Acceptable for credit: California State University, University of California
This course is designed to enhance the development of muscular strength and muscular endurance at a more advanced level. Training protocols such as pyramid and super set training are taught. Additional information is provided to increase student understanding of various aspects of weight training including safety, proper lifting techniques, and beginning training protocols. Pass/No Pass Option. CSUGE: E.

KIN 035C  WEIGHT TRAINING - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 035B
Acceptable for credit: California State University, University of California
This course is designed for intermediate level students who want to continue their development of muscular strength and muscular endurance at a more advanced level. Training protocols such as pyramid and super set training are taught. Additional information is provided to increase student understanding of various aspects of weight training. Pass/No Pass Option. CSUGE: E.

KIN 037A  CARDIO-CROSS TRAINING - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 35A or KIN 038A
Acceptable for credit: California State University, University of California
This course is designed to enhance the student's cardiovascular condition at the introductory level by providing a variety of methods of training on equipment such as the treadmill, stair stepper, exercise bicycle and more. Information is provided on how to use and program the various pieces of cardio equipment as well as principles needed to obtain good cardiovascular condition. Pass/No Pass Option. CSUGE: E.

KIN 037B  CARDIO-CROSS TRAINING - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 037A
Acceptable for credit: California State University, University of California
This course is designed to enhance the student's cardiovascular conditioning at the beginning level by providing a variety of methods of training on equipment such as the treadmill, stair stepper, exercise bicycle and transport. Information is provided on how to use and program the various pieces of cardio equipment as well as principles needed to obtain good cardiovascular condition. Pass/No Pass Option. CSUGE: E.

KIN 037C  CARDIO-CROSS TRAINING - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 037B
Acceptable for credit: California State University, University of California
This course is designed to enhance the student's cardiovascular condition at the intermediate level by providing a variety of methods of training on equipment such as the treadmill, stair stepper, exercise bicycle and more. Information is provided on how to use and program the various pieces of cardio equipment as well as principles needed to obtain good cardiovascular condition. Pass/No Pass Option. CSUGE: E.

KIN 037D  CARDIO-CROSS TRAINING - ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 037C
Acceptable for credit: California State University, University of California
This course is designed to enhance the student's cardiovascular condition at the advanced level by providing a variety of methods of training on equipment such as the treadmill, stair stepper, exercise bicycle and transport. Information is provided on how to use and program the various pieces of cardio equipment as well as principles needed to obtain good cardiovascular condition. Pass/No Pass Option. CSUGE: E.

KIN 038A  LOWER BODY CONDITIONING - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the introductory level. The student participates in a program with specialized exercises that are designed to only work the legs, gluteal, and abdominal areas. Information is presented to increase student understanding of muscular and cardiovascular principles for conditioning. Health and nutritional/diet issues are also addressed. Strength testing and body composition measurements are performed to monitor progress. Pass/No Pass Option. CSUGE: E.

KIN 038B  LOWER BODY CONDITIONING - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 038A
Acceptable for credit: California State University, University of California
This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the beginning level of lower body conditioning. The student participates in a program with specialized exercises that are designed to only work the legs, gluteal, and abdominal areas. Information is presented to increase student understanding of muscular and cardiovascular principles for conditioning. Health and nutritional/diet issues are also addressed. Strength testing and body composition measurements are performed to monitor progress. Pass/No Pass Option. CSUGE: E.

KIN 038C  LOWER BODY CONDITIONING - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 038B
Acceptable for credit: California State University, University of California
This course is designed to improve middle and lower extremity muscular strength, condition, and shape at the intermediate level. The student participates in a program with specialized exercises that are designed to only work the legs, gluteal, and abdominal areas. Information is presented to increase student understanding of muscular and cardiovascular principles for conditioning. Health and nutritional/diet issues are also addressed. Strength testing and body composition measurements are performed to monitor progress. Pass/No Pass Option. CSUGE: E.
**KIN 038D**  **LOWER BODY CONDITIONING - ADVANCED**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 038C  
Acceptable for credit: California State University, University of California  
This course is designed to improve middle and lower extremity muscular strength, condition, and shape for the advanced level of lower body conditioning. The student participates in a program with specialized exercises that are designed to only work the legs, gluteal, and abdominal areas. Information is presented to increase student understanding of muscular and cardiovascular principles for conditioning. Health and nutritional/diet issues are also addressed. Strength testing and body composition measurements are performed to monitor progress. Pass/No Pass Option. CSUGE: E.

**KIN 038E**  **LOWER BODY CONDITIONING - ENDURANCE TRAINING**  
1.0 UNIT  
Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
This course is designed for the introductory, intercollegiate level of lower body conditioning. Students improve middle and lower extremity training through muscular strength and endurance training and cardio conditioning. Pass/No Pass Option. CSUGE: E.

**KIN 038F**  **LOWER BODY CONDITIONING - SPEED TRAINING**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 038E  
Acceptable for credit: University of California, California State University  
This course is designed to improve middle and lower extremity through speed training for the beginning intercollegiate level of lower body conditioning. Pass/No Pass Option. CSUGE: E.

**KIN 038G**  **LOWER BODY CONDITIONING - AGILITY TRAINING**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 038F  
Acceptable for credit: University of California, California State University  
This course is designed to improve core strength and lower extremity agility for lower body conditioning at the intermediate collegiate level. Pass/No Pass Option.

**KIN 038J**  **LOWER BODY CONDITIONING - PLYOMETRIC TRAINING**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 038G  
Acceptable for credit: University of California, California State University  
This course is designed to improve core and lower extremity strength through plyometric training and conditioning for the advanced intercollegiate level. Pass/No Pass Option. CSUGE: E.

**KIN 039A**  **FIRE AGILITY- INTRODUCTION**  
2.0 UNITS  
Total Lab: 108 hours  
Acceptable for credit: California State University, University of California  
This course is designed to enhance the overall fitness level of the Fire Technology student and introduce them to specific skills required to successfully complete Fire Department physical agility tests. The emphasis is on improving both cardiovascular and anaerobic endurance plus muscle strength and endurance. Intense resistance training, anaerobic and cardiovascular workouts are utilized. Non-Fire Technology students are also welcome. Pass/No Pass Option. CSUGE: E.

**KIN 039B**  **FIRE AGILITY- BEGINNING**  
2.0 UNITS  
Total Lab: 108 hours  
Advisory: KIN 039A  
Acceptable for credit: California State University, University of California  
This course satisfies the requirement to enroll in the Mission College Fire Academy and is designed to enhance the overall fitness level of the Fire Technology students to prepare them to successfully complete Fire Agencies physical agility tests. Building upon the skills learned in KIN 039A, the emphasis is on improving cardiovascular endurance, muscle strength and endurance. Intense resistance training, plyometric training, anaerobic and cardiovascular workouts are utilized. Non-Fire Technology students are also welcome. Pass/No Pass Option. CSUGE: E.

**KIN 039C**  **FIRE AGILITY- INTERMEDIATE**  
2.0 UNITS  
Total Lab: 108 hours  
Advisory: KIN 039B  
Acceptable for credit: California State University, University of California  
This course covers the intermediate skills and techniques designed to enhance the overall fitness level of the Fire Technology student in order to prepare them to successfully complete the CPAT and other fire agencies physical agility tests. Building upon the skills learned in KIN 039A and KIN 039B, the emphasis is on intermediate and advanced training methodologies. Intense resistance training techniques, plyometric training and cardiovascular workouts are utilized. Non-Fire Technology students are also welcome. Pass/No Pass Option. CSUGE: E.

**KIN 039D**  **FIRE AGILITY- ADVANCED**  
2.0 UNITS  
Total Lab: 108 hours  
Advisory: KIN 039C  
Acceptable for credit: University of California, California State University  
This course is designed for students enrolled in the Mission College Fire Academy. Advanced skills and techniques enhance the overall fitness level of the Fire Technology student in order to prepare them to successfully complete the CPAT and other fire agencies physical agility tests. Building upon the skills learned in KIN 039A, KIN 039B and KIN 039C, the emphasis is on advanced training methodologies. Advanced resistance training techniques, plyometric speed and agility training and cardiovascular workouts are utilized. Pass/No Pass Option. CSUGE: E.

**KIN 040A**  **MODERN DANCE - INTRODUCTION**  
1.0 UNIT  
Total Lab: 54 hours  
Acceptable for credit: California State University, University of California  
This course is an introduction to the varied theories, styles, and techniques of the modern dance idiom. Pass/No Pass Option. CSUGE: E.

**KIN 040B**  **MODERN DANCE - BEGINNING**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 040A  
Acceptable for credit: University of California, California State University  
This course is the study and practice of the varied theories, styles, and techniques of the modern dance idiom at a beginning level. Pass/No Pass Option. CSUGE: E.

**KIN 040C**  **MODERN DANCE - INTERMEDIATE**  
1.0 UNIT  
Total Lab: 54 hours  
Advisory: KIN 040B  
Acceptable for credit: University of California, California State University  
This course is the study and practice of the varied theories, styles, and techniques of the modern dance idiom at an intermediate level. Pass/No Pass Option. CSUGE: E.
KIN 040D  MODERN DANCE - ADVANCED  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to the varied theories, styles and techniques of the jazz dance idiom. Pass/No Pass Option. CSUGE: E.

KIN 042A  JAZZ DANCE - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to the varied theories, styles and techniques of the jazz dance idiom. Pass/No Pass Option. CSUGE: E.

KIN 041A  BALLET - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to the discipline, aesthetics, traditions, and historical background of classical ballet. Pass/No Pass Option. CSUGE: E.

KIN 042B  JAZZ DANCE - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed for the beginning level student. Emphasis is placed on the varied theories, styles and techniques of the jazz dance idiom. Practice and performance opportunities are available at a beginning level. Pass/No Pass Option. CSUGE: E.

KIN 041B  BALLET - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed for beginning level dancers to practice the discipline of ballet including improving technique and performance skills. Historical background, traditions, and etiquette are also covered. Pass/No Pass Option. CSUGE: E.

KIN 042C  JAZZ DANCE - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed for the intermediate level student. Emphasis is placed on the varied theories, styles and techniques of the jazz dance idiom. Practice and performance opportunities are available at an intermediate level. Pass/No Pass Option. CSUGE: E.

KIN 041C  BALLET - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed for intermediate level dancers to practice the discipline of ballet including improving technique, building strength, and developing higher level performance skills. Pass/No Pass Option. CSUGE: E.

KIN 046A  BALLROOM DANCING - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course introduces students to various ballroom dances. Alignment and posture, etiquette, and spontaneous leading and following are emphasized. Pass/No Pass Option. CSUGE: E.

KIN 042D  MODERN DANCE - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course introduces students to the fundamentals of hip hop. Students learn general patterns as well as the basics of creating their own style and routines. Information is presented describing the history and cultural development of hip hop as a dance form. Pass/No Pass Option. CSUGE: E.
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KIN 053C  KARATE - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 053B
Acceptable for credit: University of California, California State University
This class reviews the fundamentals of the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on the refinement of the student's skills and the combining of techniques at an intermediate level. Pass/No Pass Option. CSUGE: E.

KIN 055A  SELF - DEFENSE - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to introduce the student to the fundamental skills, strategy, and tactics of self-defense which may help the individual to recognize, avoid, and respond to dangerous situations. Pass/No Pass Option.

KIN 055B  SELF DEFENSE - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 055A
Acceptable for credit: University of California, California State University
This course reviews the fundamental skills, strategy, and tactics of self-defense. Emphasis is on refinement of skills and incorporates additional take downs and ground fighting tactics. Pass/No Pass Option. CSUGE: E.

KIN 061A  HATHA YOGA - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This class provides the student with an introduction to basic Hatha yoga poses with emphasis on form and body alignment. Strength, flexibility and balance are emphasized in the yoga poses. Relaxation and meditation techniques are also introduced. Pass/No Pass Option. CSUGE: E.

KIN 061B  HATHA YOGA - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 061A
Acceptable for credit: California State University, University of California
This class provides instruction and practice of yoga poses at a beginning level with an emphasis on form and body alignment, strength, flexibility and balance. Relaxation and meditation techniques are also incorporated into the practice. Pass/No Pass Option. CSUGE: E.

KIN 061C  HATHA YOGA - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 061B
Acceptable for credit: California State University, University of California
This class provides instruction in the physical practice of yoga at an intermediate level. Strength, flexibility and balance are emphasized within the physical practice. Breath control and meditation techniques are also incorporated. Pass/No Pass Option. CSUGE: E.

KIN 061D  HATHA YOGA - ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 061C
Acceptable for credit: University of California, California State University
This class emphasizes the physical practice of yoga at an advanced level. A prior yoga practice is strongly encouraged. Relaxation and meditation techniques are also incorporated. Pass/No Pass Option. CSUGE: E.

KIN 063A  HIKING - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course introduces the student to basic hiking techniques as well as various hiking facilities in the local community. Proper warm-up and cool-down specifically related to hiking are introduced. Experience improved fitness levels through hiking. Pass/No Pass Option. CSUGE: E.

KIN 063B  HIKING - BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 063A
Acceptable for credit: California State University, University of California
This course introduces the student to elementary walking and jogging. Students improve aerobic and muscular fitness. Proper warm-up, stretching, and cool down are introduced. Fitness goals are established and monitored throughout the course. Pass/No Pass Option. CSUGE: E.

KIN 063C  WALK/JOG FOR FITNESS - INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 063C
Acceptable for credit: University of California, California State University
This course introduces the student to basic hiking techniques as well as various hiking facilities in the local community. Experience improved fitness levels through hiking. Pass/No Pass Option. CSUGE: E.

KIN 063D  WALKING / JOGGING FOR FITNESS - BEGINNER  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 063D
Acceptable for credit: University of California, California State University
This course introduces the student to basic hiking techniques as well as various hiking facilities in the local community. Experience improved fitness levels through hiking. Pass/No Pass Option. CSUGE: E.

KIN 066  EXERCISE ASSESSMENT AND PROGRAM DESIGN  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course will cover assessment and testing protocols, physical fitness guidelines and the designing of anatomically and physiologically safe and effective exercise programs for sport and fitness participants. The human physiological responses and adaptations to the acute and/or chronic stress of exercise and physical training will also be addressed. Pass/No Pass Option. E
KIN 067  TECHNIQUES OF FITNESS INSTRUCTION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is designed to provide theoretical knowledge and practical skills in preparation for a national certification exam in fitness instruction. Topics will include guidelines for instructing safe, effective, and purposeful exercise using a variety of methods and equipment, essentials of the instructor-participant relationship, principles of motivation to encourage adherence in the group fitness setting, effective instructor-to-participant communication techniques, methods for enhancing group leadership, and the group fitness instructor’s professional role. Students will be exposed to and practically apply the knowledge and skills associated with planning/designing, implementing, leading, and managing others, and the environmental elements using safe and effective exercises for a variety of fitness levels and special populations. Safety, liability, employment, client retention, and business management will also be discussed. Pass/No Pass Option. CSUGE: E.

KIN 068  SPORT PSYCHOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course will review the psychological factors associated with participation and performance in sport activities. Sport psychology research will be examined to understand how sport performance is affected by psychological principles. Topics will include historical and contemporary perspectives of sport psychology, research methods, team and group dynamics, and the relationship between sport performance and various personality, motivational, and social psychological variables. Gender and age issues, as well as the effects and management of stress and anxiety, unhealthy behaviors, and psychological burnout will be discussed. Pass/No Pass Option. CSUGE: E.

KIN 069  STRESS MANAGEMENT THROUGH FITNESS AND LIFESTYLE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
Students learn to analyze of physiological, psychological, sociological, and environmental parameters of stress, and develop personalized stress management strategies such as adhering to healthy eating and exercise behaviors to enhance well-being and the ability to cope with stress. Exercise and nutrition behaviors, intervention strategies and techniques are developed and practiced during this course to help students effectively manage stress. Pass/No Pass Option. CSUGE: E.

KIN 072  SPORTS NUTRITION  1.5 UNITS
Total Lecture: 27 hours
Advisory: KIN 077
Acceptable for credit: California State University
This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of nutritional principles as they relate to exercise and sports. Emphasis is placed on understanding the role of nutrients in physical performance. Body composition, pre-competition meals, and the efficacy of ergogenic aids are also discussed. Pass/No Pass Option.

KIN 076  WEIGHT TRAINING PRINCIPLES AND ROUTINES  1.5 UNITS
Total Lecture: 9 hours, Total Lab: 54 hours
Advisory: KIN 077
Acceptable for credit: California State University
This course is designed specifically for those students interested in pursuing the fitness specialist certificate specialty in personal training or anyone interested in learning about strength development and specific routines. Emphasis is on strength routines that develop various body parts as well as programs that enhance muscle strength, size, tone/definition and cardiovascular condition. A thorough knowledge of the weight training facilities including equipment, as well as physiology, kinesiology, and anatomy is covered. Pass/No Pass Option.

KIN 077  EXERCISE PHYSIOLOGY  1.5 UNITS
Total Lecture: 27 hours
Advisory: KIN 074
Acceptable for credit: California State University
This course is designed specifically for the fitness specialist or anyone desiring to learn how the body responds physiologically to exercise. Topics covered include how the body responds and adapts to exercise, muscle and cardiovascular physiology, metabolism, flexibility, body composition and environmental conditions. This course is relevant for those individuals considering teaching aerobic dance classes or becoming a personal trainer. Pass/No Pass Option.

KIN 078  INTRODUCTION TO KINESIOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This course is an introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub-disciplines in physical education and Kinesiology (motor learning/control, motor development, biomechanics, exercise physiology, social psychological foundations, and sport nutrition) will be discussed along with career opportunities in the areas of teaching, coaching, allied health, and fitness professions. Pass/No Pass Option. C-ID # KIN 100. CSUGE: E.

KIN 079  LIFETIME FITNESS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides an overview and application of fitness, wellness and lifestyle management techniques, aiding one in making informed decisions about how to obtain optimal physical, mental, emotional and social well-being. Accurate and reliable information on topics such as fitness, body composition, weight management, nutrition, stress management, sleep, substance use and abuse, disease prevention, behavior change protocols, relationships and the societal impact of poor health will be covered. Using the six dimensions of health, a personal and societal approach to developing a lifetime of fitness will be explored through personal reflection, critical thinking, and practical application of behavior change strategies to improve overall health. Pass/No Pass Option. CSUGE: E.

KIN 080  DANCE APPRECIATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This course is a study of the function of dance as art and ritual, social activity, spectacle, and entertainment through a survey of major dance works and artists from 19th century to present. It includes cultural contexts as well as styles and forms used in dance such as folk, ethnic, social, square, tap, jazz, modern and ballet. Pass/No Pass Option. CSUGE: C1.

KIN 081  SPORT IN SOCIETY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is a sociological analysis of sport in contemporary American Society. The role of sports regarding race, gender, family, religion, education, government, the economy, and sports institutions are examined. The social forces that have created sports organizations, the societal impact of sports, and the physiological, psychological, ethical, and societal consequences of sports participation are also explained. Pass/No Pass Option. CSUGE: D; IGETC: 4.
KIN 083  VOLLEYBALL - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: It is recommended that students have prior experience in volleyball, and some knowledge of the conditioning practices associated with it.
Acceptable for credit: University of California, California State University
This course is designed to further develop an experienced athlete to condition the body for strength, flexibility, and endurance training in order to compete as a Women’s varsity volleyball athlete. It is recommended that students have prior experience in volleyball, and some knowledge of the conditioning practices associated with it. Pass/No Pass Option. CSUGE: E.

KIN 084  INTERCOLLEGIATE VOLLEYBALL  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an Intercollegiate athletics course that is designed for the student-athlete to compete at a high level, and therefore, prior competitive volleyball experience is strongly encouraged at the high school or club level.
Acceptable for credit: University of California, California State University
This course is designed to allow the student the opportunity to further their volleyball skills at a competitive, intercollegiate level. Pass/No Pass Option. CSUGE: E.

KIN 085  INTERCOLLEGIATE BADMINTON  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an Intercollegiate athletics course that is designed for the student-athlete to compete at a high level, and therefore, prior competitive badminton experience is strongly encouraged at the high school or club level.
Acceptable for credit: California State University, University of California
This course is designed for students who have aspirations of playing intercollegiate badminton. The history, rules, intermediate techniques and strategies, as well as conditioning for badminton, are addressed. Pass/No Pass Option. CSUGE: E.

KIN 086  INTERCOLLEGIATE BASKETBALL  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an intercollegiate, advanced level basketball course designed for students to compete, and therefore, prior experience at the high school or club level is highly recommended.
Acceptable for credit: University of California, California State University
This course is designed for women students interested in competing on an intercollegiate basketball team. This course is designed to allow the student the opportunity to play intercollegiate basketball. Basketball skills and conditioning are emphasized. Practice consists of both mental and physical training. Pass/No Pass Option. CSUGE: E.

KIN 088  INTERCOLLEGIATE SOFTBALL  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an Intercollegiate Athletics Softball class for the competitive athlete. It is advised that students have prior high school or club experience playing softball.
Acceptable for credit: University of California, California State University
This course is designed to allow the student the opportunity to further their softball skills at a competitive, intercollegiate level. Pass/No Pass Option. CSUGE: E.

KIN 089  INTERCOLLEGIATE TENNIS - WOMEN  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an intercollegiate, competitive baseball class. It is strongly recommended that athletes have prior experience playing and competing at the high school or intercollegiate level.
Acceptable for credit: California State University, University of California
This course is designed for female students interested in intercollegiate tennis competition. Practice consists of both mental and physical training. Pass/No Pass Option. CSUGE: E.

KIN 090  INTERCOLLEGIATE BASEBALL  3.0 UNITS
Total Lab: 162 hours
Advisory: This is an intercollegiate, competitive baseball class. It is strongly recommended that athletes have prior experience playing and competing at the high school or intercollegiate level.
Acceptable for credit: California State University, University of California
This course is designed for male students interested in competing for an intercollegiate tennis team. Pass/No Pass Option. CSUGE: E.

KIN 092  INTERCOLLEGIATE TENNIS -MEN  3.0 UNITS
Total Lab: 162 hours
Advisory: KIN 094
Acceptable for credit: University of California, California State University
This course is designed for male students interested in competing for an intercollegiate tennis team. Practice consists of both mental and physical training.

KIN 093  SOFTBALL - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: To compete at the intercollegiate level high school or travel softball experience for safety and student success reasons is advised.
Acceptable for credit: California State University, University of California
This course provides the student with the opportunity to master the specific individual skills, team techniques, rules, history and strategies of softball. Pass/No Pass Option. CSUGE: E.

KIN 094  TENNIS - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: This course is designed for the Tennis player to improve conditioning, and overall performance in preparation for the Intercollegiate tennis season.
Acceptable for credit: California State University, University of California
This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing varsity tennis player. Pass/No Pass Option. CSUGE: E.

KIN 095  SOCCER - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: KIN 019B
Acceptable for credit: California State University, University of California
This course is designed to enhance the skills and abilities of students involved competitively in the game of soccer. Extensive soccer conditioning is stressed including strength training and speed conditioning. Skill development is covered in class. Pass/No Pass Option. CSUGE: E.
KIN 096  BASKETBALL - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: KIN 015C
Acceptable for credit: California State University, University of California
This class is designed for experienced basketball players who wish to learn advanced strategies of the game. Techniques such as full court press, press breakers, fast break, defensive schemes, and player to player and zone offenses are covered. Pass/No Pass Option. CSUGE: E.

KIN 097  BASEBALL - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: High school varsity or college baseball experience. Acceptable for credit: California State University, University of California
This course is designed for students with previous baseball experience, who have aspirations of playing intercollegiate baseball. The history, rules, intermediate techniques and strategies, as well as conditioning for baseball are addressed. Intercollegiate Baseball requires playing the sport at a high level, and therefore, it is advised that students have prior high school or competitive baseball experience. Pass/No Pass Option. CSUGE: E.

KIN 098  BADMINTON - INTERCOLLEGIATE TRAINING  2.0 UNITS
Total Lab: 108 hours
Advisory: KIN 085
Acceptable for credit: California State University, University of California
This course introduces the student to the more advanced skills and strategies of the game of badminton. The main emphasis of this course is on drills, finesse shots, shot placement, court position, and singles and doubles strategy. Pass/No Pass Option. CSUGE: E.

KIN 099  ATHLETIC TRAINING  1.0 UNIT
Total Lab: 54 hours
Advisory: It is recommended that students have some previous experience with the activity prior to enrollment. Acceptable for credit: University of California, California State University
This course is designed to develop a highly conditioned body for strength, flexibility, and endurance for the competing varsity athlete. This course may be offered via distance learning. Pass/No Pass Option. CSUGE: E.

LANGUAGES (FOREIGN)
Please refer to courses in the following languages found alphabetically in the catalog.
Arabic (ARB)
Chinese (CHI)
French (FRN)
Japanese (JPN)
Spanish (SPA)
Vietnamese (VIE)

LEARNING SERVICES (LSR)
LSR 001A  WRITING FOR LSR STUDENTS IN ENGLISH 001A  3.0 UNITS
Total Lecture: 54 hours
Corequisite: ENG 001A or ENG 001AX
This course is for students with disabilities taking English 001A. The course provides disability-specific instruction and practice in writing coherent paragraphs and essays. It focuses on the writing process and college-level, essay development using multi-sensory techniques and disability-specific pedagogy. Pass/No Pass Option. Non-degree applicable course.

LSR 010  LEARNING SERVICES STATISTICS SUPPORT  3.0 UNITS
Total Lecture: 54 hours
Corequisite: MAT 010 or MAT 010H or MAT 010X
This course is for students with disabilities or learning challenges who are taking MATH10. This course will provide disability-specific strategies to aid in the successful completion of Statistics. This course is to be taken in conjunction with MAT 010. Pass/No Pass Option. Non-degree applicable course.

LSR 900  STRATEGIES FOR BASIC SKILLS MATH  3.0 UNITS
Total Lecture: 54 hours
This course is an introduction to basic skills math to assist in the completion of certificated programs. This course is approved for credit by exam. Pass/No Pass Option, Non-degree applicable course.

LSR 940A  LEARNING STRATEGIES FOR BASIC WRITING SKILLS  3.0 UNITS
Total Lecture: 54 hours
This course is the first part of a two-part learning sequence for effective college writing. The course focuses on sentence development, effective paragraphs, and grammar using multi-sensory techniques. Grade Only. Non-degree applicable course.

LSR 940B  LEARNING STRATEGIES FOR BASIC WRITING SKILLS  3.0 UNITS
Total Lecture: 54 hours
Corequisite: ENG 001A or ENG 001AX
This course is the second part of a two-part learning sequence for effective college writing. The course focuses on college-level, essay development using multi-sensory techniques and other writing strategies. Grade Only. Non-degree applicable course.
LSR 941 LEARNING STRATEGIES FOR COLLEGE SUCCESS 3.0 UNITS
Total Lecture: 54 hours
This is an introductory course designed to accommodate the educational needs of students with disabilities. It stresses the practical application of learning strategies. Topics include auditory, visual, kinesthetic, and memory processing. The practical application of strategies within each modality is examined. Pass/No Pass Option, Non-degree applicable course.

LSR 942A LEARNING SERVICES MATH STRATEGIES 3.0 UNITS
Total Lecture: 54 hours
This is the first course in a three-part sequence. It is an introduction to mathematical strategies for students with disabilities who have had difficulty mastering the basic concepts of fractions, variables, and simple equations. Students are introduced to techniques that focus on developing compensatory strategies for visual processing, short-term memory, long-term memory, and auditory processing disabilities. Manipulative modules, supportive devices, computer software, websites, as well as drill and practice exercises are stressed in order to assist in the understanding and mastery of these basic concepts. Pass/No Pass Option, Non-degree applicable course.

LSR 942B LEARNING SERVICES MATH STRATEGIES 3.0 UNITS
Total Lecture: 54 hours
This course is the second of a two-course sequence covering mathematical strategies for students with disabilities who have had difficulty mastering the basic concepts of decimals, ratios/proportions, percents, and other pre-algebraic concepts. Students are introduced to techniques that focus on developing compensatory strategies for visual processing, short-term memory, long-term memory, and auditory processing disabilities. Manipulative modules, supportive devices, computer software, websites, as well as drill and practice exercises are stressed in order to assist in the understanding and mastery of these basic concepts. Pass/No Pass Option, Non-degree applicable course.

LSR 942C LEARNING SERVICES MATH STRATEGIES 3.0 UNITS
Total Lecture: 54 hours
This is the third class of a three-course learning sequence covering mathematical strategies for students with disabilities or students who have difficulty mastering pre-algebraic, algebraic and statistical concepts. Students are introduced to techniques that focus on developing compensatory strategies for visual processing, short-term memory, long-term memory, and auditory processing disabilities. Manipulative modules, supportive devices, computer software, websites, as well as drill and practice exercises are stressed in order to assist in the understanding and mastery of these basic concepts. Pass/No Pass Option, Non-degree applicable course.

LSR 943 NEGOTIATING THE COLLEGE WEB & ASSISTIVE TECHNOLOGY ENVIRONMENT 3.0 UNITS
Total Lecture: 54 hours
This class is designed to introduce students with perceptual, physical, communication, or learning challenges to concepts and terminology relevant to navigating the course management system and using assistive technology suited to their specific challenges. Students successfully completing the objectives of this course will possess basic skills necessary for negotiating the college course management system, and obtain functional knowledge of keyboarding and assistive technology options. Pass/No Pass Option. Non-degree applicable course.

LSR 950 ASSISTIVE TECHNOLOGY LAB 1.0 UNIT
Total Lab: 54 hours
The course is designed to give students with varied physical abilities and challenges an opportunity to practice basic skills and strategy techniques presented in special or mainstream classes. Emphasis will be on using assistive technology, software programs in the areas of reading, spelling, writing, mathematics and cognitive memory to overcome or compensate for the students’ areas of weakness. Pass/No Pass Option, Satisfactory Progress. Non-degree applicable course.

LSR 952 DISTANCE LEARNING SUCCESS 2.0 UNITS
Total Lecture: 36 hours
This is an online, hybrid course designed to help students learn strategies and tools to help build success in a distance learning environment. The course will cover essential learning disability tools, tips, and tricks to help all learners be successful in an online environment. Pass/No Pass Option. Non-degree applicable course.

LINGUISTICS (LNG)

LNG 001 INTRODUCTION TO LANGUAGE AND LINGUISTICS 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This introductory course serves as a foundation for understanding language from an anthropological perspective, addressing such core questions as how, what, when, where, why and with whom we communicate. This course surveys three core areas in linguistic anthropology--structural linguistics: phonetics, phonology, morphology, and syntax, as well as the biocultural basis of language; historical linguistics: origins and evolution/change, dialects, and language families; and sociocultural linguistics: language acquisition in cultural context, emphasizing the relationship between language and culture, and issues of language conservation and loss. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

MATHEMATICS (MAT)

MAT 000C INTERMEDIATE ALGEBRA 5.0 UNITS
Total Lecture: 90 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration. Course topics include linear systems and inequalities, absolute value equations and inequalities, rational exponents, radicals, complex numbers, quadratic equations, graphical representations, functions and inverses, logarithmic and exponential functions, conic sections, sequences and series, and applied problems. This course is approved for credit by exam. Pass/No Pass Option.

MAT 000D TRIGONOMETRY 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration. Acceptable for credit: California State University
Course topics include trigonometric functions, including applications to triangles, circular functions, radian measure, graphs, polar coordinates, trigonometric identities, inverse trigonometric functions, vectors, and complex numbers. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 851, MAT 955 (with MAT 001). CSUGE: B4.
Students pursuing a STEM degree begin with the gateway courses. Students who have successfully completed high school pre-calculus or higher may begin at MAT 003A. Visit placement.missioncollege.edu for assistance for enrolling directly in MAT 003A.

Students are advised to consult with a counselor prior to enrollment in Math courses to ensure students select courses to best meet their needs and transfer requirements.
MAT 000G  MATHEMATICS FOR THE LIBERAL ARTS STUDENT  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration.
Acceptable for credit: University of California, California State University
This course fulfills the graduation competency requirement for Associate degree and the general education requirement in mathematics for the CSU system. It introduces critical thinking techniques in areas of mathematics that include, but not limited to sequences and series, probability and statistics, countable and uncountable sets, cryptography and number theory, history of mathematics, mathematics in art and nature, the Pythagorean Theorem, and methods of proof, and game theory. There is an emphasis on general problem solving techniques as the class explores mathematics that may will be unfamiliar to most students, and communicate mathematics through class activities and write-ups. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 001  COLLEGE ALGEBRA  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration.
Acceptable for credit: University of California, California State University
This is a college-level course in preparation for the Calculus sequence. Its contents include real and complex number systems, polynomials, algebraic fractions, exponents and radicals, linear and quadratic equations, simultaneous equations, inequalities, functions, theory of equations, exponential and logarithmic equations, sequence and series, induction and the binomial theorem. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 001X  COLLEGE ALGEBRA WITH ADDITIONAL SUPPORT  6.0 UNITS
Total Lecture: 108 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration.
Acceptable for credit: University of California, California State University
This is a college-level course in preparation for the Calculus sequence. Its contents include real and complex number systems, polynomials, algebraic fractions, exponents and radicals, linear and quadratic equations, simultaneous equations, inequalities, functions, theory of equations, exponential and logarithmic equations, sequence and series, induction and the binomial theorem. Areas of support will include review algebraic and basic geometric topics that underlie College Algebra concepts and practice reading skills and other study skills that promote success in College Algebra. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 002  PRECALCULUS AND TRIGONOMETRY  6.0 UNITS
Total Lecture: 108 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration.
Acceptable for credit: University of California (5 units only), California State University.
This is an intensive course covering those topics traditionally found in the separate courses of college algebra (MAT 001) and trigonometry (MAT 000D). This course is designed for the highly motivated and very well prepared student who desires to fulfill the requirements of MAT 000D and MAT 001 in one semester. It prepares the student for the Calculus 003A/8 sequence. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 003A  ANALYTIC GEOMETRY AND CALCULUS I  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: (MAT 000D and MAT 001) or MAT 002
Acceptable for credit: California State University; University of California
This is the first part of the three-semester calculus sequence for math, physics and engineering majors. Course topics include functions, limits, continuity, differentiation and integration, maxima, minima, and other applications, and the relationship between calculus and analytic geometry for polynomial and transcendental functions. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 210. CSUGE: B4; IGETC: 2A.

MAT 003AH  ANALYTIC GEOMETRY AND CALCULUS I-HONORS  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: MAT 003A or MAT 003AH
Acceptable for credit: University of California, California State University
This course is the honors version of the Calculus I course and is the first part of the three-semester calculus sequence for math, physics and engineering majors. Course topics include functions, limits, continuity, differentiation and integration, maxima, minima, and other applications, and the relationship between calculus and analytic geometry for polynomial and transcendental functions. Students may not receive credit for both MAT 003A and MAT 003AH. Enrollment in the Honors Transfer Project is required. Grade only. C-ID # MATH 210. CSUGE: B4; IGETC: 2A.

MAT 003B  ANALYTIC GEOMETRY AND CALCULUS II  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: MAT 003A or MAT 003AH
Acceptable for credit: University of California, California State University
This course is the second part of the three-semester calculus sequence for math, physics and engineering majors. Students study and demonstrate knowledge and understanding of infinite series, parametric equations, conic sections, polar coordinates, integration techniques including inverse trigonometric and hyperbolic functions, and applications to area, volume and work. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 220. CSUGE: B4; IGETC: 2A.

MAT 004A  MULTIVARIABLE CALCULUS  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: MAT 003B
Acceptable for credit: University of California, California State University
This course is the third part of the three-semester calculus sequence for math, physics, and engineering majors. Students study and demonstrate knowledge and understanding of vectors in two- and three-dimensional space, vector-valued functions, calculus of functions for several variables, differentials, gradients, Lagrange Multipliers, multiple integrals, line integrals, and an introduction to Green’s Theorem, Divergence Theorem, and Stokes’ Theorem. Pass/No Pass Option. C-ID # MATH 230. CSUGE: B4; IGETC: 2A.

MAT 004B  DIFFERENTIAL EQUATIONS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: MAT 003B
Acceptable for credit: University of California, California State University
The student studies and demonstrates knowledge and understanding of ordinary differential equations, with emphasis on linear equations, and partial differential equations. Many standard methods are examined including Laplace Transforms, Fourier Series, power series and numerical solutions. Emphasis is placed on applications. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 240 CSUGE: B4; IGETC: 2A.
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<thead>
<tr>
<th>COURSE</th>
<th>C-ID</th>
<th>UNITS</th>
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<tbody>
<tr>
<td>MAT 004C</td>
<td>LINEAR ALGEBRA</td>
<td>4.0</td>
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<td>Total Lecture: 72 hours</td>
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<td>Prerequisite: MAT 003B</td>
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<td>Advisory: MAT 004A</td>
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<td>Acceptable for credit: University of California, California State University</td>
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<tr>
<td>The student studies and demonstrates knowledge and understanding of the basic principles of linear algebra and its applications. Topics include systems of linear equations, matrices, and vector spaces.</td>
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| MAT 005 PROGRAMMING AND PROBLEM-SOLVING IN MATLAB | 3.0 |
| Total Lecture: 36 hours, Total Lab: 54 hours | |
| Prerequisite: MAT 003A or MAT 003AH or higher | |
| Acceptable for credit: University of California, California State University | |
| This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to mathematics, science, and engineering. Topics include procedural and object-oriented programming, two- and three-dimensional graphics, data input and export, curve fitting, recursion, and applications in engineering, physics, and mathematics. | |

| MAT 010 ELEMENTARY STATISTICS | 4.0 |
| Total Lecture: 72 hours | |
| Prerequisite: Completion of the Mission College Placement Process prior to registration. | |
| Acceptable for credit: University of California, California State University | |
| Students study and demonstrate knowledge and understanding of descriptive and inferential statistics including data analysis, correlation and regression, probability, probability distributions and hypothesis testing. Particular emphasis is placed on applications. Current statistical computer packages are used. This course is approved for credit by exam. | |

| MAT 010H ELEMENTARY STATISTICS - HONORS | 4.0 |
| Total Lecture: 72 hours | |
| Prerequisite: Completion of the Mission College Placement Process prior to registration. | |
| This course is the honors version of the Elementary Statistics course. The course provides students with a comprehensive introduction to statistical methods and research. Topics include descriptive and inferential statistics, correlation and linear regression, probability, probability distributions and hypothesis testing. Particular emphasis is placed on applications and data analysis. | |

| MAT 010X ELEMENTARY STATISTICS WITH ADDITIONAL SUPPORT | 6.0 |
| Total Lecture: 108 hours | |
| Prerequisite: Completion of the Mission College Placement Process prior to registration. | |
| Acceptable for credit: University of California, California State University | |
| Students study and demonstrate knowledge and understanding of descriptive and inferential statistics including data analysis, correlation and regression, probability, probability distributions and hypothesis testing. Particular emphasis is placed on applications. Current technology is used. Areas of support will include review of arithmetic and algebra topics that underlie statistical procedures and concepts, hands-on activities that promote a deeper understanding of statistical ideas, and study skills that promote success in statistics. | |

| MAT 012 CALCULUS FOR BUSINESS | 4.0 |
| Total Lecture: 72 hours | |
| Prerequisite: Completion of the Mission College Placement Process prior to registration. | |
| Acceptable for credit: University of California, California State University | |
| Course topics include the intuitive concept of a limit, and simple techniques of differential and integral calculus and their most common applications in business, social science and biology. This course is suitable for business, biology, or social science majors. This course is not equivalent to MAT 003A. This course is approved for credit by exam. | |

<table>
<thead>
<tr>
<th>MECHATRONIC TECHNOLOGY (MTT)</th>
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<tbody>
<tr>
<td>MTT 010 INTRODUCTION TO TECHNOLOGY AND CAREERS</td>
<td>2.0</td>
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<td>Total Lecture: 18 hours, Total Lab: 54 hours</td>
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<td>This course exposes students to the field of mechatronics and control system disciplines. The course presents basic skills necessary to succeed as mechatronics student. The nature of control system in different process industries and the role of mechatronics technicians are explored. Communication skills for reports are developed. Guest speakers from local process firms and tours to local companies are included.</td>
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| MTT 012 ELECTRONIC SYSTEMS MEASUREMENT AND TROUBLESHOOTING | 2.0 |
| Total Lecture: 18 hours, Total Lab: 54 hours | |
| Advisory: MTT 010 | |
| This course covers the measurement and characterization of electronic systems, data collection, and reporting results in industry-accepted formats. System and component performance are compared to published specifications and troubleshooting techniques are developed. Laboratory practice includes the proper use of standard test instruments. | |

| MTT 020 PROGRAMMABLE LOGIC CONTROLLER (PLC) PROCESS CONTROL SYSTEMS | 2.0 |
| Total Lecture: 18 hours, Total Lab: 54 hours | |
| Advisory: MTT 010 | |
| This course covers Programmable Logic Controller (PLC) systems, function, interrelationship, and troubleshooting of systems components. PLC input/output systems and requirements are also discussed. Ladder logic programming is studied using basic I/O instructions, logic instructions, timers, counters, and comparison functions. Students will also develop an understanding of Piping/Process and Instrumentation Diagrams (P&ID). | |
MTT 030  **ELECTRICAL MOTORS AND CONTROL SYSTEMS**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 020 and MTT 022
This course covers electrical motors and controls for commercial and industrial applications. Motor types include: Direct Current (DC), stepper, single-phase and three-phase Alternating Current (AC) motors, including Variable-Frequency Drives (VFD). Students will also develop motor theory knowledge through hands-on applications. Pass/No Pass Option.

MTT 032  **MICROCONTROLLER SYSTEMS**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 010
This course explores single-chip microcontroller architecture. Students will apply their skills by programming microcontrollers and hone their troubleshooting skills on single-chip microcontroller electronic systems. Digital building blocks, number systems, and programming in high-level and assembly languages are also covered. Students will also learn about interfacing the microcontroller for practical applications, measurement techniques, and instrumentation. Pass/No Pass Option.

MTT 034  **FLUID POWER SYSTEMS**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 010
Introduces fluid power systems used in industry. The advantages and disadvantages of fluid power compared to other power transmission systems are examined. The potential dangers are explored and the safety procedures related to fluid power are reviewed and implemented. The application of principles of fluid power transmission and the formulas used in fluid power system analysis and design are experienced in the lab. The fundamental principles, components, symbols and applications of hydraulic and pneumatic fluid power applications are introduced. Basic power and control circuits are developed using computer aided design. The characteristics and dangers of using air as a fluid power force are explored. Pneumatic system components are studied including: compressors, linear actuators, rotary actuators and pneumatic tubing. The relationship between electrical signals and pneumatic controls for process industry. Hands-on activities using various pneumatic components are assembled in the lab. Pass/No Pass Option.

MTT 040  **ANALOG CIRCUITS AND SEMICONDUCTOR DEVICES**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 012
This course covers analog circuits, including: amplifiers, oscillators, and filters, using single-chip analog devices, operational amplifiers, field-effect transistors, bipolar transistors. Pass/No Pass Option.

MTT 042  **DIGITAL LOGIC SYSTEMS**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 032
This course explores the architecture, programming, application, and troubleshooting of complex programmable logic device (CPLD) electronic systems. CPLDs will be programmed in VHDL (VHSIC-HDL, Very High Speed Integrated Circuit Hardware Description Language). Fundamentals in number systems and Boolean Algebra are studied while combinational and sequential logic are used to design digital systems. The course also covers integrated logic families, digital circuit measurement techniques and instrumentation, and allows students to develop troubleshooting techniques. Pass/No Pass Option.

MTT 050  **DIGITAL MANUFACTURING**  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: EGR 025
Introduction to manufacturing with two-dimensional and three-dimensional digital layout input. Creating designs using standard Two-Dimensional (2D) and Three-Dimensional (3D) design software, e.g. AutoCAD and SolidWorks, and 3D scanner. Optimization of project design for construction on 3D printers. Examination of materials available for 3D printing. Pass/No Pass Option.

MUSIC (MUS)

NOTE: Maximum UC credit allowed for MUS 030AB, 031AB, 032AB, 033AB, 036ABCD, and 041ABCD is 12 units total.

MUS 005  **FUNDAMENTALS OF MUSIC THEORY**  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the fundamentals of music theory. Students will learn the basics of music notation, rhythm and meter, scales, intervals, chords and harmony, music analysis, melodic composition, songwriting, and techniques for listening to music. This introductory course is intended for all students. Pass/No Pass Option. CSUGE: A1; IGETC: 3A.

MUS 006  **COMMERCIAL MUSIC THEORY I**  3.0 UNITS
Total Lecture: 54 hours
Advisory: MUS 005
Acceptable for credit: University of California, California State University
Commercial Music Theory I is an intermediate level course in music theory, commercial music composition, arranging, and songwriting. Students will review elements of basic music theory as it pertains to a wide variety popular music genres, including rock, pop, jazz, music for visual media, music for business and advertising applications. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

MUS 007  **COMMERCIAL MUSIC THEORY II**  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MUS 006
Acceptable for credit: California State University, University of California
Commercial Music Theory II is an advanced-intermediate level course in music theory, commercial music composition, arranging, and songwriting. Students will review elements of music theory as it pertains to a wide variety popular music genres, music for visual media, and music for business and advertising applications. Pass/No Pass Option. C-ID # MUS 140. CSUGE: C2; IGETC: 3B.
MUS 008 COMMERCIAL MUSIC THEORY III 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MUS 007
Acceptable for credit: California State University, University of California
Commercial Music Theory III is a continuation of MUS 007, and is an advanced level course in music theory, composition, and arranging for a wide variety of commercial music genres. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

MUS 010 MUSIC APPRECIATION 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This is a basic introductory course for the student without previous training in music. Students develop an appreciation and enjoyment of music through active listening and guided discussion on related topics including: symphony movements, opera, tone poems, sonata form, and the classical concerto. Style periods are discussed including the Middle Ages, Pre-Baroque (to 1600); Baroque (1600-1750); Classical (1750-1825); Romantic (1825-1900); and Contemporary (1900-present). Pass/No Pass Option. C-ID # MUS 100. CSUGE: C1; IGETC: 3A.

MUS 016 SURVEY OF ROCK AND POPULAR MUSIC 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
The course examines the History of Rock and Roll Music, from its roots in Africa and 1950’s America through Punk Rock. Principal study is of the music, its styles and performance practices, its musician-composers, and the important social and musical forces influencing the development of Rock. Course includes analytical listening to music, as well as guided discussion. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

MUS 017 MUSIC OF THE WORLD 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
The course is a multimedia, multicultural humanities course which introduces students to music from a world music perspective. Course content is centered on videos, a supplemental textbook, and an extensive collection of recorded examples. Topics include the transformative power of music, music and memory, musical style, musical performance and improvisation, music as ritual, and music technology. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

MUS 030A BEGINNING PIANO I 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Acceptable for credit: University of California, California State University
This course is for students with no previous training in piano. Topics include note reading, rhythmic notation, interpretive symbols, proper posture, hand position and fingering. The course also covers a brief history of the piano and piano music, including famous composers and performers. Students learn to perform simple piano pieces. This course is approved for credit by exam. Pass/No Pass Option.

MUS 030B BEGINNING PIANO II 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Prerequisite: MUS 030A
Acceptable for credit: University of California, California State University
This course is for students with some previous training in piano. Topics include note reading, rhythmic notation, interpretive symbols, proper posture, hand position and fingering. The course also covers a brief history of the piano and piano music, including famous composers and performers. Students learn to perform simple piano pieces. This course is approved for credit by exam. Pass/No Pass Option.

MUS 031A INTERMEDIATE PIANO I 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 030B
Acceptable for credit: University of California, California State University
A continuation of MUS 30B. Designed for those who wish to improve their keyboard skills through a continued study of pianistic technique, interpretation, and style in the works of various composers from different musical periods as well as the continued study of the history of the piano and piano music, including famous composers and performers of piano music. Students who are taking the course online will need access to a piano keyboard (acoustic or electronic) that is suitable for piano performance. A piano practice room is available for students during times when the campus is open. This course is approved for credit by exam. Pass/No Pass Option.

MUS 031B INTERMEDIATE PIANO II 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 031A
Acceptable for credit: University of California, California State University
This course is a continuation of MUS 31A. It is designed for those who wish to improve their keyboard skills through a continued study of pianistic technique, interpretation, and style in the works of various composers from different musical periods, as well as the continued study of the history of the piano and piano music, including famous composers and performers of piano music. Students who are taking the course online will need access to a piano keyboard (acoustic or electronic) that is suitable for piano performance. A piano practice room is available for students during times when the campus is open. This course is approved for credit by exam. Pass/No Pass Option.

MUS 031C INTERMEDIATE PIANO III 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 031B
This course is a continuation of MUS 31B. It is designed for those who wish to improve their keyboard skills through a continued study of pianistic technique, interpretation, and style in the works of various composers from different musical periods, as well as the continued study of the history of the piano and piano music, including famous composers and performers of piano music. Students who are taking the course online will need access to a piano keyboard (acoustic or electronic) that is suitable for piano performance. A piano practice room is available for students during times when the campus is open. Pass/No Pass Option.

MUS 032A BEGINNING VOICE I 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Acceptable for credit: University of California, California State University
This is a Beginning I level course for developing the singing voice and vocal presentation. Elements of vocal production are studied, including tone placement, correct breathing, vocal production, and good diction. The student also learns how to "perform" vocal music, as well as the important psychological aspects of singing, such as the building of vocal confidence and the lessening of vocal anxiety. A song repertory is studied that represents a variety of musical and cultural styles, and practice is provided with both live piano and recorded taped accompaniment. This course is approved for credit by exam. Pass/No Pass Option.

MUS 032B BEGINNING VOICE II 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Acceptable for credit: University of California, California State University
This course is for students with some previous training in voice. Topics include note reading, rhythmic notation, interpretive symbols, proper posture, hand position and fingering. The course also covers a brief history of the piano and piano music, including famous composers and performers. Students learn to perform simple piano pieces. This course is approved for credit by exam. Pass/No Pass Option.
MUS 032B  BEGINNING VOICE II  1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Prerequisite: MUS 032A
Acceptable for credit: University of California, California State University
This is a Beginning II level course for developing the singing voice and vocal presentation. Elements of vocal production are studied, including tone placement, correct breathing, vocal production, and good diction. The student also learns how to "perform" vocal music, as well as the important psychological aspects of singing, such as the building of vocal confidence and the lessening of vocal anxiety. A song repertory is studied that represents a variety of musical and cultural styles, and practice is provided with both live piano and recorded taped accompaniment. This course is approved for credit by exam. Pass/No Pass Option.

MUS 033A  INTERMEDIATE VOICE I  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Prerequisite: MUS 032B
Acceptable for credit: University of California, California State University
This course is a continuation of MUS 32B. Students will develop the singing voice and vocal presentation. Elements of vocal production are studied, including tone placement, correct breathing, vocal production, and good diction. The student also learns how to "perform" vocal music, as well as the important psychological aspects of singing, such as the building of vocal confidence and the lessening of vocal anxiety. A song repertory is studied that represents a variety of musical and cultural styles, and practice is provided with both live piano and recorded taped accompaniment. Pass/No Pass Option.

MUS 033B  INTERMEDIATE VOICE II  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Prerequisite: MUS 033A
Acceptable for credit: University of California, California State University
This course is a continuation of MUS 33A. Students will further develop their singing voice, vocal presentation, and repertoire. Pass/No Pass Option.

MUS 036A  BEGINNING GUITAR I  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Acceptable for credit: University of California, California State University
This is a beginning-level guitar course. Students learn about the guitar, how to string and tune a guitar, and basic chords and strumming patterns. Emphasis will be on learning popular songs and folk music. Basic music theory and music notation are also introduced. Students must supply their own playable guitar - acoustic steel string, classical nylon string or electric guitars are welcome. Pass/No Pass Option.

MUS 036B  BEGINNING GUITAR II  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Prerequisite: MUS 036A
Acceptable for credit: California State University, University of California
This beginning-intermediate level course is for students who have successfully completed MUS 036A. Emphasis is on expanding their chordal repertoire to include seventh chords, reading traditional music notation and guitar tablature, and an introduction to the guitar pick. Students must supply their own playable guitar – acoustic steel string, classical nylon string, or electric guitars are welcome. Pass/No Pass Option.

MUS 036C  INTERMEDIATE GUITAR I  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Prerequisite: MUS 036B
Acceptable for credit: California State University, University of California
This intermediate level course is for students who have successfully completed MUS 036B. Students will learn intermediate level guitar techniques including barre chords, playing scales, and an introduction to fingerstyle guitar. Students also learn how to perform in a variety of musical styles including popular, country, folk, and the blues. Students must supply their own playable guitar - acoustic steel string, classical nylon string or electric guitars are welcome. Pass/No Pass Option.

MUS 036D  INTERMEDIATE GUITAR II  1.0 UNIT
Total Lecture: 9 hours Total Lab: 27 hours
Prerequisite: MUS 036C
Acceptable for credit: California State University, University of California
This is an advanced-intermediate course in guitar for students who have successfully completed MUS 036C. Emphasis is on music reading, playing in advanced-intermediate positions, scales, chords, major and minor keys. The student studies the history of the guitar and guitar music, including famous composers and composers of guitar music. Advanced-intermediate pieces are learned from various stylistic periods and cultures, and skills in critical thinking are developed as related to guitar performance. Pass/No Pass Option.

MUS 039A  ADVANCED PIANO MASTERCLASS I  1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 031A
Acceptable for credit: University of California, California State University
This course is a survey of advanced music for the piano and other keyboard instruments from the Baroque Period to 20th Century musical styles. Assignments include preparation and performances of different piano repertoire each semester. Students participate in discussions and projects related to standard piano repertoire, literature and appropriate performance practices. Students are assigned new musical works each semester from the vast amount of piano repertoire that is available allowing the student to continue development of his/her technical abilities. Pass/No Pass Option. C-ID # MUS 180.

MUS 039B  ADVANCED PIANO MASTERCLASS II  1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 090
Acceptable for credit: University of California, California State University
This course is designed for advanced piano students previously enrolled in MUS 039A. MUS 039B is a survey of advanced music for the piano and other keyboard instruments that focuses on solo piano repertoire. Assignments include preparation and performances of different piano repertoire each semester. Students participate in discussions and projects related to solo piano repertoire, literature and appropriate performance practices. Students are assigned new musical works each semester from the vast amount of piano repertoire that is available allowing the student to continue development of his/her technical abilities. Pass/No Pass Option. C-ID # MUS 180.

MUS 039C  ADVANCED PIANO MASTERCLASS III  1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Advisory: MUS 039C
Acceptable for credit: University of California, California State University
This is a piano performance course for advanced piano students. Emphasis is placed on developing repertoire and performance skills to prepare for a final piano concerto performance. Assignments include preparation and performances of different piano repertoire, discussions and projects related to standard piano repertoire, literature and appropriate performance practices. Students also study piano pedagogy. Pass/No Pass Option. C-ID # MUS 180.
MUS 039D  ADVANCED PIANO MASTERCLASS IV  1.0 UNIT
Total Lecture: 9 hours , Total Lab: 27 hours
Advisory: MUS 090
Prerequisite: MUS 039C
Acceptable for credit: University of California, California State University
This is a piano performance course for advanced piano students. Emphasis is placed on developing repertoire and performance skills to prepare for a final piano concerto performance. Assignments include preparation and performances of different piano repertoire, discussions and projects related to standard piano repertoire, literature and appropriate performance practices. Students also study piano pedagogy.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 041A  MISSION CHORUS I  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: University of California, California State University
Mission Chorus is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary styles. Students participate in public performances. Mission Chorus is open to those with and without previous experience in group singing. Placement auditions are held before the first day of class. Music reading may be covered as well as the basic elements of music.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 041B  MISSION CHORUS II  1.0 UNIT
Total Lab: 54 hours
Prerequisite: MUS 041A
Acceptable for credit: University of California, California State University
Mission Chorus II is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary styles. Students participate in public performances. Students who wish to enroll in MUS 041B must have previous experience in group singing at the beginning level. Placement auditions are held before the first day of class. Course activities include group singing, identification of diatonic intervals, and proper breath support.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 041C  MISSION CHORUS III  1.0 UNIT
Total Lab: 54 hours
Prerequisite: MUS 041B
Acceptable for credit: University of California, California State University
Mission Chorus III is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary styles. Students participate in public performances. Students who wish to enroll in MUS 041C must have previous experience in group singing at the intermediate level. Placement auditions are held before the first day of class. Course activities will include group singing and the identification of chromatic intervals and dominant chords.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 041D  MISSION CHORUS IV  1.0 UNIT
Prerequisite: MUS 041C
Acceptable for credit: University of California, California State University
Mission Chorus IV is an ensemble of mixed voices that performs a wide variety of choral repertoire from classical to contemporary styles. Students participate in public performances. Students who wish to enroll in MUS 041D must have previous experience in group singing at the intermediate to advanced level. Placement auditions are held before the first day of class. Course activities will include group singing, identification of non-diatonic intervals and analysis and interpretation of advanced level choral music.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 048A  SYMPHONY ORCHESTRA I  1.0 UNIT
Total Lab: 54 hours
Advisory: Students will audition for the instructor to demonstrate their instrumental skill level.
Acceptable for credit: University of California, California State University
This is a beginning level course for the study and performance of symphonic music and repertoire of all styles and periods. Emphasis is placed on group participation and public performance. Attendance at all scheduled performances required. New works of orchestral music are performed each semester. Students must provide their own instruments.  Pass/No Pass Option.  C-ID # MUS 180.

MUS 048B  SYMPHONY ORCHESTRA II  1.0 UNIT
Total Lab: 54 hours
Advisory: MUS 048A
Acceptable for credit: University of California, California State University
This is an intermediate level course for the study and performance of symphonic music and repertoire of all styles and periods. Emphasis is placed on group participation and public performance. Attendance at all scheduled performances required. New works of orchestral music are performed each semester.  Pass/No Pass Option.

MUS 048C  SYMPHONY ORCHESTRA III  1.0 UNIT
Total Lab: 54 hours
Advisory: MUS 048B
Acceptable for credit: University of California, California State University
This is an intermediate/advanced level course for the study and performance of symphonic music and repertoire of all styles and periods. Emphasis is placed on group participation and public performance. Attendance at all schedule performances required. New works of orchestral music are performed each semester.  Pass/No Pass Option.

MUS 048D  SYMPHONY ORCHESTRA IV  1.0 UNIT
Total Lab: 54 hours
Advisory: MUS 048C
Acceptable for credit: University of California, California State University
This is an advanced level course for the study and performance of symphonic music and repertoire of all styles and periods. Emphasis is placed on group participation and public performance. Attendance at all schedule performances required. New works of orchestral music are performed each semester.  Pass/No Pass Option.

MUS 050  MISSION STEELBAND  1.0 UNIT
Total Lab: 54 hours
Advisory: MUS 090
Acceptable for credit: University of California, California State University
This performance ensemble focuses on the study and performance of music from Trinidad, South America and the Caribbean musical tradition. Ensemble members learn how to play Caribbean steel drums. Emphasis is placed on participation and public performance. Attendance at all scheduled performances is required. Prior experience with percussion/music is not required.  Pass/No Pass Option.
MUS 080 MIDI AND MUSIC PRODUCTION I  3.0 UNITS
Total Lecture: 54 hours
Advisory: MUS 005
Acceptable for credit: California State University
This course is a practical introduction to the Musical Instrument Digital Interface (MIDI) music system and provides students the skills necessary to create their own music using a Digital Audio Workstation (DAW). Through a series of hands-on projects, students develop basic musicianship skills including: music theory, composition and arranging as they apply to popular music. Students also use the recording studio to complete a final project that incorporates the use of MIDI and audio tracks. Pass/No Pass Option.

MUS 081 AUDIO PRODUCTION I  3.0 UNITS
Total Lecture: 54 hours
Advisory: MUS 080
Acceptable for credit: California State University
This is a hands-on survey of audio recording techniques using digital music software and hardware. Specific subject areas include microphones, mic pre-amps, multi-track recording, vocal overdubs, and basic mixing. Students complete a series of projects designed to develop basic recording, editing and mixing skills. Pass/No Pass Option.

MUS 082 MIDI AND MUSIC PRODUCTION II  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MUS 080
Advisory: MUS 005
Acceptable for credit: California State University
This is an advanced level, music production course that provides students the skills necessary to create their own compositions for film, TV and video games using a Digital Audio Workstation (DAW) software. Through a series of hands-on projects students develop advanced composition skills including: score analysis, orchestration and original music composition as it applies to commercial music. Students also use the recording studio to complete a final project that combines an original MIDI music composition with video. This course may be offered via distance learning. Pass/No Pass Option.

MUS 083 AUDIO PRODUCTION II  3.0 UNITS
Total Lecture: 54 hours
Advisory: MUS 080
Acceptable for credit: California State University
This is an advanced audio recording, mixing and MIDI production course using ProTools software and hardware. Students learn how to produce voice-overs, sound effects, multi-track recordings and MIDI sequences to be used in films, television, radio, web applications and the music and gaming industries. Participation in at least one on-campus music event and a final portfolio of work is required. Pass/No Pass Option.

NONCREDIT ENGLISH AS A SECOND LANGUAGE
Please refer to English as a Second Language found alphabetically in the catalog.

OLDER ADULT - NONCREDIT (NCO)

NCO 1611 OLDER ADULT ART  NONCREDIT
Total: 32 hours
This non-credit course explores art, crafts and creative artistic expression through a variety of different artistic techniques. This course develops formal artistic skills such as color, composition, form, harmony, texture, and contrast through physical and tactile skills such as painting, sculpture, writing, and coloring. Cultural, seasonal and holiday themes are emphasized in the production of arts and crafts items for personal use or gifts. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3900 FORUM ON WORLD AFFAIRS  NONCREDIT
Total: 32 hours
This noncredit course expands the student’s knowledge of economic, social, governmental, historic, geographic, and cultural issues. Students also expand communication skills as they expand knowledge of world, national and local issues and become better informed community members. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3901 FORUM ON WORLD AFFAIRS I  NONCREDIT
Total: 9 hours
This course expands the student’s knowledge of current economic, social, and cultural issues at an introductory level. Students also improve communication skills as they share knowledge of world, national, and local issues and become better informed community members. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3902 FORUM ON WORLD AFFAIRS II  NONCREDIT
Total: 18 hours
This course provides an in-depth coverage of current affairs that includes analysis of economic, social, historic, and cultural factors that contribute to current world affairs. Through class discussions and individual student projects students improve skills in communication and critical analysis. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3903 FORUM ON WORLD AFFAIRS III  NONCREDIT
Total: 36 hours
This course provides an in-depth coverage of current affairs that includes analysis of economic, social, historic, and cultural factors that contribute to current world affairs. Through class discussions and individual student projects students improve skills in communication and critical analysis. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3904 MOVE TO BE FIT  NONCREDIT
Total: 18 hours
Through lecture, demonstration, and practice, older adults learn techniques for stress reduction, strategies for safely implementing a physical activity program, and develop an understanding of key healthy aging concepts to maintain and improve overall health and well-being. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.
NCO 3905  FITNESS FOR OLDER ADULTS  NONCREDIT
Total: 24 hours
This course is designed to help the older adult improve balance and agility. Students are given activities that contribute to their understanding of the benefits of physical activity and movement through the aging process. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3906  MUSIC APPRECIATION THROUGH MOVEMENT  NONCREDIT
Total: 36 hours
This course is designed for the non-credit older adult who has had no formal training in music. Students develop an appreciation and enjoyment of music through active listening, guided practice, and movement. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3907  CRAFT AND CREATE  NONCREDIT
Total: 9 hours
This course is for the older adult who is interested in learning a variety of different craft techniques through the execution of simple art projects. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCO 3908  EXPLORATIONS IN PAINTING AND DRAWING  NONCREDIT
Total: 24 hours
This course is for the older adult student who is interested in developing skills in drawing and painting. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.

NCH 001CW  INTRODUCTION TO COMMUNITY HEALTH WORK  NONCREDIT
Total: 54 Hours
Advisory: CAP 010A and CAP 062B
This is the first of a three-course sequence leading to the Community Health Worker Certificate of Completion. This course introduces students to the role of the Community Health Worker, the types of client and agencies with whom the Community Health Worker works on a daily basis, and the basic concepts of public health practice. Pass/No Pass Only. Non-degree applicable course.

NCH 002CW  INTRODUCTION TO CHRONIC DISEASE MANAGEMENT  NONCREDIT
Total: 54 Hours
Prerequisite: NCH 001CW
This course addresses chronic health conditions (also referred to as chronic illness or chronic disease), the leading cause of illness and death in the United States. Community Health Workers (CHW) often work closely with clients who live with chronic conditions. Topics include basic information about the types of chronic conditions and techniques for their management. Pass/No Pass Only. Non-degree applicable course.

NCH 003CW  EXTERNSHIP FOR COMMUNITY HEALTH WORKER  NONCREDIT
Total: 54 Hours
Prerequisite or Corequisite: NCH 002CW
This externship will give students an experiential learning opportunity to enhance their academic and professional skill sets. Students will learn and understand the duties of a Community Health Worker in a professional setting, and contract for a minimum of 54 hours at an externship placement. Students must complete the first course, NCH 001CW. The next course NCH 002CW can be taken with NCH 003CW externship. (Note: Any student can take both NCH 001CW and NCH 002CW in one semester or summer, then take the NCH 003CW Externship next semester.) Pass/No Pass Only. Non-degree applicable course.

NURSING LVN TO RN PROGRAM (LVN)
For all nursing courses see Health Occupations

NUTRITIONAL SCIENCE (NTR)

NTR 006  PERSONAL HEALTH AND WELLNESS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is placed on individual responsibility for personal health and the promotion of informed, positive health behaviors. Topics include nutrition, exercise, weight control, mental health, stress management, violence, substance abuse, reproductive health, disease prevention, aging, healthcare, and environmental hazards and safety. Pass/No Pass Option. C-ID # PHS 100. CSUGE: E.

NTR 015  HUMAN NUTRITION  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course introduces scientific principles as they apply to human nutrition. It explores the functions of essential nutrients, the chemical composition of foods, as well as psychological and social issues related to food intake. Students will explore current topics in nutrition and evaluate nutrient intake as it relates to maintaining health and preventing disease throughout the lifecycle. This course is approved for credit by exam. Pass/No Pass Option. C-ID # NUTR 110. CSUGE: E.
NTR 015H HUMAN NUTRITION - HONORS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This honors course introduces scientific principles as they apply to human nutrition. It explores the functions of essential nutrients, the chemical composition of foods, as well as psychological and social issues related to food intake. Students will explore current topics in nutrition and evaluate nutrient intake as it relates to maintaining health and preventing disease throughout the lifecycle. Students may not receive credit for both NTR 015 and NTR 015H. Enrollment in the Honors Program is required. Pass/No Pass Option. C-ID # NUTR 110. CSUGE: E.

NTR 040 NUTRITION AND DISEASE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This nutrition course intended for students interested in entering the health fields with emphasis on physiology, metabolism of nutrients, metabolic diseases, and dietary modification to optimize recovery and health. Students will understand and evaluate dietary intake, nutritional assessment, and nutrition care commonly used at clinics and hospitals. Pass/No Pass Option.

NTR 040H NUTRITION AND DISEASE - HONORS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This honors nutrition course is intended for students interested in entering the health fields with emphasis on physiology, metabolism of nutrients, metabolic diseases, and dietary modification to optimize recovery and health. Students will understand and evaluate dietary intake, nutritional assessment, and nutrition care commonly used at clinics and hospitals. Students may not receive credit for both NTR 040 and NTR 040H. Enrollment in the Honors Program is required. Pass/No Pass Option.

PHILOSOPHY (PHI)

PHI 001 INTRODUCTION TO PHILOSOPHY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to some philosophical problems and the various approaches to their solutions. The student is exposed to selected traditional philosophical systems with emphasis upon how these systems are relevant to solving the problems of contemporary existence. Among the questions explored in the course are: What is reality; What is the nature of human beings; What makes an act right or wrong; Are human actions free or determined; What is knowledge. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

PHI 002 INTRODUCTION TO LOGIC  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the techniques of traditional and modern logic comprising both deductive and inductive inference. Students are introduced to techniques for evaluating the quality and correctness of a chain of thought. The aim is to improve one's ability to read critically and to recognize and avoid logical errors. This class demonstrates that there are right and wrong ways to reason, and that good reasoning is a skill that can be developed and improved. Pass/No Pass Option. C-ID # PHIL 110. CSUGE: A3.

PHI 003 INTRODUCTION TO PROBLEMS IN ETHICS  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
This course critically examines questions of value and obligation. Students explore prominent ethical theories, including Kantianism, the Utilitarians and virtue ethics. The student then applies these ethical theories to case studies, such as bioethics and environmental ethics. Much of the course is devoted to critical thinking and writing skills. This course is approved for credit by exam. Pass/No Pass Option. C-ID # PHIL 120. CSUGE: A3, C2; IGETC: 1B.

PHI 005 INTRODUCTION TO SOCIAL AND POLITICAL PHILOSOPHY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces students to a critical study of some major social and political problems. What is society? What is a state? What is freedom? What is authority? What is the nature of political obligation? What constitutes justice? What constitutes a right? What are the relationships, if any, between the individual and society? Pass/No Pass Option. CSUGE: C2, D2; IGETC: 3B, 4G

PHYSICAL EDUCATION
See Kinesiology for program and course information.
PHYSICS (PHY)

PHY 002A  GENERAL PHYSICS - MECHANICS AND THERMODYNAMICS  5.0 UNITS
Total Lecture: 72 hours, Total Lab: 54 hours
Prerequisite: MAT 003A or MAT 003AH
Acceptable for credit: University of California, California State University
This is the first lecture/lab course in physics for majors in subjects other than engineering or the physical sciences. Topics covered include Newton's laws of force, dynamics of rigid bodies, the concepts of potential and kinetic energy, momentum, thermodynamics, hydrodynamics, and wave motion. Analytical solutions of numerical problems at the trigonometric and algebraic level are emphasized. NOTE: UC credit may be limited. See a counselor. Materials Fee. Grade only. C-ID # PHYS 100S (with PHY 002B), PHYS 110. CSUGE: B1; IGETC: 5A.

PHY 002B  GENERAL PHYSICS - ELECTRICITY, MAGNETISM AND OPTICS  5.0 UNITS
Total Lecture: 72 hours, Total Lab: 54 hours
Prerequisite: PHY 002A
Acceptable for credit: University of California, California State University
This lecture/lab course is a continuation of PHY 002A as a lecture/lab course with the study of electricity, magnetism, geometrical and wave optics and atomic physics. NOTE: UC credit may be limited. See a counselor. Materials Fee. Grade only. C-ID # PHYS 100S (with PHY 002A), PHYS 110. CSUGE: B1; IGETC: 5A.

PHY 004A  ENGINEERING PHYSICS-MECHANICS  5.0 UNITS
Total Lecture: 72 hours, Total Lab: 54 hours
Prerequisite: MAT 003A or MAT 003AH
Acceptable for credit: California State University, University of California
This course in mechanics, the first in a series of engineering physics courses, is a calculus-based study of forces, energy and momentum. Kinematic problems are solved using position, velocity and acceleration. Conservation of momentum and energy is applied to moving and interacting systems, rotational mechanics, simple harmonic motion, gravity, mechanical properties of matter, fluid statics and dynamics. Materials Fee. Grade only. C-ID # PHYS 205, PHYS 200S (with PHY 004B, PHY 004C). CSUGE: B1; IGETC: 5A.

PHY 004B  ENGINEERING PHYSICS-ELECTRICITY AND MAGNETISM  4.0 UNITS
Total Lecture: 54 hours Total Lab: 54 hours
Prerequisite: MAT 003B and PHY 004A
Acceptable for credit: California State University, University of California
This lecture/laboratory course is the second in the calculus-based engineering physics series. The course continues the concept of field theory and develops the concepts of Maxwell's equations. Topics include: Coulomb's Law, Gauss' Law, Electric Potential, Biot-Savart Law, Ampere's Law, and Faraday's Law. Kirchoff's Laws and AC circuits are introduced. Solutions to numerical and theoretical problems are emphasized at the calculus level. Grade only. C-ID # PHYS 210, PHYS 200S (with PHY 004A, PHY 004C). CSUGE: B1; IGETC: 5A.

PHY 004C  ENGINEERING PHYSICS-LIGHT AND HEAT  4.0 UNITS
Total Lecture: 54 hours Total Lab: 54 hours
Prerequisite: MAT 003B and PHY 004A
Acceptable for credit: California State University, University of California
This lecture/laboratory course is the third semester in the engineering physics series. The course content includes thermodynamics, geometrical and wave optics, atomic and modern physics. The dual nature of light is investigated in lecture and laboratory by the use of interference and diffraction effects. The laws of heat transfer, thermodynamics, and the Carnot cycle are covered. Numerical and theoretical solutions to problems are emphasized. Materials Fee. Grade only. C-ID # PHYS 215, PHYS 200S (with PHY 004A, PHY 004B). CSUGE: B1; IGETC: 4C.

PHY 004D  ENGINEERING PHYSICS-ATOMIC  2.0 UNITS
Total Lecture: 36 hours
Prerequisite: PHY 004B
Acceptable for credit: University of California, California State University
This course is an introduction to quantum physics with an emphasis on the electronic structure of atoms and solids, waves and particle duality, statistics, band theory, radiation and relativity. This course is approved for credit by exam. Grade only. CSUGE: B1.

PHY 010  INTRODUCTION TO PHYSICS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: Elementary Algebra Skills.
Acceptable for credit: University of California, California State University
This is a conceptual course in physics, including the development of fundamental concepts as applied to everyday phenomena, from a limited mathematical perspective, emphasizing verbal logic, critical analysis, and rational thought. The topics included in this course are mechanics, thermodynamics, electricity and magnetism, optics, and modern physics. Grade only. CSUGE: B1; IGETC: 5A.

POLITICAL SCIENCE (POL)

POL 001  AMERICAN GOVERNMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the structure and functions of the governments at the Federal and California levels. Topics covered include Civil Rights and Liberties, Institutional development, and non-governmental actors in politics. This course helps satisfy the U.S. History, Constitution, and state and local government requirements for transfer to the UC/CSU systems, as well as for the Associate of Arts degree. Pass/No Pass Option. C-ID # POLS 110. CSUGE: DB; IGETC: 4H.

POL 001H  AMERICAN GOVERNMENT - HONORS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
Honors American Government involves interdisciplinary, writing-intensive, collaborative, and experiential instruction. The course covers the structure and functions of the American national government, as well as those of state and local governments. Emphasis is placed on the development of a deep understanding of historical and societal influences on the modern American political institutions. Students cannot get credit for both POL 001 and POL 001H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # POLS 110. CSUGE: DB; IGETC: 4H.

POL 002  COMPARATIVE GOVERNMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course explores the government and politics of some of the major nations in the world as well as developing nations. Political structures, functions, processes and policies are compared with each other and with the U.S. government. Particular consideration is given to contemporary world problems with an emphasis on developing comparative analytical skills and abilities. Pass/No Pass Option. C-ID # POLS 130. CSUGE: DB; IGETC: 4H.
**POL 004  INTERNATIONAL RELATIONS  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces the beginning student to world politics. The class is designed to provide students with both a framework and the analytical skills for better understanding the causes and effects of world events and the broader dynamics of the relations among nations. Emphasis is placed on theories of international relations, state and non-state players, the historical struggle for power between countries, international organizations, international economics, and the foreign policy process both in the United States and abroad. Pass/No Pass Option. C-ID # POLS 140. CSUGE: D8; IGETC: 4H.

**POL 006  POLITICS OF RACE, CLASS AND GENDER  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the role race, economic class, and gender have and currently play in global politics. The class surveys the political history, goals, strategies, perspectives, barriers and successes of women, the poor, and selected minorities within the context of politics around the world, as well as the effects of their intersectionality. Various ethnic, religious, socio-economic and gender groups are considered. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: D8; IGETC: 4H.

**POL 007  INTERNATIONAL FILMS  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a critical look at the world and its problems through some of the finest international films. Films from Asia, Africa, Europe, and the Americas are viewed and analyzed to explore such topics as nationalism, sovereignty, war and peace, ethnic conflict, economics and immigration. This course is cross-listed as Humanities 007 (HUM 007). Pass/No Pass Option. CSUGE: C2, D7; IGETC: 3B.

**POL 020  CONTROVERSIAL LEGAL ISSUES  3.0 UNITS**
Total Lecture: 54 hours
Advisory: POL 001
Acceptable for credit: University of California, California State University
This course develops critical thinking skills as applied to contemporary legal and political issues that stem from controversies over civil rights and liberties. Topics such as drug decriminalization, offensive speech, affirmative action, discrimination against gender and sexual orientation, school prayer, the right to die, and pornography are explored. Students engage in debates on the issues, applying skills that allow them to distinguish between fact and judgment. Completion of Political Science 001 is recommended. Pass/No Pass Option. CSUGE: A3, D8; IGETC: 4H.

**PSY 001  GENERAL PSYCHOLOGY  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course introduces major concepts, problems and methods that psychologists use to investigate and understand the human mind. Major topics of study include the history and origins of psychology, introductory statistical concepts, motivation, emotion, biological determinants of behavior, environmental factors in behavior, psychological tests and measurements, and learning and personality theory. This course is approved for credit by exam. Pass/No Pass Option. C-ID # PSY 110. CSUGE: D9; IGETC: 4I.

**PSY 001H  GENERAL PSYCHOLOGY - HONORS  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This Honors course introduces major concepts, problems, and methods that psychologists use to investigate and understand the human mind. Major topics of study include the history and origins of psychology, introductory statistical concepts, motivation, emotion, biological determinants of behavior, environmental factors in behavior, psychological tests and measurements, and learning and personality theory. Students cannot get credit for both PSY 001 and PSY 001H. Enrollment in the Honors Program is required. This course is approved for credit by exam. Pass/No Pass Option. C-ID # PSY 110. CSUGE: D9; IGETC: 4I.

**PSY 007  BIOLOGICAL PSYCHOLOGY  3.0 UNITS**
Total Lecture: 54 hours
Prerequisite: PSY 001 or PSY 001H
Acceptable for credit: University of California, California State University
This course is an introduction to the physiological substrates of behavior. Among the areas covered are neurophysiology, the functional nervous system, senses, emotion, motivation, and learning. The course has value for behavioral science, paramedical, and pre-medical majors. Pass/No Pass Option. C-ID # PSY 150. CSUGE: D9; IGETC: 4I.

**PSY 010  SOCIAL PSYCHOLOGY  3.0 UNITS**
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course studies psychological and sociological influences on an individual while functioning in social contexts, including the development of self-image, patterns of social behavior, attraction /repulsion, conformity /rebellion, formation of attitudes, and problems during social change. Pass/No Pass Option. C-ID # PSY 170. CSUGE: D9; IGETC: 4I.

**PSY 012  HUMAN GROWTH AND DEVELOPMENT  3.0 UNITS**
Total Lecture: 54 hours
Advisory: PSY 001
Acceptable for credit: University of California, California State University
This course blends psychological, physiological, cultural and other environmental forces that affect human growth and development. Additionally, theoretical models and research into the development of cognitive, perceptual, physical, personality and emotional abilities are presented. This course is approved for credit by exam. Grade only. C-ID # PSY 180. CSUGE: D9; IGETC: 4I.

**PSY 015  INTRODUCTION TO RESEARCH METHODS  3.0 UNITS**
Total Lecture: 54 hours
Prerequisite: (MAT 010 or MAT 010H or MAT 009 or SOC 016) and (PSY 001 or PSY 001H)
Acceptable for credit: University of California, California State University
This course surveys various psychological research methods with an emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology are examined through a review of research in a variety of sub-disciplines of psychology. Pass/No Pass Option. C-ID # PSY 200. CSUGE: D9; IGETC: 4I.
PSY 015H  INTRODUCTION TO RESEARCH METHODS - HONORS  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: (MAT 010 or MAT 010H or MAT 009 or SOC 016) and (PSY 001 or PSY 001H)
Acceptable for credit: University of California, California State University
This honors course surveys various psychological research methods with an emphasis on research design, experimental procedures, descriptive methods, instrumentation, and the collection, analysis, interpretation, and reporting of research data. Research design and methodology are examined through a review of research in a variety of sub-disciplines of psychology. Students cannot get credit for both PSY015 and PSY015H. Enrollment in the Honors Program is required. Pass/No Pass Option. C-ID # PSY 200. CSUGE: D9; IGETC: 4I.

PSY 025  INTRODUCTION TO ABNORMAL PSYCHOLOGY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: PSY 001 or PSY 001H
Acceptable for credit: University of California, California State University
This course focuses upon various mental disorders, categories and treatments. Disorders and treatments studied include depressive disorders, anxiety disorders, substance abuse disorders, schizophrenia, sexual disorders, developmental disorders, and personality disorders. This course is approved for credit by exam. Pass/No Pass Option. C-ID # PSY 120. CSUGE: D9; IGETC: 4I.

PSY 030  PSYCHOLOGY OF ADDICTION AND SUBSTANCE ABUSE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the physiological and psychological processes of addiction and how they relate to the abuse of legal and illegal substances. Pass/No Pass Option. C-ID # PSY 130. CSUGE: D9.

PSY 045  INTRODUCTION TO HUMAN SEXUALITY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an up-to-date and comprehensive introduction to the topic of human sexuality, including information and perspectives from sociology, health science, psychology, and anthropology. Topics include sexual anatomy and physiology, sexual expression, sexual orientation, sexually transmitted diseases, safe sexual practices, and sexual problems. The emphasis of this course is the history, attitudes, medical aspects, and current practices of sexuality in the United States. Pass/No Pass Option. C-ID # PSY 130. CSUGE: D10; E; IGETC: 4J.

READING (REA)

REA 054  CRITICAL COLLEGE READING AND THINKING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course enables students to examine, develop and apply the concepts of critical reading, critical thinking, analysis, and logical reasoning in multi-discipline and multi-cultural academic sources. Emphasis is on critical reading, logical reasoning/thinking, reflective judgment, and problem-solving skills that lead to the ability to interpret, analyze, and critically evaluate college text, and advocate ideas. Grade only. CSUGE: A3, E.

REGISTERED NURSING

For Vocational Nursing and Psychiatric Technician courses, see Health Occupations

SOCIAL JUSTICE STUDIES (SJS)

SJS 001  SOCIAL JUSTICE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
Interdisciplinary study of social justice. The course will cover philosophical and historical foundations of the social justice concept and movement and examine the socio-economic, cultural and political conditions of key social groups. The lens will be centered on but not limited to the experiences of the United States. Pass/No Pass Option. C-ID # SJS 110.

SJS 002  INTRODUCTION TO GENDER STUDIES  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
In this course, students will learn how sex and gender are shaped by biological and environmental factors, and what research shows about sex differences. Further, students will examine gender from feminist perspectives. This course will examine how gender is constructed in various institutions such as the family, mass media, education, and the economy. In this course students will be given a basic understanding of the gender and feminism and will be introduced to relevant theories of gender, the intersectionality of gender, race and class, as well as how gender shapes an individual's experience of the world in realms such as communication, sexuality, relationships, work, health and violence. Pass/No Pass Option. C-ID # SJS 120.

SJS 003  INTRODUCTION TO LGBTQ STUDIES  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University, University of California
This introductory course introduces students to a broad range of historical and contemporary gay, lesbian, bisexual, transgender, and queer issues addressed through sociological, political, racial, and sexual context. Pass/No Pass Option. C-ID # SJS 130.

SOCIOLOGY (SOC)

SOC 001  INTRODUCTION TO SOCIOLOGY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the field of sociology as a scientific discipline, an examination of human society from various sociological perspectives, an analysis of the relationship between personality development and the socio-cultural environment, the presentation of social institutions, and the possible influences of these on behavior. Pass/No Pass Option. C-ID # SOC 110. CSUGE: D; IGETC: 4.

SOC 001H  INTRODUCTION TO SOCIOLOGY - HONORS  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course is an introduction to the field of sociology as a scientific discipline, an examination of human society from various sociological perspectives, an analysis of the relationship between personality development and the socio-cultural environment, the presentation of social institutions, and the possible influences of these on behavior. The honors component involves an in-depth analysis of specific topics, using current information from research journals and is more rigorous than SOC 001. Students cannot get credit for both SOC 001 and SOC 001H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # SOC 110. CSUGE: D; IGETC: 4.
<table>
<thead>
<tr>
<th>COURSES</th>
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</thead>
<tbody>
<tr>
<td><strong>SOC 002</strong> SOCIAL PROBLEMS</td>
</tr>
<tr>
<td>Total Lecture: 54 hours</td>
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<tr>
<td>Advisory: SOC 001</td>
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<tr>
<td>Acceptable for credit: University of California, California State University</td>
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<tr>
<td>This course investigates the sociological perspective on social problems. Drug addiction, crime, poverty, violence, mental illness, prejudice, and other issues are discussed. Causes of problems and possible remedies are explored, including available resources in the local community. Pass/No Pass Option. C-ID # SOCI 115. CSUGE: D; IGETC: 4.</td>
</tr>
</tbody>
</table>

| **SOC 002H** SOCIAL PROBLEMS - HONORS | 3.0 UNITS |
| Total Lecture: 54 hours |
| Advisory: SOC 001 or SOC 001H |
| Acceptable for credit: University of California, California State University |
| This course investigates the sociological perspective on social problems. Drug addiction, crime, poverty, violence, mental illness, prejudice, and other issues are discussed. Causes of problems and possible remedies are explored, including available resources in the local community. The honors component involves an in-depth analysis of specific topics, using current information from research journals and is more rigorous than SOC 002. Students cannot get credit for both SOC 002 and SOC 002H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # SOCI 115. CSUGE: D; IGETC: . |

| **SOC 016** INTRODUCTION TO STATISTICS IN SOCIAL AND BEHAVIORAL SCIENCES | 3.0 UNITS |
| Total Lecture: 54 hours |
| Prerequisite: (PSY 001 or PSY 001H or SOC 001 or SOC 001H) and Intermediate Algebra |
| Acceptable for credit: University of California, California State University |
| For students majoring in psychology, sociology, and other behavioral sciences. Introduces students to the basic statistical techniques and design methodologies used in behavioral sciences. Topics include descriptive statistics; probability and sampling distributions; statistical inference and power; linear correlation and regression; chi-square; t-tests, and ANOVA. An emphasis will be placed on the interpretation and relevance of statistical findings and the application of statistical concepts to real-world problems in the behavioral and social sciences. Pass/No Pass Option. C-ID # SOCI 125. CSUGE: B4; IGETC: 2A. |

| **SOC 021** INTRODUCTION TO RACE AND ETHNICITY | 3.0 UNITS |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course introduces the student to the sociological analysis of race, ethnicity, and racism. Topics include the cultural, political, and economic practices and institutions that support or challenge racism, racial and ethnic inequalities, as well as historical and contemporary patterns of interaction between various racial and ethnic groups. Pass/No Pass Option. C-ID # SOCI 150. CSUGE: D; IGETC: 4. |

| **SOC 040** INTRODUCTION TO MARRIAGE AND FAMILY | 3.0 UNITS |
| Total Lecture: 54 hours |
| Advisory: SOC 001 |
| Acceptable for credit: University of California, California State University |
| An analysis of marriage and the family in contemporary American society including assessments of problems of mate choice, courtship and dating practices; adjustments to marriage and divorce; some aspects of parenthood and child training, and an investigation of dysfunctional familial relationships. Pass/No Pass Option. C-ID # SOCI 130. CSUGE: D; IGETC: 4. |

| **SOC 045** INTRODUCTION TO HUMAN SEXUALITY | 3.0 UNITS |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course is an up-to-date and comprehensive introduction to the topic of human sexuality, including information and perspectives from sociology, health science, psychology, and anthropology. Topics include sexual anatomy and physiology, sexual expression, sexual orientation, sexually transmitted diseases, safe sexual practices, and sexual problems. The emphasis of this course is the history, attitudes, medical aspects, and current practices of sexuality in the United States, including a special emphasis on urban and suburban areas of California. Pass/No Pass Option. C-ID # SOCI 160. CSUGE: D; IGETC: 4. |

| **SOC 047** SOCIOLOGY OF CRIMINOLOGY | 3.0 UNITS |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course covers the sociological analysis of crime, criminal behavior, and the criminal justice system. It explores the history and social construction of crime and criminality and examines the definition of crime and its violations, as well as the laws and methods used to control criminal behavior. Also, measurement of crime and basic theoretical explanations of criminal behavior are discussed. Pass/No Pass Option. C-ID # SOC 160. CSUGE: D; IGETC: 4. |

| **SOC 050** INTRODUCTION TO CRIMINAL JUSTICE | 3.0 UNITS |
| Total Lecture: 54 hours |
| Acceptable for credit: California State University, University of California |
| This course introduces students to the characteristics of the criminal justice system in the United States. Focus is placed on examining crime measurement, theoretical explanations of crime, responses to crime, components of the system, and current challenges to the system. The course examines the evolution of the principles and approaches utilized by the justice system and the evolving forces which have shaped those principals and methods. Although justice structure and process are examined in a cross-cultural context, the emphasis is placed on the US justice system, particularly the structure and function of US police, courts, and corrections. Students are introduced to the origins and development of criminal law, legal process, and sentencing and incarceration policies. Pass/No Pass Option. C-ID # AJ 110. CSUGE: D. |

| **SOC 054** CONCEPTS OF CRIMINAL LAW | 3.0 UNITS |
| Total Lecture: 54 hours |
| Prerequisite: SOC 050 |
| Acceptable for credit: University of California, California State University |
| This course offers an analysis of the doctrines of criminal liability in the United States and the classification of crimes against persons, property, morals, and public welfare. Special emphasis is placed on the classification of crime, the general elements of crime, the definitions of common and statutory law, and the nature of acceptable evidence. This course utilizes case law and case studies to introduce students to criminal law. The completion of this course offers a foundation upon which upper-division criminal justice course will build. The course also includes some limited discussion of prosecution and defense decision making, criminal culpability, and defenses to crimes. Pass/No Pass Option. C-ID # AJ 120. |

| **SOC 058** INTRODUCTION TO CORRECTIONS | 3.0 UNITS |
| Total Lecture: 54 hours |
| Acceptable for credit: University of California, California State University |
| This course provides a history of and critical analysis of punishment, the various types of punishment, alternatives to punishment, and the impact of punishment on the Criminal Justice System, corrections, a critical examination of the types of correctional institutions and the clients housed in each institution, and an examination of contemporary correctional issues. Pass/No Pass Option. C-ID # AJ 200. |
SOC 060  COMMUNITY AND JUSTICE SYSTEM  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course examines the complex, dynamic relationship between communities and the justice system in addressing crime and conflict with an emphasis on the challenges and prospects of administering justice within a diverse multicultural population. Topics may include the consensus and conflicting values in Cultural, Religion, and Law. Pass/No Pass Option. C-ID # AJ 160. CSUGE: D; IGETC 4

SPANISH (SPA)

SPA 001  FIRST SEMESTER SPANISH (ELEMENTARY LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Corequisite: SPA 001L
Acceptable for credit: University of California, California State University
The student acquires the basic skills for communication in Spanish: listening, speaking, reading, and writing. The student is exposed to a general overview of Hispanic civilization and culture from Spain, Latin America, and the United States. This course is equivalent to two years of high school Spanish. Pass/No Pass Option. C-ID # SPAN 100. CSUGE: C2; IGETC: 6A

SPA 001L  FIRST SEMESTER SPANISH LABORATORY  0.5 UNITS
Total Lab: 27 hours
Corequisite: SPA 001
Acceptable for credit: California State University
The student acquires the basic skills for communication in Spanish: listening, speaking, reading, and writing. The student is exposed to a general overview of Hispanic civilization and culture. This is a 0.5 unit class that is a corequisite of SPA 001. Pass/No Pass Option. CSUGE: C2.

SPA 002  SECOND SEMESTER SPANISH (ELEMENTARY LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: SPA 001 or 2 years of High School Spanish
Corequisite: SPA 002L
Acceptable for credit: University of California, California State University
SPA 002 is a continuation of SPA 001. The student continues to develop basic skills for communication in Spanish: Listening, speaking, reading, and writing. The student is exposed to a general overview of Hispanic civilization and culture. Pass/No Pass Option. C-ID # SPAN 110. CSUGE: C2; IGETC: 6A.

SPA 002L  SECOND SEMESTER SPANISH LABORATORY  0.5 UNITS
Total Lab: 27 hours
Advisory: SPA 002
Acceptable for credit: California State University
SPA 002L is a continuation of SPA 001L and is also a corequisite of SPA 002. The student continues to develop basic skills for communication in Spanish: Listening, speaking, reading, and writing. The student is exposed to a general overview of Hispanic civilization and culture. Pass/No Pass Option. CSUGE: C2.

SPA 003  THIRD SEMESTER SPANISH (INTERMEDIATE LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: SPA 002
Acceptable for credit: University of California, California State University
SPA 003 is a continuation of SPA 002. Students will continue to develop proficiency in Spanish language skills through a review of grammar, vocabulary building exercises, culturally authentic dialogues, readings, and multimedia studies in Hispanic civilization, traditions, customs, and values. This course is approved for credit by exam. Pass/No Pass Option. C-ID # SPAN 200. CSUGE: C2; IGETC: 3B, IGETC 6A.

SPA 004  FOURTH SEMESTER SPANISH (INTERMEDIATE LEVEL)  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: SPA 003
Acceptable for credit: University of California, California State University
SPA 004 is a continuation of SPA 003. The student will continue to develop proficiency in Spanish language skills through a review of grammar, vocabulary-building exercises, culturally relevant dialogues and readings regarding Hispanic civilization. This course is approved for credit by exam. Pass/No Pass Option. C-ID # SPAN 210. CSUGE: C2; IGETC: 3B, IGETC 6A.

SPA 050A  BASIC CONVERSATIONAL SPANISH AND CULTURE  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
Designed for those desiring a basic, practical conversational approach to learning a language, this course emphasizes conversation and vocabulary-building with a minimum of grammar. A variety of activities center on everyday life in Spanish-speaking countries. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2.

SPA 050B  BASIC CONVERSATIONAL SPANISH AND CULTURE  3.0 UNITS
Total Lecture: 54 hours
Advisory: SPA 050A
Acceptable for credit: California State University
This course is a continuation of SPA 050A. Students increase their vocabulary and knowledge of basic grammatical structures while emphasizing conversation. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2.
### TRANSPORTATION (TRN)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Total Lecture</th>
<th>Total Lab</th>
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<tr>
<td>TRN 010</td>
<td>Introduction to Transit Industry Careers</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 101</td>
<td>Foundations of Public Service for Transit Workers</td>
<td>2.0 UNITS</td>
<td>18 hours, 54 hours</td>
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<tr>
<td>TRN 102</td>
<td>Public Service and Stress Management for Public Transit Employees</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 103</td>
<td>Community Health Issues for Public Transit Employees</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 104</td>
<td>Peer Mentoring for Public Transit Workers: One-On-One Skills</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 105</td>
<td>Group Facilitation and Training Skills for Peer Mentors</td>
<td>1.0 UNIT</td>
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<td>TRN 106</td>
<td>Interpersonal Communication for Transit Workers</td>
<td>1.0 UNIT</td>
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<tr>
<td>TRN 107</td>
<td>Labor/Management Problem Solving in Public Transit</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 108</td>
<td>Performance Coaching for Public Transit Leaders</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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<tr>
<td>TRN 109</td>
<td>Transit Business Technology and Practices for Transit Employees</td>
<td>1.0 UNIT</td>
<td>9 hours, 27 hours</td>
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<tr>
<td>TRN 110</td>
<td>Transit Operations for New Leaders</td>
<td>2.0 UNITS</td>
<td>36 hours</td>
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<tr>
<td>TRN 121</td>
<td>Way, Power, &amp; Signal Maintenance Core Training I</td>
<td>1.0 UNIT</td>
<td>9 hours, 27 hours</td>
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<td>TRN 122</td>
<td>Way, Power, &amp; Signal Maintenance Core Training II</td>
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<tr>
<td>TRN 123</td>
<td>Way, Power, &amp; Signal Maintenance Core Training III</td>
<td>1.0 UNIT</td>
<td>18 hours</td>
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</tr>
</tbody>
</table>

**Pass/No Pass Option.**

This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to the principles of effective interpersonal communication in public transit professions. Topics include verbal and non-verbal communication, active listening, and accountability in communication. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to the principles of effective labor/ management problem solving in public transit professions. Topics include an overview of labor and management, trust building, and developing problem solving strategies. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to the principles of effective performance coaching in unionized public transit professions. Topics include leadership roles, management styles, and positive performance coaching. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 9 hours, Total Lab: 27 hours**

Students acquire fundamental technology skills necessary in today’s public transit agencies, including computer basics, simple usage of Microsoft Office applications, and accessing the Internet. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 36 hours**

Students are introduced to major support departments in public transit bus (coach) operations: coach maintenance, transit planning and scheduling, transit radio dispatching, and field supervision. Students learn the major functions, relationships, and overall impact of these departments on delivering safe and reliable public bus service on the street. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 9 hours, Total Lab: 27 hours**

Students are introduced to the basic elements of one- on-one peer mentoring in a transit industry environment. Students acquire fundamental knowledge of the personal and interpersonal skills needed to be an effective peer mentor in entry-level transit operations. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

This course focuses on the theory and practice of facilitating effective meetings in a public transit environment. Topics include the differences between leading and facilitating, fundamental facilitation techniques, and personal strategies for facilitators to maintain neutrality while guiding meeting participants to successful outcomes. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to the relationship between delivering professional public service and managing stress factors inherent in the transit industry. Students acquire fundamental knowledge of public service strategies and stress management skills needed for a career in transit industry operations. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to common community health problems and issues they are likely to encounter on the job in the public transit industry. Topics include biohazards, communicable disease, and occupational safety. Additionally, students are taught a framework for understanding and handling interactions with members of the community suffering from difficult health issues, such as substance abuse or mental illness. This course is approved for credit by exam. Pass/No Pass Option.

**Total Lecture: 18 hours**

Students are introduced to the basic elements of one-on-one peer mentoring in a transit industry environment. Students acquire fundamental knowledge of the personal and interpersonal skills needed to be an effective peer mentor in entry-level transit operations. This course is approved for credit by exam. Pass/No Pass Option.

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**Total Lecture: 9 hours, Total Lab: 27 hours**

Students acquire fundamental technology skills necessary in today’s public transit agencies, including computer basics, simple usage of Microsoft Office applications, and accessing the Internet. This course is approved for credit by exam. Pass/No Pass Option.
TRN 131  BASIC PRINCIPLES OF TRACK MAINTENANCE I  2.0 UNITS
Total Lecture: 27 hours, Total Lab: 27 hours
Students are introduced to track structure, safety and use of track, track tools, roadbed, crossties, and ballast. This course prepares students for entry-level positions in railway track work. This course is approved for credit by exam. Pass/No Pass Option.

TRN 132  BASIC PRINCIPLES OF TRACK MAINTENANCE II  2.0 UNITS
Total Lecture: 27 hours, Total Lab: 27 hours
Students are introduced to rail maintenance, rail joint maintenance, track alignment and gage, track surface, turnouts, and roadway maintenance. This course prepares students for entry-level positions in railway track work. This course is approved for credit by exam. Pass/No Pass Option.

TRN 133  ADVANCED PRINCIPLES OF TRACK MAINTENANCE I  2.0 UNITS
Total Lecture: 27 hours, Total Lab: 27 hours
Students are introduced to rail replacement, cutting and welding, turnouts and trackwork, track construction, railroad grade crossing, and management and security. This course prepares students for entry-level positions in railway track work. This course is approved for credit by exam. Pass/No Pass Option.

TRN 134  ADVANCED PRINCIPLES OF TRACK MAINTENANCE II  2.5 UNITS
Total Lecture: 27 hours, Total Lab: 54 hours
Students are introduced to operation work equipment, vegetation control, rail defects, track inspection, Federal Railroad Administration (FRA) track standards, and derailment work. This course prepares students for entry-level positions in railway track work. This course is approved for credit by exam. Pass/No Pass Option.

TRN 141  PRINCIPLES OF ELECTRICITY AND TEST EQUIPMENT  3.0 UNITS
Total Lecture: 45 hours, Total Lab: 27 hours
This course covers the basic principles of electricity needed to safely and efficiently perform overhead line work, including proper use of electrical test equipment. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority. This course is approved for credit by exam. Pass/No Pass Option.

TRN 142  ELECTRICAL SAFETY FOR THE TRADES  2.5 UNITS
Total Lecture: 45 hours
Prerequisite: Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority. This course covers basic principles of electricity and the potential dangers it can pose to humans. Safety topics include electrical hazards, use of electrical protective devices, and safe work practices around electricity. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 143  DC THEORY AND POWER COMPONENTS  2.0 UNITS
Total Lecture: 36 hours
Advisory: Elementary Algebra Skills.
This course covers DC (Direct Current) theory and various power components used in overhead line work. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 144  TRACTION POWER SAFETY PRACTICES  2.5 UNITS
Total Lecture: 45 hours
This course covers safe practices for the use of traction power systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Core apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 151  OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS I  2.5 UNITS
Total Lecture: 36 hours, Total Lab: 27 hours
This course covers high voltage, NFPA 70E, red tag power outage procedures, print reading and documentation, and hand and power tools. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 152  OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS II  2.5 UNITS
Total Lecture: 27 hours, Total Lab: 54 hours
This course covers traction power tools and test equipment, traction power substations, power distribution and control, and overhead contact systems. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 153  OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS III  2.5 UNITS
Total Lecture: 36 hours, Total Lab: 27 hours
This course covers fall protection, rigging and hoisting, hi-rail vehicles, bucket truck and bucket rescue, grounding, and confined space entry. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 154  CATENARY SAFE WORK PRACTICES  5.0 UNITS
Total Lecture: 72 hours, Total Lab: 54 hours
This course covers the hazards of working on overhead catenary lines, and how to effectively protect against them. Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 155  MOBILE CRANE - BOOM TRUCK  2.0 UNITS
Total Lecture: 27 hours, Total Lab: 27 hours
This course covers safe use of the mobile crane (boom truck). Per California Code of Regulations, this course is limited to students admitted to the Overhead Line Worker apprenticeship program at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

TRN 201  SERVICE MECHANIC: ORIENTATION & SAFETY  2.5 UNITS
Total Lecture: 45 hours
This course covers an orientation to VTA, the mechanic helper program, the shop floor, familiarization with the fleet, and electrical safety. This course is approved for credit by exam. Pass/No Pass Option.

TRN 202  SERVICE MECHANIC: TOOLS & FASTENERS  2.5 UNITS
Total Lecture: 45 hours
This course focuses on tools and fasteners: correct work methods, care and selection of tools, common tools and uses, and common fasteners and uses. This course is approved for credit by exam. Pass/No Pass Option.
This course covers direct current, circuits, Ohm’s Law, and Watt’s Law. This course is approved for credit by exam. Pass/No Pass Option.

TRN 302 THE ART OF TRAINING FOR TRANSIT II 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Prerequisite: TRN 301
This is an intermediate level course of a three-course series designed for transit trainers to advance their mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will advance their skills in self-assessment/reflection and build a personal system of continuous learning. Students will learn multiple teaching modalities and use of instructional software through practical labs and written journals throughout the course. Students will also explore student assessment and classroom management techniques geared to intermediate/advanced topics classes. This course, as part of the Art of Training for Transit series, is appropriate for trainers with at least one year of teaching experience, especially those who teach in transit apprenticeships or other formal training programs. Pass/No Pass Option.

TRN 303 THE ART OF TRAINING FOR TRANSIT III 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Prerequisite: TRN 301 and TRN 302
This is an advanced level course of a three-course series designed for transit trainers to advance their mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will evaluate and help refine teaching styles, approaches, and assessment tools of other instructors in their training department/section, using the course content from TRN 301 and TRN 302. Students will learn effective mentoring and coaching skills for a training department/section. This course is appropriate for trainers with at least two years of teaching experience, especially for those who play a lead role or teach in transit apprenticeships or other formal training programs. Pass/No Pass Option.

TRN 401 COACH OPERATOR: NEW OPERATOR TRAINING I 2.0 UNITS
Total Lecture: 27 hours, Total Lab: 27 hours
This classroom/lab instruction course for Coach Operator Apprentices focuses on DMV legal regulations as they apply to the mass transit industry. This course is approved for credit by exam. Pass/No Pass Option.

TRN 402 COACH OPERATOR: NEW OPERATOR TRAINING II 5.0 UNITS
Total Lecture: 45 hours, Total Lab: 135 hours
Advisory: TRN 401
This classroom/lab instruction course for Coach Operator apprentices focuses on transit operations - rules and regulations, and processes. Apprentices also complete training in the field. This course is approved for credit by exam. Pass/No Pass Option.

TRN 403 COACH OPERATOR: NEW OPERATOR TRAINING III 1.0 UNIT
Total Lecture: 18 hours
Advisory: TRN 401
This classroom instruction course for Coach Operator apprentices focuses on customer service, internal relationships between departments, and personal well-being. This course is approved for credit by exam. Pass/No Pass Option.
**COURSES**

**2023-2024 MISSION COLLEGE CATALOG**

Supervisor apprenticeship programs at Santa Clara Valley Transportation Authority (VTA) meet the requirements identified by VTA and the California Public Utilities Commission (General Order 143-B). This training meets the requirements identified by VTA. Pass/No Pass Option.

**TRN 404 COACH OPERATOR: NEW OPERATOR TRAINING IV** 1.0 UNIT

Total Lecture: 18 hours
Advisory: TRN 401
This classroom instruction course for Coach Operator Apprentices focuses on safety and security while driving. This course is approved for credit by exam. Pass/No Pass Option.

**TRN 405 COACH OPERATOR: NEW OPERATOR TRAINING V** 1.0 UNIT

Total Lecture: 18 hours
Advisory: TRN 401
This classroom instruction course for Coach Operator Apprentices focuses on technical proficiency with coach equipment, troubleshooting, and vehicle inspection. This course is approved for credit by exam. Pass/No Pass Option.

**TRN 421 TRANSIT DISPATCHING AND RADIO COMMUNICATIONS** 8.0 UNITS

Total Lecture: 72 hours, Total Lab: 216 hours
This intensive course covers the combined classroom and field training sections of Transit Radio Dispatcher (TRD) training. Per California Code of Regulations, this course is limited to students admitted to the Transit Radio Dispatcher apprenticeship programs at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

**TRN 441 BUSINESS TECHNOLOGY AND WRITING FOR SUPERVISORS** 1.0 UNIT

Total Lecture: 9 hours, Total Lab: 27 hours
This course covers fundamental technology skills necessary for supervisory roles in today’s public transit agencies, including the use of Microsoft Office applications and e-mail systems. Other topics include the basics of professional written communications in a business environment. Per California Code of Regulations, this course is limited to students admitted to the Transit Supervisor apprenticeship programs at Santa Clara Valley Transportation Authority. Pass/No Pass Option.

**TRN 501 LIGHT RAIL OPERATOR SAFETY CERTIFICATION** 2.0 UNITS

Total Lecture: 36 hours
This course is part of VTA’s Light Rail Safety Certification program, which is required for employees that will perform work in a rail environment. The Light Rail Safety Certification program introduces employees to rail nomenclature and builds a safety foundation that meets the requirements identified by VTA and the California Public Utilities Commission (General Orders 175-A, 172 and 143-B). This course is approved for credit by exam. Pass/No Pass Option.

**TRN 502 LIGHT RAIL OPERATOR YARD CERTIFICATION** 2.0 UNITS

Total Lecture: 36 hours
This course is part of VTA’s Light Rail Yard Operation Certification program, which is required for employees that will operate light rail vehicles within the Guadalupe Yard limits. The Light Rail Yard Operation Certification program introduces employees to VTA’s Kinkisharyo light rail vehicle. Employees will learn about the operations of the vehicle, various components and operating rules. This training meets the requirements identified by VTA and the California Public Utilities Commission (General Order 143-B). This course is approved for credit by exam. Pass/No Pass Option.

**TRN 503A LIGHT RAIL INFRASTRUCTURE: MAINLINE OPERATION CERTIFICATION** 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours
Prerequisite: TRN 501 and TRN 502
This course is part of the VTA Light Rail Mainline Operation Certification program, which is required for employees that will operate light rail vehicles beyond the Guadalupe Yard. The Light Rail Mainline Operation Certification program focuses on the infrastructure found on VTA’s mainline and familiarizes employees with requirements to safely navigate through them. This training meets the requirements identified by VTA and the California Public Utilities Commission (General Order 143-B). Pass/No Pass Option.

**TRN 503B LIGHT RAIL INFRASTRUCTURE: BLUE LINE FAMILIARIZATION** 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours
Prerequisite: TRN 501 and TRN 502 and TRN 503A
The Light Rail Infrastructure Blue Line Familiarization course is required for VTA employees that will operate light rail vehicles beyond in revenue service between the Santa Teresa Terminal and Baypointe Terminal. The Blue Line Familiarization focuses on the specific infrastructure found on the blue-line; employees will learn the requirements to safely navigate a Light Rail Vehicle (LRV) through this route. This training meets the requirements identified by VTA. Pass/No Pass Option.

**TRN 503C LIGHT RAIL INFRASTRUCTURE: GREEN LINE FAMILIARIZATION** 2.5 UNITS

Total Lecture: 36 hours, Total Lab: 27 hours
Prerequisite: TRN 501 and TRN 502 and TRN 503A and TRN 503B and TRN 503C
The Light Rail Infrastructure Green Line Familiarization course is required for VTA employees that will operate light rail vehicles in revenue service between the Winchester Terminal and Old Ironside Terminal. The Green Line Familiarization focuses on the specific infrastructure found on the green line; employees will learn the requirements to safely navigate a LRV through this route. This training meets the requirements identified by VTA. Pass/No Pass Option.

**TRN 504 LIGHT RAIL TRAIN OPERATIONS** 2.0 UNITS

Total Lecture: 9 hours, Total Lab: 81 hours
Prerequisite: TRN 501 and TRN 502 and TRN 503A and TRN 503B and TRN 503C and TRN 503D
Acceptable for credit: California State University
Light Rail Train Operations is a capstone course that builds on the TRN 501-503 series. It focuses on the student’s ability to apply the rules, regulations, standard operating procedures, and their LRV/light rail system knowledge through intensive operations training with instructors in the field. This training meets the requirements identified by VTA. Pass/No Pass Option.

**VIETNAMESE (VIE)**

**VIE 001 FIRST SEMESTER VIETNAMESE** 5.0 UNITS

(Elementary Level)
Total Lecture: 90 hours
Acceptable for credit: University of California, California State University
This course covers fundamental vocabulary and basic grammatical structures of the Vietnamese language for daily social situations. Students learn the tonal system of the Vietnamese language and to pronounce the different tones of this language with an acceptable level of accuracy. The course emphasizes listening, speaking, reading, and writing. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 6A.
VIE 002  SECOND SEMESTER VIETNAMESE  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: VIE 001 or two years of high school Vietnamese or equivalent.
Acceptable for credit: University of California, California State University
Vietnamese 002 is a continuation of Vietnamese 001. The student acquires the basic skills for communication in Vietnamese: listening, speaking, reading, and writing. The student is exposed to a general overview of Vietnamese civilization and culture. This course is approved for credit by exam. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

VIE 049A  VIETNAMESE FOR THE VIETNAMESE-SPEAKING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course presents a comparison between the Vietnamese spoken in the U.S. and the formal written and spoken Vietnamese language. Emphasis is on study of Vietnamese culture, society, and history. This course includes studying the accomplishments of the Vietnamese both in Vietnam and in the U.S. This course is taught primarily in Vietnamese. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

VIE 049B  VIETNAMESE LANGUAGE AND CULTURE FOR FLUENT SPEAKERS  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: VIE 049A
Acceptable for credit: University of California, California State University
This course, designed for those whose first language is Vietnamese, is a continuation of Vietnamese 049A. It consists of three segments: language, culture, and Vietnamese-Americans. The course includes (1) a further study of the spoken language and the different styles of writing; (2) a detailed examination of the distinctive features of the Vietnamese culture through readings in Vietnamese poetry, prose, and the arts; and (3) a study of the accomplishments of the Vietnamese in their home country and in the U.S. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

WORK EXPERIENCE (WRK)

PROGRAM: Business and Technology Experience Education and Internship

Each student participating in Cooperative Work Experience Education is assigned to a faculty-advisor who meets with the student and his/her employer to discuss, define, develop and write measurable learning objectives in developing short- and long-range career goals.

Cooperative Work Experience Education units satisfy a portion of the requirements for a 2-year degree and are transferable to most of the state colleges and universities. Determination of the units is based on the following schedule of hours.

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<th>UNITS</th>
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Students working in non-paid positions need to work 60 hours per unit of credit per semester.

Work Experience classes are repeatable. A student may earn a total of 16 units of work experience while attending a California community college. A total of 6 units may be earned in general work experience.

NOTE: During Summer Session, the enrollment of 7 units do not apply. Student can enroll in only one class and be concurrently enrolled in Work Experience.

WRK 300CD OCCUPATIONAL WORK EXPERIENCE FOR CHILD DEVELOPMENT  3.0 UNITS
180 hours of unpaid or 225 hours of paid work experience, per semester.
Prerequisite: CHD 001 and CHD 002 and CHD 010 and CHD 017 and CHD 020 and CHD 024 and CHD 025 and HOC 004 Acceptable for credit: California State University
This course is designed for students working in the early childhood special education field (birth-age 5). The student is required to attend an orientation at the beginning of the course. Students earn 1.0 unit of credit for every 60 hours of unpaid work or 75 hours of paid work. Students can earn a maximum number of 8 units per term. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Note: Students must be working in a job or volunteer position related to the early childhood special education. Grade Only.

WRK 300FP OCCUPATIONAL WORK EXPERIENCE FOR FIRE PREVENTION INTERNSHIP  3.0 - 4.5 UNITS
Prerequisite: FPT 055 or FPT 301
Acceptable for credit: California State University
This Work Experience course is part of the Fire Prevention Internship Program and accompanies FPT 300A, 300B, 300C and 300D. This course requires that students apply for and are admitted to a paid internship with a fire agency, and students may have to meet eligibility requirements for the internship that may vary according to the agency. Fire Prevention Interns will complete 10-14 hours paid employment per week at a fire agency, Monday through Friday during normal business hours. Interns may be assigned to 2 different agencies. Units vary between 3 units for 10 hours (160 hours total) to 4.5 units for 14 hours (224 hours total). According to CCR Title 5, section 55252, Occupational Work Experience Education is supervised employment extending classroom - based occupational learning at an on-the-job learning station related to the student’s educational or occupational goal. This course is designed for students working in a paid or unpaid job in the fire prevention and fire service industries. The course provides students with a structured program designed to teach them new soft and employability skills that assist them in advancing in their current position or securing a job in the future. The student is required to attend an orientation at the beginning of the course and complete a minimum of 75 hours for paid work for each unit earned per semester. Students can earn a maximum of 8 units per term. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Only one Work Experience course may be taken per semester. Note: Students must be working in a job or volunteer position related to their major. Grade Only.

WRK 300GW GENERAL WORK EXPERIENCE  1.0 - 4.0 UNITS
Acceptable for credit: California State University
General Work Experience provides an opportunity for students to earn college credit for on-the-job training in a paid or volunteer position. The student will be required to attend orientation at the beginning of the course and complete a minimum of 75 hours for paid work or a minimum of 60 hours for unpaid work for each unit earned per semester. Students may enroll in a maximum of 8 units of work experience per term, for a total maximum of 16 units of general work experience during their community college attendance. Note: Students must be working in a paid job or volunteer position prior to starting the course. Pass/No Pass Option.
WRK 300HM OCCUPATIONAL WORK EXPERIENCE FOR HOSPITALITY MANAGEMENT  1.0-8.0 UNITS
60-300 hours of unpaid work experience, or 75-375 hours of paid work experience, per semester.
According to Title 5 education code, section 55252,
Occupational Work Experience Education is supervised employment extending classroom - based occupational learning at an on-the-job learning station related to the student’s educational or occupational goal. This course is designed for students working in a paid or unpaid job in the food service, hospitality and restaurant industries. The course provides students with a structured program designed to teach them new soft and employability skills that assist them in advancing in their current position or securing a job in the future. The student is required to attend an orientation at the beginning of the course and complete a minimum of 75 hours for paid work or a minimum of 60 hours for unpaid work for each unit earned per semester. Students can earn a maximum of 8 units per term. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Only one Work Experience course may be taken per semester. Note: Students must be working in a job or volunteer position related to their major. Pass/No Pass Option.

WRK 300MT OCCUPATIONAL WORK EXPERIENCE FOR MECHATRONIC TECHNOLOGY  1.0 - 4.0 UNITS
This course is designed for students working in the Mechatronics industry. The student is required to attend an orientation at the beginning of the course and complete a minimum of 75 hours (for paid work) or a minimum of 60 hours (for unpaid work) for each unit earned per semester. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Note: Students must be working in a job or volunteer position related to the Mechatronics industry. Pass/No Pass Option.

WRK 300TN OCCUPATIONAL WORK EXPERIENCE FOR THE TRANSPORTATION INDUSTRY  1.0-8.0 UNITS
60-480 hours of unpaid work experience, or 72-576 hours of paid work experience, per semester.
According to Title 5 education code, section 55252,
Occupational Work Experience Education is supervised employment extending classroom - based occupational learning at an on-the-job learning station related to the student’s educational or occupational goal. This course is designed for students working in the mass transit industry. The student is required to attend an orientation at the beginning of the course. Students earn 1.0 unit of credit for every 60 hours of unpaid, or 75 hours of paid work. Students can earn a maximum number of 8 units per term. Students may earn a maximum of 16 units of occupational work experience during their community college attendance. Note: Students must be working in a job or volunteer position related to the mass transit industry. Pass/No Pass Option.
Mission College Personnel

Chancellor
Bradley Davis

Board of Trustees
Adrienne Grey, President
Susan Fish, Vice-President
Jack Lucas, Trustee
Robert Owens, Trustee
Karl Watanabe, Trustee
Anne Kepner, Trustee
Randi Kinman, Trustee
Casey Chang, Student Trustee

Mission College Administration
President, Seher Awan
Vice President, Administrative Services, Danny Nguyen
Vice President, Instruction, Lorrie Ranck
Vice President, Student Services, Omar Murillo
Dean, Academic Services, Valerie Jensen
Dean, Workforce Innovation, Jeff Pallin
Dean, Business, Education, and Service Industries, Jacqueline Escajeda
Dean, Enrollment and Financial Services, Veronica Martinez
Dean, Public Safety, Health and Wellness, Roy Vasquez (Interim)
Dean, Creative Arts and Communication, Brian Miller
Dean, Institutional Effectiveness and Research, Alfred Gallegos
Dean, People, Culture and Society, Vacant
Dean, Science, Technology, Engineering and Math (STEM), Clement Lam
Dean of Student Services, Richard Alfaro
Executive Director, Athletics, John Vlahos
Executive Director, Student Health Services, Yuko Kawasaki
Director, Child Development Center, Anne Horgan
Director, DSPS and VALOR, Debra Williams
Director, Educational Partnerships, Julian Branch
Director, EOPS/CARE/CalWORKs, Diego Espinoza
Director, HSI-STEM Program, Inez Barragan
Director, International Programs, Chigusa Katoku
Director, Marketing, Ben Demers
Director, Math, Engineering, Science, Achievement (MESA), Edrina Rashidi
Director, Outreach and Student Development, Connor Keese
Director, Student Equity and Success, Ken Songco
Director, TRIO Program, Manuel Salazar

Mission College Department Chairs*
Academic Support Center, Chia Green
Accounting, Jennifer Tseung
Anthropology, Jeff Cormier
Art, Mark Engel
Astronomy, Clint Poe
Biological Sciences, Kelly Neary
Business, Christopher Zilg
Chemistry, Ashley Farris
Child Development Center, Willy Kwong
Communication Studies, Steve Lipman
Computer Applications, Christopher Zilg
Computer Science Information Technology, Faramarz Morterazie
Counseling, Alicia Martinez
Economics, Jeff Cormier
Engineering/MTT, Robert Schaffer
English, Margaret Juncker
English as a Second Language, Amelia Akers-Martin
Fire Protection Technology, Guy Hall
Foreign Language, Carla Breidenbach
Graphic Design, Mark Garrett
Health Occupations, Lania Williams
History, RaeAnn Ramsey
Hospitality Management, Daniel Arias
Humanities, RaeAnn Ramsey
Kinesiology, Kaitlin Ferguson
Learning Services, Alicia Martinez
Library Services, Michele Speck
Mathematics, Pat Lavallo
Music, Keith Johnson
Older Adults, Kathryn Wood
Nutritional Science, Kelly Neary
Philosophy, RaeAnn Ramsey
Physics, Clint Poe
Political Science, Jeff Cormier
Psychology, Jeff Cormier
Reading, Margaret Juncker
Sociology, Jeff Cormier

*The Department Chair positions change periodically; therefore, listed individuals may not be accurate.
Please contact the appropriate Division/Department for updates to this list.
Classified Professionals

ANAYA, SUSANA  
Office Coordinator, HSI-STEM (Hispanic-Serving Institutions-Science, Technology, Engineering, or Mathematics)

BADAL ABIDISHOU, ELEEN  
Financial Aid Systems Specialist, Student Financial Services

BAUTISTA, JONNA  
Duplicating Services Assistant, Office of Administrative Services

BIBAT, CHRISTOPHER  
Sr. Financial Analyst, Office of Administrative Services

BOGATIN-STARR, LIZ  
Administrative Assistant, Academic Senate

CAPCAP, ANNE MARGARET  
Program Analyst, Basic Needs

CARDENAS LANZA, CESAR  
Enrollment & Financial Services Advisor, Student Enrollment Services

CHENG, TINA  
Administrative Specialist, Academic Services

DASALLA, ANALIZA  
Program Specialist, Student Enrollment Services

DELA CRUZ, KRISTAL  
Management Assistant, Office of Administrative Services

DELOS REYES, MELISSA  
Management Analyst, Office of Administrative Services

DO, THANH  
Senior Information Technology Analyst, Student Services

DUONG, STEVE  
Program Specialist, Rising Scholars Program

FEATHERSTONE, JAMILLE  
Research Analyst, Office of Institutional Effectiveness and Research

FEDALIZO, EDWARD  
Instructional Technology Analyst (Distance Education), Office of Instruction

FOOT, THUY  
Administrative Specialist, Creative Arts & Communication

GAITAN, BEVERLY  
Administrative Specialist, Public Safety, Health & Wellness Division

GALANG, ROEHL  
Student Enrollment & Financial Services Advisor, Student Financial Services

GERARDO, RAYMOND  
Program Specialist, Transfer and Articulation

GIORDANENGO, GIANNI  
Instructional Lab Technician, Physics

GONZALEZ, GENINA  
Management Assistant, Office of Instruction

HAMPTON, LORI  
Administrative Specialist, Business, Education & Service Industry

HARRISON, KENDALL  
Administrative Assistant, Workforce Development Initiatives

JOHNSGARD, MELISSA  
Supervisor, Mental Health Services

KAST, DENISE  
Curriculum and Instructional Analyst, Academic Services

KEITH, MARIE  
Executive Assistant, Office of the President

LE, DIEMANH  
Enrollment & Financial Services Advisor, Student Enrollment Services

LEIJA, BEA  
Administrative Specialist, Workforce Innovation

LLOYD, JENNIFER  
Instructional Technician, Chemistry, Math, Science and Engineering Division

LOI, MY  
Administrative Specialist, Counseling & Learning Services Division

LOPEZ, ARACELI  
Program Specialist, Extended Opportunity Program and Services (EOPS) and CARE

LU, XUAN  
Office Coordinator, Disability Support Programs and Services (DSPS)

MARSHALL, AMANDA  
Supervisor, Extended Opportunity Program and Services (EOPS) and CARE

MCMAHON, BARBARA  
Instructional Technician, Biological Sciences

MEDRANO, MARY ANN  
Instructional Technology Technician, Alt Media, DSPS

MELGOZA, YESENIA  
Administrative Assistant, Office of Student Activities

MERCADO, JOCELYN  
Enrollment & Financial Services Advisor, Student Financial Services

MELTON, ZITA  
Management Assistant, Office of Student Services

MOSS, WILL  
Instructional Lab Technician, Art

MURILLO, JORGE  
Program Analyst, HSI-STEM (Hispanic-Serving Institutions-Science, Technology, Engineering, or Mathematics)

NAGARAJAN, UMA  
Instructional Lab Technician, Biological Sciences

NARVAEZ, LUSYNA  
Program Specialist, Student Equity and Success

NGUYEN, JESSICA  
Senior Student Records Advisor, Records

NGUYEN, NGOC LIEN  
Enrollment & Financial Services Advisor, Financial Services

NOVA, OLGA  
Supervisor, Library Tech and Public Services

PATUN, JOUNEY  
Program Specialist, International Students

QUACH, STAR  
Library Media Technician, Library

RAMIREZ, ELIZABETH  
Program Analyst, Outreach

RANCAP, MARIE  
Enrollment and Financial Services Advisor, Financial Services

RICE, SANDRA  
Program Specialist, Hospitality Management

RIVERS, RACHELLE  
Program Specialist, Apprenticeships, Workforce Innovation

ROGERS, KENA  
Administrative Specialist, People, Culture and Society

SAMANT, PRACH  
Research Analyst, Office of Institutional Effectiveness and Research

SHIVELY, BRIAN  
Program Specialist, Office of Administrative Services
SHIVERS, LISA  
Nursing Program Technician, Health Occupations

SHOKROLLAHI, NAHID  
Senior Library Media Technician, Library

SPENCER, JOHN  
Instructional Technology Analyst, Academic Services

STROUD, KYLE  
Program Analyst, Promise, Outreach

SVERDLIN, TAWNY  
Webmaster/UX Designer, Marketing

TALAMANTES, JACQUELINE  
Enrollment & Financial Services Advisor, Student Financial Services

TOPETE, VIANEY  
Program Specialist, TRIO

TRAN, KELVIN  
Management Analyst, Student Enrollment Services

TRAN, NGUYET  
Program Specialist, VALOR

TRINH, NGOC-TU  
Office Coordinator, EOPS, CARE and CalWORKs

TROY, MARIANNA  
Program Specialist, DSPS

TURNER, SHELbie  
Graphic Designer, Marketing and Communication

VAN, LINDA  
Program Specialist, Counseling

VASQUEZ, NITHA  
Enrollment and Financial Services Advisor, Student Enrollment Services

VASQUEZ VEGA, EPIGMENIO  
Senior Student Records Advisor, Student Enrollment Services

VILLANUEVA, JHONALiza  
Enrollment & Financial Services Advisor, Student Enrollment Services

VU, JULIE  
Program Specialist, Welcome Center

WONG, LIZA  
Administrative Specialist, STEM (Science, Technology, Engineering & Math)

YU, LINPING  
Administrative Specialist, Academic Services

ZAMZOW, MARK  
Program Specialist, Health Occupations

ZENDEJAS, SAUL  
Athletic Trainer, Athletics

ZEPEDA, MILANI  
Executive Assistant, Office of the President

District Classified Professionals at Mission College

AGUIRRE, MAYRA  
Custodian, Custodial Department

BUI, KEVIN  
Custodian, Custodial Department

CAMPI, JEFF  
Senior Maintenance Mechanic, Maintenance Department

CERVANTES, ARTURO  
Custodian, Custodial Department

CRUZ, FIDELINA  
Custodian, Custodial Department

CURIEL, LISA  
Senior Child Development Specialist, Child Development Center

DARRELL, TRICIA  
Program Specialist, Child Development Center

GONZALEZ-HANSEN, NATALIE  
Administrative Specialist, Athletics

GUEST, ROBERT  
Information Technology Technician, Educational Technology Services

GUTIERREZ, LUIS  
Senior Desktop Support, IS Department

HERNANDEZ-PEREZ, GERARDO  
Custodian, Custodial Department

HUYNH, ROSA  
Administrative Specialist, Facilities

KAPOWICH, RYAN  
Information Technology Analyst, Educational Technology Services

KESTER, REBECCA  
Senior Parking Services Officer, District Police

LY, PATRICK  
Information Technology Analyst, Educational Technology Services

MAGANA, SR., EDWARD  
Groundskeeper, Grounds Department

MARTINEZ, DANIEL  
Maintenance Mechanic, Maintenance Department

MARTINEZ, YARELI  
Senior Child Development Specialist, Child Development Center

NANGIA, SHUCHI  
Senior Child Development Specialist, Child Development Center

NG CHIU, MIU PING  
Custodian, Custodial Department

NGUYEN, DAT T.  
Senior Information Technology Analyst, Educational Technology Services

NGUYEN, HAI  
Supervisor, Custodial Department

NGUYEN, LAN  
Child Development Specialist, Child Development Center

PALOMO, JUAN  
Groundskeeper, Grounds Department

PEREZ, AARON  
Groundskeeper, Grounds Department

PEREZ, JOSHUA  
Custodian, Custodial Department

PHAM, PHUONG  
Senior Child Development Specialist, Child Development Center

PHAM, REGINA  
Custodian, Custodial Department

PHAM, THUY  
Parking Services Specialist, District Police

QUAN, ALLAN  
Senior Desktop Support, IS Department

RAMIREZ, FAUSTINO  
Custodian, Custodial Department

ROSAS ORTEGA, IVAN  
Senior Irrigation Technician, Trades Department

SALCEDO, PABLO  
Custodian, Custodial Department

SALINAS, DANIEL  
HVAC Mechanic, Facilities

SALINAS, RICKY  
Senior HVAC Mechanic, Trades Department

SMITH, THIEN  
Food Services Technician, Child Development Center

SORIA, RAFAEL  
Groundskeeper, Grounds Department

SOTELO, JOSE G.  
Custodian, Custodial Department

TREJO, REYNALdo  
Custodian, Custodial Department

URBINA, JORGE L.  
Custodian, Custodial Department

WALKER, DESTINY  
Senior Child Development Specialist, Child Development Center
Faculty and Administrative Staff

ABDELLJABBAR, WAEL 2005
Instructor in CSIT
Ed.D. Educational Leadership, Fielding Graduate University; M.S. Management Information Systems (MIS); B.S. Computer Science, emphasis in Management Information Systems, ACEI; B.S. Information Technology, University of the Pacific; AS Applied Science of Network Administrators, Silicon Valley College; AS, Tele-communications Switching, Telecommunications College-Jordan; CISCO Certified Academy Instructor (CCAI)

ABIROUS, DINIA 2019
Instructor in Accounting
Ph.D. in Management Sciences, ESADE Business School, Ramon Llull University, Spain 2016; Master of Research Management Science, ESADE Business School, Ramon Llull University, Spain 2011; M.S. Accountancy, San Jose State University, 1994; Multiple Subject Teaching Credential Program, San Francisco State University, 2006.

AWAN, SEHER 2022
President
Ed.D in Organizational Leadership, Pepperdine University; M.P.A. California State University, Northridge; B.B.A. California State University, Northridge; B.S. Business Administration, California State University, Northridge.

AKERS-MARTIN, AMELIA 1997
Instructor in English as a Second Language
M.A. in English (Teaching English as a Second Language/Application Linguistics), Iowa State University; M.S. in Education, Online Teaching and Learning, California State University East Bay; B.S. in Anthropology and B.A. in Spanish, Iowa State University.

AL BAKER, SALAAM 2005
Instructor in Chemistry
Ph.D. in Inorganic Chemistry, Auburn University, Auburn, Alabama; B.S. in Chemistry, minor in Biology, Basra University, Iraq.

ALFARO, RICHARD 2013
Dean, Student Support Services
M.A. in Educational Administration, Santa Clara University; B.A. in Organizational Communications, California State University, Stanislaus; A.A., Modesto Junior College.

ARIA, DANIEL 2014
Instructor in Hospitality Management
B.S. in Hospitality and Management, San Jose State University; A.S. in Food and Restaurant Management, Mission College; Associate of Occupational Science in Culinary Arts, Culinary Institute of America; A.A. in Biological Science, Fullerton College;

BAKER, JAMES 2020
Instructor in Communication Studies
Ph.D. in Instructional Communication, minor in Interpersonal Communication, West Virginia University; M.A. in Instructional Communication, minor in Communication, CSU, Sacramento; B.A. in Communication, minor in Theater, CSU, Sacramento.

BARNES YOLANDA 1999
Articulation Officer/Counselor
M.S. in Counseling/Career Development, California State University, Sacramento; B.A. in Sociology/Organizational Studies, University of California, Davis.

BARRAGAN, INEZ 2017
Director, HSI-STEM Program
M.A. in Higher Education and Student Affairs, California State University, Sacramento; B.S. in Applied Behavioral Science, University of California, Davis; A.A. in General Education, Social Sciences, Santa Rosa Junior College.

BECK, JOHN G. 2016
Instructor in Astronomy and Physics
Ph.D. in Astronomy, University of California, Los Angeles; M.S. in Physics, California State University, Northridge; B.S. in Physics, University of California, Los Angeles.

BERKLEY, JUDITH, 2007
Instructor in Health Occupations
Post master’s Certificate in Nursing Education, San Jose State University; M.S. Family Nurse Practitioner, San Jose State University; B.S. in Nursing, San Jose State University; A.S. in Sciences, West Valley College.

BOGHIOZIAN, TINA 2016
Librarian
M.L.I.S. in Library and Information Science, San Jose State University; B.A. in Library Science, Isfahan University of Medical Sciences.

BREIDENBACH, CARLA 2013
Instructor in Spanish
Ph.D. in Linguistics/Hispanic Linguistics, University of South Carolina; M.A. in Spanish, Middlebury College; B.A. in Spanish Art History, St. Olaf College.

BRENNAN, JONATHAN B. 1998
Instructor in English
Ph.D. in Comparative Ethnic Studies/Literature, University of California, Berkeley; M.A. in English, University of California, Berkeley; B.A. in English, University of California, Berkeley.

BROEDER, MARINA 2017
Instructor in ESL
B.A. in Linguistics, Intercultural Communications, and Teaching English to Speakers of Other Languages, Moscow State Linguistic University; Diploma in Linguistics, Intercultural Communication, and Teaching English to Speakers of Other Languages (TESOL); graduated with High Honors, Moscow State Linguistic University.

BRUNSON, SCOTT M. 2000
Chef/Instructor in Hospitality Management
Highest Honor Graduate, California Culinary Academy, San Francisco; Previous Director, Culinary Arts Department at OICW in Menlo Park, CA; B.A. Environmental Biology, University of Colorado, Boulder.

BURTON, BRITTA 2004
Instructor in English as a Second Language
M.A. in TESOL, Arizona State University; B.A. in Translating and Interpreting English and Spanish, University of Mainz, Germany.

BUSS, SCOTT 2000
Instructor in Kinesiology Men’s Tennis Coach
M.A. in Physical Education with emphasis in Sports Psychology, San Jose State University, San Jose, California; B.A. in Psychology, University of California, Santa Cruz; A.A. in Natural Science, Napa Community College, Napa, California.

CABANILLA, JOANNE 2015
Instructor in Biological Sciences
Ph.D. in Medicine, University of the Philippines; B.S. in Zoology, University of the Philippines.

CAMERON, MELODIE 2015
DSPS Counselor/Veterans Counselor
M.A. in Education/Counseling and Student Personnel, San Jose State University; B.A. in Psychology, San Jose State University.

CAO, MICHAEL 2014
Instructor in Mathematics
M.A. in Applied Mathematics, University of California, San Diego; B.S. in Mathematics of Computation, University of California, Los Angeles.

CARR, MINDY 2004
Instructor in Mathematics
M.A. in Mathematics, University of California, Santa Cruz; B.A. in Mathematics, University of California, Berkeley.

CHAKRAVARTHY, GAYATHRI, 2019
Lab Faculty Specialist, Academic Support Center
M.S. in Pure Mathematics, Madras University; A.S. in Mathematical Sciences, Victoria University, Australia.
CHAMBERS, KARA 2001  
Instructor in English as a Second Language  
M.A. in TESOL, San Francisco State University; B.A. in Comparative Literature and English, San Francisco State University.

CHAN, POOI-SEE 2018  
Instructor in Biological Sciences  
Ph.D. in Animal Science, Michigan State University; M.S. in Animal Science, The University of Georgia; B.S. in Biology and Chemistry, Campbell University.

CONSTANTIN, ELLI 2013  
Instructor in Learning Services  
M.Ed. in Education: Mild to Moderate Disabilities, Boston University; B.S. in Business Administration, University of California, Riverside.

COON, CHERYL 2020  
Instructor in Art  
M.F.A. San Francisco Art Institute; B.A. in French, minor in English literature, Humboldt State University; B.A. in Art, minor in Creative Writing, Humboldt State University; Sculpture and Jewelry Studies, Academy of Art University.

CORMIER, JEFF 2004  
Instructor in Psychology  
M.A. in Sociology, San Jose State University, California; additional graduate study in Psychology, Northcentral University, Arizona; B.A. Clinical Psychology, San Jose State University, California.

CRONIN, G. RYAN 2021  
Instructor in Fire Protection Technology  
B.S. in Business Administration, Major in International Business, Minor in Chemistry, San Jose State University; A.S. in Administration of Justice, West Valley College; A.S. in Fire Technology, Mission College.

CRUZ, ALICIA 2021  
Instructor in Health Occupations  
B.S. in Nursing, University of Alabama, graduated with honors.

DEDINSKY, JOHN 1982  
Instructor in Mathematics  
M.S. in Mathematics, Stanford University; B.S. in Mathematics, Stanford University.

DEL FRATE GOLDEN, JUDIE 1995  
Instructor in Computer Applications  
Ph.D. in Education, Ohio State University; M.A. in Education, Ohio State University; B.S. in Education, Ohio State University; B.B.A. in Marketing, University of Massachusetts.

DELLAPORTA, LYNN 1999  
Instructor in Health Occupations  
M.S. in Nursing, California State University, San Francisco; B.S. in Health Education, California State University, Chico.

DEMMERS, BENJAMIN 2022  
Director of Marketing and Public Relations  
B.A. in Journalism, University of Rhode Island

DENNIS, HAZE 1996  
Instructor in Hospitality Management/Work Experience  
M.S. in Recreation and Tourism, Cal State University East Bay; B.S. in Hotel/Restaurant Administration, University of Nevada, Las Vegas; A.S. in Hotel/Restaurant Management, St. Louis Community College.

DISNEY, KATE 1990  
Instructor in Engineering  
M.S. in Electrical and Computer Engineering, University of California, Santa Barbara; B.S. in Electrical and Computer Engineering, University of California, Davis.

DYER, JUDITH 2019  
Instructor in Health Occupations  
M.S. in Nursing Education, Aspen University, Denver; Physician’s Assistant (PA), Kennesaw State University; B.S. in Nursing, Kennesaw State University.

ENGEL, MARK 2004  
Instructor in Art  
M.F.A., San Jose State University; B.F.A., San Jose State University; both with Pictorial Art Major.

ESCAJEDA, JACQUELINE 2019  
Dean of Business, Education, and Service Industries  
M.A. in Higher Education Leadership, California State University, Sacramento; B.S. in Organizational Behavior, University of San Francisco; A.A. in Social Science, Sacramento City College.

ESPARZA, NITA 2013  
Instructor in Communication Studies  
M.A. in Communication Studies, San Jose State University; B.A. in Communication Studies, Humboldt State University; A.A. in Liberal Arts, West Valley College.

ESPINOZA, DIEGO 2021  
Director of EOPS, CARE, and CalWORKs  
M.A. Educational Leadership, Santa Clara University; B.S. Social and Behavioral Sciences

FARIS, ASHLEY 2011  
Instructor in Chemistry  
Ph.D. in Chemistry, University of California, Santa Barbara; B.S. in Chemistry, minor in Mathematics, Trinity University.

FERGUSON, KAITLIN 2018  
Instructor in Kinesiology  
M.A. in Coaching and Athletic Administration, Concordia University; M.A. in Kinesiology, Fresno Pacific University; B.A. in Communication and Sport Management, UC Santa Barbara; A.A. in Fitness, Nutrition, Health and Kinesiology, Santa Rosa Junior College; Personal Training Certification through the National Academy of Sports Medicine, as well as a TRX®, Suspension and Rip Training certifications, and the Madd Dog Spinning® Certification.

FINEMAN, BENJAMIN 2015  
Instructor in Mathematics  
Ph.D. in Mathematics, University of California, Davis; B.A. in Mathematics, Haverford College.

FLORES, JEANINE 2018  
Instructor in Graphic Design  
M.S. in Education (Online Teaching and Learning), California State University, East Bay; B.F.A. in Industrial Design, University of Illinois at Champaign-Urbana.

GALLEGOS, ALFRED 2022  
Dean of Institutional Effectiveness and Research  
M.A. in Psychology, California State University, Los Angeles; B.A. in Psychology, California State University, Los Angeles.

GARCIA, MARY 2021  
Instructor in English  
Ph.D. in Comparative Literature, University of California, Santa Barbara; M.A. in Comparative Literature, University of California, Santa Barbara; B.A. in English and World Literature, Pitzer College.

GARRETT, MARK 2000  
Instructor in Graphic Design  
M.F.A., University of California, Davis; B.F.A. with emphasis in photography, University of Arizona.

GEE, KAREN 2012  
Instructor in Psychology  
M.A. in Education, Stanford University; M.A. in Experimental Psychology, San Jose State University; B.A. in Psychology, minor in Human Biology, Stanford University.

GLASER, LORA 2006  
Instructor in English as a Second Language  
M.A. in Linguistics/TESL, San Jose State University; B.A. in German Literature and Language, State University of New York, College at Oneonta. Advanced coursework in German (language and literature), University of Wurzburg, Germany.

GREEN, CHIA 2002  
Lab Faculty Specialist, Academic Support Center  
M.Ed. in Instructional Technology, Arkansas Tech University; Graduate Certificate in TESOL, Pennsylvania State University; B.S. in Biomedical Engineering, Chung Yuan University, Taiwan.

GUARDINO, BIANKA 2000  
Counselor  
M.S.W., San Jose University; B.A. in Psychology, Stanislaus State University; A.A. in Psychology, Modesto Junior College.

HALL, GUY 2020  
Instructor in Fire Protection Technology  
A.S. in Fire Technology and a minor in Business, Cabrillo College.
HAND, VERONICA 2016
Counselor
M.A. in Education-Counseling and Student Personnel, San Jose State University; M.A. in Social Sciences in Education with a focus in Higher Education, Stanford University; B.A. in Journalism, San Jose State University.

HARDINGE, TARA 2012
Instructor in Sociology
Ph.D. in Sociology, University of California, Irvine; M.A. in Sociology, University of California, Irvine; B.A. in Sociology, University of California, Irvine; B.A. in Psychology and Social Behavior, University of California, Irvine.

HARTMAN, CAROL 2021
Instructor in Health Occupations
M.S.N. in Nursing Education, Sacred Heart University; B.A. in Mathematics and Computer Science, Boston College; A.S. in Nursing, Evergreen Valley College.

HAWKINS, PHILLIP 2004
Instructor in Music
M.M. in Music with emphasis in Percussion Performance, Wichita State University; B.M. in Music Education with emphasis in Instrumental Music, Wichita State University; additional course work at Bethel College.

HITTLEMAN, MICHELE 2017
Counselor
M.Ed. in Education, University of California, Los Angeles; B.A. in History, Brandeis University.

HORGAN, ANNE 2016
Program Director Child Development Center Lab School
M.A. Developmental Psychology, San Francisco State University; Adult Education Credential, UC Berkeley; B.A. Psychology, San Francisco State University

HUA, NGOC 2021
Instructor in Health Occupations
BSN, San Jose State University

HUDAK, PATRICK 1995
Instructor in Computer Applications
M.A. in Educational Technology, San Diego State University; M.A. in Linguistics/TESOL, San Jose State University; B.A. in Psychology, University of California, Davis; additional graduate work in Project Management/Technology at Capella University.

HUERTA, JAVIER
Instructor in English
M.F.A. in English, Creative Writing, University of Texas at El Paso; BA in English, University of Houston.

JAVIER-TOLENTINO, LAUREN 2017
Instructor in Biological Science
Ph.D. in Biological Sciences, University of California at Irvine; M.S. in Biological Sciences, University of California, Irvine; B.A. in Biology, University of Hawaii at Manoa, Hawaii.

JENSEN, VALERIE 2018
Dean, Academic Services
M.A. in Speech Communication, California State University, Hayward; B.A. in Speech Communication: Organizational Communication/Public Relations, California State University, Hayward; Graduate Certificate in Community College Leadership, University of Nebraska, Lincoln.

JOHNSON, KEITH 1999
Instructor in Music
Ph.D. in Music Composition, University of California, San Diego; M.M. in Music Composition, Yale University School of Music; B.M. in Music Composition, California State University, Long Beach; A.A. in Music, Cuesta Community College.

JOHNSON, MATTHEW 2010
Instructor in Philosophy
M.A. in Philosophy, University of Illinois, Champaign-Urbana; B.A. in Philosophy, University of California, Santa Cruz; A.A. Humanities/Social Science, Gavilan Community College

JUNCKER, MARGARET, 2002
Instructor in English
MA in English Literature, California State University Fresno; BA in English, California State University Fresno; AA from Fresno City College

KATOKU, CHIGUSA 2015
Program Director, International Student Center
M.A. in Teaching English to Speakers of Other Languages (TESOL), Middlebury Institute of International Studies; B.A. in Linguistics and English and American Literature, Sagami, Women’s University, Japan.

KEESE, CONNOR 2021
Director, Outreach & Student Development
M.A. in Higher Education with an emphasis in College Student Development, University of Denver; B.A. in Political Science, San Diego State University.

KIGHT, AMANDA 2018
Instructor in Health Occupations
M.S. Nursing, University of San Francisco; board-certified in Psychiatric Nursing, Addition Nurse and Nursing Leadership.

KIM, MICHELLE 2012
Instructor in Economics
M.A. in Economics, University of California, Irvine; B.A. in Political Economy of Industrial Societies, University of California, Berkeley; B.A. in Economics, University of California, Berkeley.

KRAVETS, ZOYA 2005
Instructor in Mathematics
M.S. in Mathematics, California State University, Hayward; M.S. in Statistics, California State University, East Bay; BS in Mathematics, Leningrad Institute of Education, Russia.

KWONG, WILLY 2019
Instructor in Child Development
M.A. in Child and Adolescent Development, San Jose State University; B.A. in Child and Adolescent Development, San Jose State University.

LAM, CLEM E 1987
Dean of Science, Technology, Engineering, and Math
Ph.D., M.S., and B.S. in Mathematics, University of Iowa.

LAVALLO, PATRICK 2001
Instructor in Mathematics
M.A. in Mathematics, University of California, Santa Barbara; B.A. in Mathematics and minor in Physics, University of California, San Diego.

LAWHEAD, THERESA 2006
Counselor
M.S. in Counseling, California State University, Hayward; B.A. in Psychology, San Jose State University.

LIPMAN, STEVE 2004
Instructor in Communication Studies
M.A. in Speech Communication, San Francisco State University; B.A. in Speech Communication, San Francisco State University.

LOVERN, LETISHA 2012
Instructor in Math
M.A. in Mathematics, minor in Applied Mathematics, California State University, East Bay; B.S. in Mathematics, Sonoma State University.

MARTINEZ, ALICIA 2002
Counselor
M.A. in Counseling Psychology with emphasis in Marriage, Family and Child Counseling, University of San Francisco; B.A. in Psychology, University of California, San Diego.

MARTINEZ, VERONICA 2022
Dean, Enrollment and Financial Services
M.P.A., University of San Francisco; B.A. Social Science, San Jose State University

MC GEE, DONNELLE C. 1998
Instructor in English
M.A. in Counselor Education, San Jose State University; M.F.A. in Creative Writing, Goddard College; B.A. in Sociology, California State University, Stanislaus.
MENDOZA, STEPHANIE 1997
Instructor in Kinesiology
M.A. in Physical Education, San Jose State University; B.S. in Physical Education, San Jose State University; A.A. Chabot College; continuing educational units at Loyola Marymount University.

MILLER, BRIAN 2016
Dean of Creative Arts and Communication
Ph.D. in History, University of Mississippi; M.A. in History, University of Mississippi; B.A. in History, The Pennsylvania State University.

MORTON-STARNER, ERICA 2017
Instructor in English
Ph.D. in English, University of Oregon; M.A. in English, Western Washington University; B.A. in English, Northern Arizona University.

MORTEZAIE, FARAMARZ 2015
Instructor in Computer Science and Information Technology
Ph.D. in Electrical and Computer Engineering, University of California, Irvine; M.S. in Electrical and Computer Engineering, University of California, Santa Barbara; B.S. in Electrical and Computer Engineering, University of California, Santa Barbara.

MURILLO, OMAR 2016
Vice President of Student Services
Ed.D. in Educational Leadership, San Francisco State University; M.Ed. in Education, Counseling and Student Services with PPS Credential, San Jose State University; B.A., Liberal Studies, minor in Spanish Literature and Culture, California State University, Monterey Bay.

MUSAT, CARMEN 1999
Instructor in Mathematics
M.A. in Mathematics, University of Bucharest; M.A. in Finance, Golden Gate University; B.A. in Mathematics, University of Bucharest.

MYINT, MYO 1999
Instructor in English as a Second Language
M.A. in Linguistics and TEFL, Institute of Education, Myanmar; B.A. in English, Institute of Education, Myanmar.

NAGAMI, PAUL 2021
Instructor in Biological Science
52 units of Ph.D. work, Stanford University; M.S. in Biology (Ecology and Systematic Biology), San Francisco State University; B.S. in Biology, California Institute of Technology; graduated with honors; additional graduate studies in Developmental Biology, Stanford University.

NAKAHAMA, JOHN 2002
Instructor in Mathematics
M.A. in Mathematics, San Jose State University; B.A. in Mathematics, San Jose State University.

NEARY, KELLY 2006
Instructor in Biological Sciences
M.S. in Biological Sciences with concentration in Physiology, San Jose State University; B.S. in Physiology, University of California, Davis.

NGUYEN, CHAU 2006
Counselor
M.A. in Counseling Education, San Jose State University; B.A. in Liberal Studies and minor in Child Development, California State University, Hayward.

NGUYEN, DANNY 2006
Vice President, Administrative Services
Pharm.D. in Pharmacy Science, University of Southern California.

NGUYEN, HAI QUOC 2020
Instructor in History
M.A. and B.A. in History, San Francisco State University; A.A. in Liberal Arts/History, De Anza College.

NGUYEN - VU, MYTRA 2001
Instructor in Child Development
Ed.D. in Early Childhood Education, Walden University; M.A. in Child Development, San Jose State University; B.A. in Psychology, San Jose State University.

OLIVER, MARSHA 2001
Instructor in Health Occupations
Director, LVN Program
M.S. in Nursing Education, Walden University; B.S. in Nursing, University of Phoenix; A.S. in Nursing, Oregon Institute of Technology; additional graduate studies at University of Phoenix.

PALLIN, JEFFREY J. 2018
Dean of Workforce Innovation
Ph.D. (ABD) in Mathematical Logic and Recursion Theory, University of Wisconsin; M.B.A in Operations and Control, Boston University; B.S.B.A. in Philosophy and Logic, Boston University.

PARK, GAIZONG 2013
Counselor, International Students
M.A. in Education-Counseling and Student Personnel, San Jose State University; B.A. in Psychology, California State University, Fresno.

POE, CLINT H. 1995
Instructor in Physics and Astronomy
Ph.D. in Astrophysics, University of Wisconsin; M.S. in Astronomy, Vanderbilt University; B.S. in Physics, University of North Carolina, Chapel Hill.

PURDUM, KRISTEN 2017
Instructor in Mathematics
M.S. in Applied Mathematics, Santa Clara University; B.S. with honors in Mathematics, minors in Physics and Secondary Education, Mount Union College.

RAMSEY, RAEANN 2013
Instructor in History
Ph.D. in Humanities, Faulkner University; M.A. in Humanities/History, California State University, Dominguez Hills; B.A. in English and Philosophy, University of the Pacific.

RANCK, LORRIE 2021
Vice President of Instruction
M.A. in International and Multicultural Education (IME), University of San Francisco; B.A. in Education, University of Wyoming.

RASHIDI, EDRINA 2015
Director, Mathematics, Engineering, Science Achievement (MESA)
M.A. in History, University of Illinois, Urbana-Champaign; B.A. in Humanities, emphasis in European Studies, San Jose State University.

REED, ROBERT 2012
Instructor in Mathematics
M.A. in Mathematics, University of California, Santa Cruz; B.A. in Mathematics, University of California, Santa Cruz.

REPLICON, JEAN 1995
Instructor in Biological Sciences
Ph.D. in Molecular Biology, Loyola University of Chicago; B.A. in Biology, Northwestern University, Evanston.

RITZ, CHRISTINE 2002
Instructor in English
M.A. in English Literature, San Jose State University; B.A. in English Literature, San Jose State University; A.A. in Liberal Arts, Mission College; additional studies at University of California, Santa Cruz Extension.

RIVAS, MONICA 1999
Instructor in Foreign Language (Spanish and Italian)
Ph.D. in Romance Languages, University of Oregon; M.A. in Spanish Literature, University of Oregon; graduate studies: Universita per Stranieri, Perugia, Italy; L’Instituto Linguistico Bertrand Russell, Padova, Italy; Universidad de Madrid (la Complutense) Spain; B.A. in Journalism; B.A. in Spanish, California State University, Chico.

RIVAS, RICK 2004
Instructor in Graphic Design and Multimedia Design
M.S. in Multimedia Design and Marketing, California State University, Chico; B.A. in Philosophy, University of California, Los Angeles; AA in Graphic Design, Mission College.
ROSE, DAVID 2008
Instructor in Fire Protection Technology
EMT Program Director
Pre-Hospital Care Education Program, Stanford University; Master Fire Instructor, Fire Service Training and Education System, State of California; A.S. in Fire Protection Technology, Mission College; A.S. in Social Sciences, Mission College; A.S. in General Education, Mission College; additional coursework; George Washington University.

ROSNER, JULAINE 2000
Instructor in English as a Second Language
M.A. in English with an Emphasis in Teaching English as a Second Language (TESOL); B.A. in Spanish with an emphasis in Linguistics and a minor in French from the University of Massachusetts at Amherst; studies abroad in Spain.

ROTHENBERG, HEATHER 2000
Instructor in Nutritional Science
M.S. in Nutritional Science, New York University; B.S. in Dietetics & Food Administration and B.A. in Physical Education-Exercise Physiology, California State University, Chico; R.D. from Bronx VA Medical Center, New York.

SAIN, MONICA 2021
Instructor in English
M.A. in English with an emphasis in Composition, San Francisco State University; B.A. in Literature with an emphasis in Pre- and Early Modern Studies, University of California, Santa Cruz; Specialized Certificate in College Counseling, University of California, San Diego Extension.

SALAZAR, MANUEL 2016
Director of TRIO
M.A. in Counselor Education, San Jose State University; B.A. in Sociology and minor in Mexican American Studies, San Jose State University.

SANCHEZ-HEREDIA, MARCELO 2020
Counselor
M.A. in Counseling, Saint Mary’s College of California; B.A. in Psychology, University of California, Davis.

SCHAFFER, ROBERT 2019
Instructor in Engineering and Mechatronic Technology
Ph.D. in Electrical Engineering, Stanford University; B.S. in Electrical and Computer Engineering; George Mason University.

SCHWEPEPE, JAMES 2013
Instructor in Chemistry
Ph.D. in Chemistry, Bryn Mawr College; M.A. in Chemistry, Bryn Mawr College; B.S. in Biochemistry, Marlboro College.

SHAHEEN, ALBERT 2020
Instructor in ESL
M.A. in TESOL, Saint Michael’s College; B.A. in History, Western Connecticut State University.

SHAN, WENLEI 2014
Instructor in Business
M.B.A., Arizona State University; M.S. in Electrical Engineering from Purdue University.

SHANI, GUY 2018
Instructor in Biological Sciences
Ph.D. in Microbiology, University of California, Davis; B.S. in Biological Science, California Polytechnic State University, San Luis Obispo.

SHANK, TED 2015
Instructor in English
M.A. in English, San Jose State University; B.A. in English, San Jose State University; California Single Subject Teaching Credential, English; Cross-Cultural, Language, and Academic Development (CLAD) Certified.

SHERIDAN, LANA 2020
Instructor in Physics
Ph.D. in Physics, University of Waterloo, Canada; M.A. in Physics and B.A. in Physics, University of Oxford, United Kingdom.

SHERIDAN, LANAY 2013
Instructor in English
Ph.D. in English, University of North Carolina; B.A. in English, University of California, Berkeley.

SKLAR, MAX 2015
Instructor in Mathematics
M.S. in Mathematics, University of Massachusetts; B.A. in Mathematics with a minor in Physics, University of California, Santa Cruz.

SOBALA, JOANNA 2013
Instructor in Economics
M.A. in Economics, San Jose State University; M.A. in English Literature, University of Toronto; Certificate in Teaching English as a Second Language, University of Toronto; Honorary B.A. in English and Philosophy, University of Toronto.

SONGO, KEN 2012
Director, Student Equity and Success
M.P.A. in Public Administration, San Francisco State University; B.A. in Psychology, University of California, Santa Cruz.

SOUSA, PEDRO 2020
Instructor in Early Childhood Education
M.A. in Child Development, San Jose State University; B.A. in Life Science, San Jose State University.

SPECK, MICHELE 2004
Librarian
M.L.I.S. in Library and Information Studies, University of Hawai‘i; M.A. in Instructional Technology, San Jose State University; B.S. in Business Administration, University of Nevada, Reno.

SULLIVAN, SARAH 2010
Instructor in Reading and English
M.S. in Education with emphasis in Language and Literacy, Simmons University; Secondary Education Certification (grades 8-12), Massachusetts College of Liberal Arts; B.A. in English, Colgate University.

SUN, HELEN 2004
Instructor in CSIT
M.S. in Computer Science and Physics, Iowa State University; B.S. in Physics and minor in Computer Science, Iowa State University, Ames.

THOMPSON, TERESA 2013
Instructor in Accounting
M.B.A. in Entrepreneurship, University of California, Irvine; Certified Public Accountant; B.S. in Business Administration Accounting, University of California, Riverside.

TRAN, REBECCA 2004
Counselor
M.A. in Counseling Education, San Jose State University; B.A. in Liberal Studies and minor in Mathematics for Elementary School Teachers, San Jose State University.

TRAN, THERESA 2002
Counselor, EOPS
M.A. in Counseling Psychology, Sofia University (Institute of Transpersonal Psychology); B.A. in Psychology and Sociology, University of California, Santa Cruz.

TRANG, THUY 2005
Counselor
M.S. in Counseling with emphasis in College and Career Counseling, San Francisco State University; B.A. in Communications, University of California, Berkeley.

TSENG, JENNIFER 2017
Instructor in Accounting
M.B.A., University of California at Riverside; B.A. in Finance, University of Illinois at Urbana-Champaign; Certified Public Accountant.

ROY VASQUEZ 2023
Interim Dean of Public Safety, Health and Wellness

VARBEL, ANDY 2004
Instructor in English
M.A. in English Literature, San Francisco State University; B.A. in Literature University of California, Santa Cruz.

VIERNES, NEIL O. 2016
Instructor in Chemistry
M.S. in Chemistry, University of Illinois at Urbana-Champaign; B.S. in Chemistry, University of California, Berkeley.

VLAHOS, JOHN
Executive Director, Intercollegiate Athletics
B.S., Finance, Santa Clara University; M.S., Sports Leadership, Virginia Commonwealth University
WALTER, ROSHAWN 2021
Counselor
M.Ed. in Educational Counseling, University of Southern California; B.A. in Sociology, University of California, Los Angeles; A.A. in Sociology, El Camino College.

WANG, JAN 2013
Instructor in Health Occupations
M.S. in Science in Nursing, University of California, San Francisco; B.S. in Nursing, Arkansas State University; Licensures: California Registered Nurse (RN); California Public Health Nurse (PHN).

WILLIAMS, DEBRA 2012
Director of DSPS and Veteran Programs
M.S. in Education, Chaminade University of Honolulu; B.S., Business Administration, John F. Kennedy University.

WILLIAMS, LAINA 2021
Instructor in Health Occupations
B.A. in Gerontology with a minor in Health Administration, Ashford University; Licensed Vocational Nursing Program (LVN), Central County Occupational Center.

WINSOME, THAIS 2005
Instructor in Biological Sciences
Ph.D. in Ecology (Soil Biology), Institute of Ecology, University of Georgia; M.S. in Soil Science, University of California, Berkeley; B.S. in Conservation & Resource Studies, University of California, Berkeley.

WONG, ELAINE 2004
Librarian
M.L.I.S. in Library and Information Science, San Jose State University; TEFL/TESL Certificate, University of California, San Diego; B.A. in Graphic Communications, San Diego State University; A.A. in Art, Mira Costa College.

WOOD, KATHRYN 2012
Instructor in Political Science
M.A. in Political Science, International Relations emphasis, University of California, Santa Barbara; B.A. in Political Science, San Jose State University; A.A. in Social Sciences, San Jose City College.

WUNDRAM, BRENNNA 2001
Instructor in Kinesiology (Dance)
M.F.A. in Dance Performance and Choreography, New York University; B.S. in Business Administration and minor in Dance, California Polytechnic State University, San Luis Obispo.

YANG, DAVID 2016
Counselor
M.S. in Counselor Education, Sacramento State University; B.A. in History, Asian American Studies, University of California, Santa Barbara.

ZAVALA, ALEJANDRO 2016
Counselor, EQPSM.A. in Counselor Education, San Jose State University; B.A. in Psychology, California State University, Monterey Bay; A.A. in Behavioral Sciences, Hartnell College.

ZILG, CHRISTOPHER 2015
Instructor in Business
M.S. in Finance, Golden Gate University; B.S. in Business Administration/Economics, High Point University; Supply Chain Manager Certification, Institute of Supply Management, Arizona State University.

Associate Faculty

ABRAMS, JEREMY  Political Science
ABU-ZAINA, HASAN  Computer Information
AHUMED, MOHAMMED  Health Occupations
AKHOIRISHIDA, MOHAMMED  Computer Information
ALCAZAR, VIVIANA  Spanish
AL-AGTASH, SALEM  Computer Science
ALVAREZ, PATRICIA  English
AMEEN, UMEERA  Counseling
ANDERSON, CYNTHIA  Health Occupations
ANSARI, UNBAREEN  Biological Science
ARAFILES, TITA  Health Occupations
ARDIZZONE, ART  Accounting
BABU, PRIYA  Mathematics
BACH, HIEN  Health Occupations
BADAL, SHAMIR AN  Counseling
BALUTA, JOLANTA  Health Occupations
BARRON, NICHOLAS  Anthropology
BASILE, MARIA  Kinesiology
BECKUM, CALVIN  Sociology and Psychology
BELLER, JONATHAN  Communication Studies
BERTOLA, MARIE  French
BRISBANE-RAMIREZ, MOLLY  Non-Credit Older Adult
BLAUSEN, JOSHUA  Chemistry
BOLOURCHIAN, FARZIN  Chemistry
BRACER, ROY Sociology
CABRERA, FERNANDO, Spanish
CAMBELL, HUSAYN Computer Information
CHANG, BING RU Mathematics
CHEN, LILY English
CHEW, JOHN Fire Technology
CHOBABKO, ALLA Non-Credit Older Adult
CHIN, JAMES Health Occupations
COBB, JEANIE English
COLLINS, RUTHIE Non-Credit Older Adult
CONSTANTIN, JENNIFER Psychology
COSTANZA, JENNIFER English as a Second Language
CONTENTO, VIRGINIA Reading
COWELS, ANN Health Occupations
CUDAHY, MARY English
DASSALLA, MITCHELL Computer Applications and Non-Credit Older Adults
DEA-WONG, JULIA Counseling
DELLONA, NINA MARIA English as a Second Language
DEMIRAY, DENIZ Economics
DINH, HUNG Mathematics
DO, KHOI Biological Sciences
DRAZKIEWICZ, ANETA Biological Science
DRION, YOKA Music
ECABANDE, JUDITH F. Health Occupations
ECTOR, JOHN Music
EL KAISI, ROUBA Computer Information
ENSMINGER, BETTY Communications
ESPINELI, DINAH Chemistry
EVANS, ANNE Mathematics
FETTGATHER, BOB Psychology
FICHMANN, JENNY Biological Sciences
FIECHTER, VALERIE English as a Second Language
FIRENZI, GINA Communication Studies
FLORES, ELIZABETH Counseling
FOLSE, HARMONY Biological Science
FRAN, MICHELLE Reading
FRANCISCO, EMILIO Counseling
FRANKEL, VALERIE Reading/English
GARCIA, ALMA Counseling
GARD, INA J. English
GATT, LARRY Fire Technology
GEE, JOHN Mathematics
GIBBS STAYTE, PATRICIA Sociology
GIRARDI, JUDITH Library
GHOFARAN, JAHAN Computer Information
GOLDEN-ROMERO, PATRICIA Hospitality Management
GRAHAM, ALISON Non-Credit Older Adult
GRANT, DAVID Non-Credit Older Adult
GREWAL, AMAN Accounting
GRZYMALA, KEVIN History
GUCH, DANIEL Psychology
HALL, KATHERINE Library
HALLMARK, HEATHER Health Occupations
HAMED, MOHAMMAD Computer Information
HAMMOND, LAURA Library
HANLE, GREG Economics
HARTKIN, ART Computer Applications
HARRISON, MARY ALLISON Biological Science
HARRIS, ELIZABETH Communication Studies
HAYEN, KATHLEEN English as a Second Language
HAWKINS, MICHAEL Music
HEGSTROM, CATHERINE Non-Credit Older Adult
HEIZER, (SIZEMORE), RACHNA Political Science
HILL, BOBBY Kinesiology - Head Baseball Coach
HOLLAND, KRISTY History
HOWARD, SCOTT Kinesiology, Head Men’s and Women’s Tennis Coach
HU, SHIH (Ceech) Kinesiology
HUA, NGOC-HANH Health Occupations
HULBERT, ROBIN Biological Science
HUNSAKER, MARCI Library
HWANG, CLIFFORD Mathematics
INOUE, BETTY Counseling
JAMELLO, CATRINA Counselor
JOHNSON, CATRINA Counselor
JOHNSON, MARITES Health Occupations
KHAN, SIDDIQUE Physics
KAS-OSEKA, JOSHUA Business
KAYE, MELANIE Graphic Design & Multimedia
KERBY, AIMEE Disability Support Programs and Services (DSPS)
KIRCHNER, DEANE (RUTH) Health Occupations
KLIEMAN, LINDA Health Occupations
KNITTEL, GREG History
KOBPIKAR, SANEET Biological Sciences
KRISHNAMURPHY, LATITHA Computer Information
KULAK, PRASHANT Computer Information
LAAL, VANDANA Child Development
LAFARRE, CYRUS Health Occupations
LANE, ANN Library
LANG, GHISLAINE Economics
LEE, KENNY Non-Credit Older Adult
LETIT, KRISSTYNA Non-Credit Older Adult
LINDSETH-RIVERA, KRISTIN Art
LIENRO, ALEMAYEHU Global Studies and Geography
LOUDEN, LESLEY Graphic Design & Multimedia
MA, SUSAN Library
MABUL, AMADO Business
MAGID, SAMIR Computer Information
MAGILL, DOUGLAS Computer Application
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MAJOR, JOHN Accounting
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MICODIN, DRAGOS Mechatronic Technology
MNEIMNEH, MAHER Computer Information
MOOSAVI, MEHDI Biological Science
MORAN, ROXANNE Physics
MORRISON, JENNIFER Communication Studies
MOQUEIRA, IGNACIO, Astronomy/Physics
MOSTYN, GREG Accounting
MOURAD, NIHAD Mathematics
MOUSAVI SHABAEI, PARISA Biological Science
NAIR, ELIZABETH Health Occupations
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NATH, KASHI, Physics
NEKREP, NADA Biological Science
NGUYEN, HONG NGOC Health Occupations
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NICOLAI, BRENT Health Occupations
NOEL, MARINA Business
NOLAN, PAUL B. Business
NOLASCO, MONICA Counseling
OBEID, KHALID Arabic
OMIDI, PEJMAN English and Reading
OSTRANDER, HELEN DSPS
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PETERS, CHRISTINA Engineering
PETROSYAN, ALLA English, Humanities
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PINNELL, SABRINA Political Science
PIPER, DAVID Humanities/Psychology/ Counseling, Faculty Lead, Student Equity and Success
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ZAMZOW, MARK Health Occupations
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Zhou, Kala JINGZI Mathematics
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New Business and Technology Building is Open!

Get ready to unlock your full potential with our brand new, state-of-the-art Business and Technology building. With over 39,000 square feet of space spread across two floors, you’ll have access to:

- Cutting-edge library for your research and study needs
- Spacious classrooms with the latest technology for an optimal learning experience
- Computer labs for practical, hands-on training
- Numerous areas to relax and focus on your studies

But that’s not all—head up to the outdoor patio on the second floor and you’ll be rewarded with one of the best views of the entire campus.

All of this was made possible through the $350 million-dollar Measure C bond program in 2012, ensuring that our students have access to the best facilities for their education.
Mission College has a commitment to extend educational opportunity to all members of the community and implements this philosophy by means of various programs, services and facilities at the College. Most administrative offices are open 9 a.m. - 4 p.m., Monday through Friday. It is recommended that you make an appointment in advance or call for specific hours of operation: (408) 988.2200.

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Academic Support Center/ Tutoring Center .........................408.855.5095
Admissions ........................................408.855.5000

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President’s Office ......................................408.855.5123
VP Administrative Services Office .................408.855.5230
VP Instruction Office ..................................408.855.5180
VP Student Services Office .............................408.855.5197
Articulation Office ......................................408.855.5045
Placement and Assessment Information ...........408.855.5098
Placement and Assessment (Direct) ....................408.855.5099
Athletics .................................................408.855.5540

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Cafeteria ....................................................408.855.5117
CalWORKs .............................................408.855.5228
Career Technical Education Division Office 408-855-5201
Cashiers (Fees/Refunds) ................................408.855.5028
Child Development Center .............................408.855.5173
Counseling ...............................................408.855.5030

Disability Support Programs and Services Center (DSPS) ........408.855.5085
TTY .........................................................408.727.9243
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Help Desk (Message) ...........................408.855.5359
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Computer Services .................................408.855.5359
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& Services (EOPS) ....................................408.855.5055
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