# College Calendar 2022-2023

## Fall Semester 2022
- **August 27, 2022** – **December 17, 2022**
  - 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
  - Deadline to petition for fall completion of a degree or certificate
  - Campus Closed - Veterans’ Day Observed
  - Last day to WITHDRAW from full-term classes with a “W”
  - Campus Closed - Thanksgiving Break
  - Final Exams
  - Last day to submit Pass/No Pass grading option for full term course
  - Campus Closed – Winter Break

## Winter Session 2023
- **January 3, 2023** – **January 26, 2023**
  - First Day of Classes
  - Campus Closed - Martin Luther King Day
  - Final Exams

## Spring Semester 2023
- **January 28, 2023** – **May 26, 2023**
  - 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
  - Deadline to petition for spring completion of a degree or certificate
  - Campus Closed – Presidents’ Day
  - Campus Closed - Cesar Chavez Day
  - Spring Break
  - Last day to WITHDRAW from a full-term classes with a “W”
  - Final Exams
  - Last day to submit Pass/No Pass grading option
  - Commencement

## Summer 2023
- Summer Term 2023 instruction dates are to be determined. Classes will begin in June and most will run for a six-week term. Please check the college website or Summer/Fall 2023 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.*
On behalf of the faculty, classified professionals, and administrators of Mission College, I want to welcome you to our campus. I am incredibly excited that you are joining our Saints Family. Whether you are starting college for the first time or returning to college, you will find your mission here. Just like Mission College continues to rise like the sun over Silicon Valley, you have risen to the challenge of college, overcoming a pandemic and shining brightly as you begin your journey with us.

As a new member of the Saints Family myself, I have been met with warmth, welcome, and a deep sense of hope as we re-engage post-pandemic. I know that you will experience this warm welcome and so much more as you join us on-campus and online. We are dedicated to your success and offer many different opportunities to be successful, including in-person courses, online courses, evening, weekend, and short-term eight-week courses. At Mission, we will meet you where you are at and support you as you find your way to achieving your dreams.

The entire Mission College team cares about your personal and professional success and we will be with you every step of the way. As you return to campus, you may also notice some great new changes in our facilities. Enjoy our new plaza with USB ports and comfortable spaces to relax. We are planning renovations to our Child Development Center and Library to best support you. We also have some new facilities opening this academic year including our new Business and Technology Building opening in early 2023. Construction will also begin on our new theatre and community space this year. As you can see, we care deeply about your success and continue to invest in your learning experiences.

If you have any questions or need assistance, stop by or live chat with our Welcome Center and our wonderful ambassadors will meet you online, in-person or over email. Also, with the impact of COVID-19, we want to ensure that you have everything you need to be successful. Please take advantage of the free Wi-Fi hotspots available for you as well as the laptop loan program. We are here for you and your success.

Remember that you are in control of your future and the decisions you make today will impact that future. We are here for you and I look forward to seeing you on campus. Welcome again to the Mission College Family. Go Saints!

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

#IKnowMyMission
#missioncollegeSC
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>College Calendar</td>
<td>Front Cover</td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>Accreditation</td>
<td>6</td>
</tr>
<tr>
<td>Equal Opportunity and Non-Discrimination</td>
<td>6</td>
</tr>
<tr>
<td>Catalog Policies</td>
<td>7</td>
</tr>
<tr>
<td>Our Mission, Vision, and Values</td>
<td>7</td>
</tr>
<tr>
<td>Learning Outcomes</td>
<td>7</td>
</tr>
<tr>
<td>Getting started at Mission</td>
<td>8</td>
</tr>
<tr>
<td>Admissions</td>
<td>9</td>
</tr>
<tr>
<td>Admissions Eligibility</td>
<td>9</td>
</tr>
<tr>
<td>Concurrent/Dual Enrollment High School Students</td>
<td>9</td>
</tr>
<tr>
<td>International Students</td>
<td>9</td>
</tr>
<tr>
<td>Student Success Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Placement and Assessment</td>
<td>11</td>
</tr>
<tr>
<td>Assessment Services/Prerequisite Clearance</td>
<td>11</td>
</tr>
<tr>
<td>Registration</td>
<td>12</td>
</tr>
<tr>
<td>Orientation</td>
<td>12</td>
</tr>
<tr>
<td>Online Registration</td>
<td>12</td>
</tr>
<tr>
<td>Enrollment Policies and Procedures</td>
<td>12</td>
</tr>
<tr>
<td>Withdrawal Policies and Procedures</td>
<td>13</td>
</tr>
<tr>
<td>Costs and Financial Aid</td>
<td>14</td>
</tr>
<tr>
<td>Enrollment Fee</td>
<td>14</td>
</tr>
<tr>
<td>California Residency</td>
<td>14</td>
</tr>
<tr>
<td>AB540/AB2000/SB68</td>
<td>14</td>
</tr>
<tr>
<td>Non-resident Tuition</td>
<td>14</td>
</tr>
<tr>
<td>Other Fees</td>
<td>15</td>
</tr>
<tr>
<td>Refunds</td>
<td>15</td>
</tr>
<tr>
<td>Drop for Non-payment</td>
<td>15</td>
</tr>
<tr>
<td>Holds on Records</td>
<td>15</td>
</tr>
<tr>
<td>Financial Aid</td>
<td>15</td>
</tr>
<tr>
<td>Payment Plan</td>
<td>15</td>
</tr>
<tr>
<td>Student Activities</td>
<td>16</td>
</tr>
<tr>
<td>Services for Students</td>
<td>17</td>
</tr>
<tr>
<td>Academic Support Services</td>
<td>19</td>
</tr>
<tr>
<td>Community Education</td>
<td>19</td>
</tr>
<tr>
<td>Student Support Programs</td>
<td>20</td>
</tr>
<tr>
<td>Campus Information</td>
<td>22</td>
</tr>
<tr>
<td>Parking</td>
<td>22</td>
</tr>
<tr>
<td>Rights and Responsibilities</td>
<td>23</td>
</tr>
<tr>
<td>Title IX: Sexual Harassment and Assault</td>
<td>23</td>
</tr>
<tr>
<td>Privacy Rights of Students Annual Notification (FERPA)</td>
<td>24</td>
</tr>
<tr>
<td>Student Need to Know Policies and Information</td>
<td>24</td>
</tr>
<tr>
<td>Academic Regulations and Policies</td>
<td>25</td>
</tr>
<tr>
<td>Academic Freedom</td>
<td>25</td>
</tr>
<tr>
<td>Academic Honesty</td>
<td>25</td>
</tr>
<tr>
<td>Class Attendance and Participation</td>
<td>26</td>
</tr>
<tr>
<td>Grade Policies</td>
<td>26</td>
</tr>
<tr>
<td>Transcripts</td>
<td>26</td>
</tr>
<tr>
<td>Final Examinations</td>
<td>27</td>
</tr>
<tr>
<td>Academic Honors</td>
<td>28</td>
</tr>
<tr>
<td>Academic Standing</td>
<td>28</td>
</tr>
<tr>
<td>Academic Renewal</td>
<td>29</td>
</tr>
<tr>
<td>Credit for Prior Learning</td>
<td>30</td>
</tr>
<tr>
<td>Coursework from Other Institutions</td>
<td>31</td>
</tr>
<tr>
<td>Course Evaluation for General Education</td>
<td>31</td>
</tr>
<tr>
<td>Credit for Military Service</td>
<td>31</td>
</tr>
<tr>
<td>Credit by Internal Examination</td>
<td>31</td>
</tr>
<tr>
<td>Credit by External Examination</td>
<td>32</td>
</tr>
<tr>
<td>College Credit for Advance Placement (AP)</td>
<td>33</td>
</tr>
<tr>
<td>College Credit for Examination Program</td>
<td>34</td>
</tr>
<tr>
<td>College Credit for International</td>
<td>35</td>
</tr>
<tr>
<td>Baccalaureate Program Exams (IB)</td>
<td>35</td>
</tr>
<tr>
<td>Major and Career Pathways</td>
<td>36</td>
</tr>
<tr>
<td>Programs of Study</td>
<td>37</td>
</tr>
<tr>
<td>General Requirements for Transfer Students</td>
<td>38</td>
</tr>
<tr>
<td>Associate in Arts/Associate in Science Degrees</td>
<td>41</td>
</tr>
<tr>
<td>CSU General Education Certification Requirements</td>
<td>44</td>
</tr>
<tr>
<td>General Education Requirements iGETC for CSU</td>
<td>47</td>
</tr>
<tr>
<td>General Education Requirements iGETC for UC</td>
<td>49</td>
</tr>
<tr>
<td>Degree and Certificate Program Requirements</td>
<td>52</td>
</tr>
<tr>
<td>Course Descriptions</td>
<td>162</td>
</tr>
<tr>
<td>Mission College Personnel</td>
<td>249</td>
</tr>
<tr>
<td>Campus Maps</td>
<td>261</td>
</tr>
<tr>
<td>Catalog Index</td>
<td>262</td>
</tr>
<tr>
<td>Campus Phone Directory</td>
<td>Back Cover</td>
</tr>
</tbody>
</table>
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.

Ground breaking 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 with a Central Plaza, theatre space, STEM Center and Business Technology Building set to be built.

Accreditation

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.

Mission College is fully accredited with the next accreditation cycle beginning in 2027.

Minority-serving Institution

Mission College is proud to be both an Hispanic-Serving Institution (HSI) and an Asian American and Pacific Islander Serving Institution (AANAPISI). The college has received significant federal grant funds to further and enhance the services we offer and to support the success of students across the college.

HSI-STEM grants support the enrollment of Latinx and low-income students from our area high schools to Mission College, 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 is to assist AAPI and low-income students from matriculation through degree attainment and transfer to four-year colleges/ universities, with a particular emphasis on transfer into Science, Technology, Engineering, and Mathematics (STEM) majors.

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 1963, Title IX of the Education Amendments of 1972, and Title VI of the Civil Rights Act of 1964, 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.
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 who are considered returning students, meaning those who are 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 the purpose of 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.

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.
## Getting Started at Mission

We look forward to having you join us at Mission College! If you ever need help or get stuck, go to welcome.missioncollege.edu and live chat with our Welcome Center. A student ID will need to be re-activated through CCC Apply if you miss a semester and want to register for classes. If you lose your student ID number go here: web.wvm.edu/whatsmyid/gnumber

### Start Here: apply.missioncollege.edu

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
</table>
| 1 | **Apply for Admission**  
- Apply via CCC Apply. A student 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. |
| 2 | **Declare Your Vaccination Status**  
- Students taking in-person classes must declare their vaccination status or provide a medical or religious exemption. The declaration is optional for online classes. The information will be verified by our vendor, Pyramed through a state database and followed up by Health Services with any discrepancies.  
Declare status at: My Mission Portal |
| 3 | **Apply for Financial Aid**  
- Apply for Financial Aid by submitting the Free Application for Federal Student Aid (FAFSA) and/or the CA Dream Act Application. FAFSA can take between 2-3 weeks to process. You will need the school code (0144558).  
Visit financialaid.missioncollege.edu for information. |
| 4 | **Determine Your Placement**  
- Complete the Placement Process for math and English from within your My Mission Portal  
- Clear Prerequisites from prior experience or college classes, if applicable, via the assessment website.  
- Those taking ESL for credit classes need to complete a separate ESL assessment  
For Help: Assessment.missioncollege.edu |
| 5 | **Complete the Required Orientation**  
- Go to My Mission Portal to complete the self-paced, online orientation.  
View orientation tutorial video on getting started at counseling.missioncollege.edu |
| 6 | **Meet with a Counselor to Select Classes**  
- Go to My Mission Portal to complete the self-paced, online orientation.  
View orientation tutorial video on getting started at counseling.missioncollege.edu |
| 7 | **Register and Pay for Classes**  
- Students 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 the start of the term.  
- Students can also do this with the “Go Mission” app. Details on downloading at go.missioncollege.edu  
View more information at: missioncollege.edu/admissions/become-a-student/index.html |
| 8 | **WVM Email / Single Sign-On**  
- Students will need a WVM email address to access services via Single Sign-On and will receive a WVM email address once they register for classes.  
- Please note it can take up to 72 hours after you receive a student ID number (G01234567) for everything to become active. |
Welcome Center
The Mission College 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 is capable of benefiting 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 the mandatory health services fee.
- Persons who are apprentices as defined in Labor Code 3077.
- A formal, written document from the student's high school district indicating he or she is exempted from any high school attendance.
- G.E.D., California high school (HS) Equivalency Certificate
- Certificate of the State Proficiency Test.
- Any person over the age of 18 and possessing a high school diploma or its equivalent.
- 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.
- An international student with a valid F-1 visa and proof of financial sponsorship of at least $21,500 or its equivalent in foreign currency.
- A non-high school graduate, above 16 years of age, who has in his/her possession the mandatory health services fee.
- Dually enrolled high school students may not register into Kinesiology or 900 level courses.

Dual Enrollment High School Students Admission
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, GTEC, 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 2021-2022 academic year, the non-resident tuition and fee is $307.00 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.

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 & 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 & Financial Aid.

Notification of Tax Identification Numbers (TIN) or Social Security Numbers (SSN)

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 & Privacy Act (FERPA).

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.

CONNECT WITH CRANIUM CAFÉ

Many of our departments use Cranium Café where you can chat instantly with area staff, get in line for a drop-in video meeting, schedule appointments for in-person or video meetings. While on our website, look for the white boxes which invite you to “Connect with Cranium Café.”

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. Log on to My Mission Portal with their @ mywvm.wvm.edu email address for access.

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/gnumber

KNOW AND USE YOUR STUDENT EMAIL

Students are provided with a personalized email account (yourname@mywvm.wvm.edu) which allows for single sign-on for a variety of services. Visit email.missioncollege.edu for more information.

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).

DOWNLOAD OUR MOBILE APP

With our app you can:
• Ability to search, add, drop and pay for classes.
• Connecting to Canvas from the app.
• Maps and directions.
• Events and activities on campus.
• Links to the Library, Tutoring and Bookstore.
• Real-time VTA schedules.

Download at go.missioncollege.edu

ANY ADDITIONAL QUESTIONS

Visit ask.missioncollege.edu for any addition questions you might have.
PLACEMENT AND ASSESSMENT SERVICES

Placements for Math and English Course
Mission College students enroll directly into college-level 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 student to complete the ESL placement process.

Assessment Services/Prerequisite Clearance
Mission College Placement and Assessment Services also assists students to clear course prerequisites. Additional information is found at placement.missioncollege.edu. Students are encouraged to provide their high school transcripts and transcripts from other colleges they have attended to Placement and Assessment Services for prerequisite clearances to be processed.

Unofficial AP, IB, or CLEP scores can also be submitted to get a 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 https://missioncollege.edu/depts/articulation/external-credit.html.
Orientation Services for New Students

New students are highly encouraged to complete a Mission College orientation. There are several different ways to complete the Mission College Orientation:

a) students can complete the Online Orientation through their Mission College Student Portal, or
b) 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 will then be able to 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 approval of the appropriate Dean.

Unit Load Limitation

A normal class load is 15 units; students enrolling in 12 or more units are considered full-time; students enrolling in fewer than 12 units are considered part-time. Students are prohibited from taking more than 18 units without special authorization from a counselor. High school students are limited to no more than 8 units per term, with the exception of students admitted into the Mission Early College High School.

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: www.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 must be otherwise ineligible to take the course she or he wishes to audit.
- 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 his or her enrollment in that course to receive credit for the course.

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 term—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 & 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. 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 from 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 using an authorized symbol 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 hardship), 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), 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:

a. Job transfer outside the geographical region;

b. Illness in the family where the student is the primary caregiver;

c. 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);

d. The student is the subject of an immigration action;

e. Death of an immediate family member;

f. Chronic or acute illness;

g. Verifiable accidents; or

h. Natural disasters directly affecting the student.

Additional information can be found in this catalog on page 28.

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 Withdraw

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 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 web page, 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. For the 2021-22 academic year, the non-resident tuition fee is $290 per unit for the summer 2021 term; and $307 effective fall 2021, in addition to the California Resident Fee is $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 & 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
     - California adult school (established by a county office of education, a unified school district or high school district, or the Department of Corrections and Rehabilitation).
     - California community college (maximum of two years of credit bearing courses can count toward this requirement)
   - OR
   - 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.

2. **Degree or unit requirements**
   - Graduation from a California high school (or attainment of the equivalent)
   - Attainment of an associate degree from a California Community College
   - Fulfillment of minimum transfer requirements from a California Community College to a UC or CSU campus

A year’s equivalence at a California Community College is either a minimum of 24 semester units or credits, or 54 quarter units. For non-credit courses, a year’s attendance is a minimum of 840 semester hours or 1890 quarter 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 & 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 also 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 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 is $21.00 per semester and $18.00 for the summer terms. The mandatory health fee supports Student Health Services. The health fee is not a replacement for personal health care insurance. The health fee is exempted for:
1. Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination, or organization;
2. Students who are attending a community college under an approved apprenticeship training program. (Ed Code 76355)

Any student who either requests an exemption of the health fee or is determined by a Student Services program to warrant review for exemption will be referred to the Admissions & Records Department and these requests will be reviewed on a case by case basis.

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, as long as 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; see registration section for details. It normally takes approximately 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 has instituted a drop for non-payment policy. Students with outstanding balances on their accounts will 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 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.

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), Cal Grant, Extended Opportunity Program and Services (EOPS) Grant, and 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 missioncollege.edu/scholarships.

Financial Aid Book Loan Advances
Book loans are processed as a financial aid advance to students with completed financial aid files and who are eligible for federal financial aid. Funds may be limited for this program.

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 at (800) 699-8056.
STUDENT ACTIVITIES

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 of these activities serve to provide the student with opportunities to participate in the decision and policy-making processes of the college.

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, 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.

Campus Clubs

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

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

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.

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 & 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 & enrollment verifications
• Student Petitions & Appeals
• Veterans/VA & Athletic Certifications
• Evaluations for degrees & 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 & crisis intervention
• Community referrals
• And more

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

Bookstore
mc.bncollege.com | (408) 855-5080
Barnes & Noble College Booksellers provide services in-person and online for students to purchase textbooks and other class materials including reference materials, art and office supplies, clothing, and a variety of convenience items.
The bookstore accepts cash, Barnes & Noble gift cards, credit and bank cards with proper identification. Receipts are required for any exchanges or refunds. Information regarding the bookstore’s return policy, textbook buy-back or rental programs, early textbook reservations or general inquiries can be obtained in store or online at mc.bncollege.com.

Career Services Center
jobs.missioncollege.edu | SEC 122 | (408) 855-5304
The Career Services Center provides services around full-time, part-time, Internship, apprenticeship, seasonal and work study positions via our job portal College Central Network or CCN. 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

SERVICES FOR STUDENTS
Health & Mental Health Services

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

Institute for International Studies (IIS) | International Students Center (ISC)
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 | SEC 109

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 | 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 | 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 located in the Student Engagement Center. Assistance is available via online chat, email, phone, and in-person.

Our staff speaks multiple languages. Key services include assistance with

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

Mission College is committed to supporting our students to ensure they have the resources they need to be most successful. Students in need of food assistance, a laptop or Wi-Fi hotspot loan, emergency financial assistance, mental health support, or housing assistance are encouraged to visit the Mission Cares website above for more information and to connect with our team.

Second Harvest Food Bank

Emergency Financial Assistance

Food for Textbooks Program

Laptop and Wifi Loan Program

On Campus Mental Health Counseling

Campus Support Programs
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, wifi, 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

communityed.missioncollege.edu | 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.

For information on the Community Education Pharmacy Technician Program see page 155
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 & 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**
dsp.s.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, 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.

**Extended Opportunity Program and Services (EOPS)**
eops.missioncollege.edu | SEC 148 | (408) 855-5056
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 provides highly motivated students the opportunity to work closely with instructors and other motivated students in advanced levels of 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 STEM Academic, Transfer, and Career Counseling. Dedicated Student Study Center (SEC 152) with access to printing, a lending library, and key course software; Tutoring and weekly Academic Excellence Workshops (AEW’s) in Math, Physics, Biology, Chemistry.
Opportunities off Campus: 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. 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 & 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
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 a 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 as well as benefit assistance through Veteran Administration services.

Services with the VALOR Center include:
- Peer Mentoring & 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 Gillmore 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. The Bookstore also sells snacks and beverages.
- 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 www.missioncollege.edu/depts/food or by calling 408-855-5245.

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 & special permit spaces, no overnight parking, etc., when parked on campus. The WVMCCD 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.

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 located in the Student Engagement Center. Assistance is available via online chat, email, phone or in-person. Our staff speaks multiple languages. Key services include assistance with:
- Admissions & registration process
- Accessing My Mission Portal, Canvas and student email accounts
- Financial aid applications and scholarship resources,
- General questions and much more
In addition, please refer to the West Valley-Mission Community College District Website for additional information on the following areas:

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 WVMCCD 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

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. For victims or those who have witnessed a violation to come forward and file a complaint, please contact the Title IX Coordinator, by calling (408) 855-5195 or via email: 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, please 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:

In addition, please refer to the West Valley-Mission Community College District Website for additional information on the following areas:
**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.

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 courses 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 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 webpage of the Office of the Vice President of Student Services.
ACADEMIC REGULATIONS & POLICIES

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. Following are definitions of in-class cheating, out-of-class cheating, plagiarism, and furnishing false information. These are not all-inclusive and the list itself is not meant to limit definition of cheating to just those mentioned.

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.

APREQUISITE 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 semester. If you do not pass your current course and it is a prerequisite for the course in which you registered, you will be dropped from the course and your fees will be automatically refunded.

ACOREQUISITE is a course which you must take at the same time as another course as a condition of enrollment. You are not permitted to enroll in a class for which you cannot demonstrate you have met the prerequisite or are not 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. See more information in this catalog on page 11.

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). Transcripts may be sent to an educational institution or may be mailed to the student. Processing a standard transcript request usually requires 10 working days. There is no charge for the first two transcripts requested, in-person, 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 & Records Office. A one-hour transcript may be obtained at a cost of $20 per transcript copy. For online transcript requests, go to: missioncollege.edu/admissions

Petition for Completion of Degree or Certificate/ Applying for Graduation
Steps to Apply
For application forms visit missioncollege.edu/admissions/graduation/diplomas-certificates.html

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 & 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. If final units will be taken at another college, please note this on the Application for Degree/Certificate. Once coursework is complete and final grades are posted, official transcripts must be sent to Admissions & 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 awarded 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>
</tbody>
</table>

Pass/No Pass
Courses may be offered in either or both of the following categories (as referenced in The California Code of Regulations, Title 5 §55752):
1. Courses in which all students are evaluated on a “Pass/No Pass” basis
a. When a course is offered in which credit is awarded on the basis of a single satisfactory standard of performance, the “Pass/No Pass” grading standard must be utilized. Pass (P) shall be awarded for meeting that standard and No Pass (NP) for failure to do so.
b. Transfer of Credit Units: a student is responsible for checking with a counselor or transfer institution to determine any limitation on the transfer of credit units.
c. Maximum Number of Credit Units: A maximum of 20 credit units of the “Pass/No Pass” type may be applied toward the completion of the associate degree; units earned on a Pass/No Pass basis shall not be used to calculate grade point averages. Pass/No Pass units attempted for which No Pass (NP) is recorded, however, shall be considered in probation and progress dismissal procedures.
I - Incomplete

Nonevaluative Symbols

- A notation of SP may be awarded to a student who has met at least one of the following requirements: they are progressing and have acquired some of the skills and knowledge needed to achieve course outcomes, and they are consistent and able to achieve the course outcomes. The SP designation shows that students are not to exceed the first 30 percent of the term, whether the basis of evaluation is to be "Pass/No Pass" or a letter grade.

- The utilization of courses graded on a “Pass/No Pass” basis to satisfy major or certificate requirements must be approved by the Department Chair in consultation with appropriate members of the Division faculty within each College.

- A grade of SP 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 other form of final evaluation. Conditions for the removal of the “Incomplete” grade 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 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

- A. 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 shall be assigned when the course is completed.

- B. 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

- A. 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.

- B. The “RD” grade shall not be used in the computation of the grade point average.

W - Withdrawal

- A. 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.

- B. 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.

- C. 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.”

- D. 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 & Records to request the third and final repeat in person during the registration period.

MW - Military Withdrawal

- A. “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:

  - i. In lieu of an “MW” symbol, a student may directly petition the faculty member for an Incomplete (“I”) 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.

  - ii. 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.

- B. 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:

a. Job transfer outside the geographical region;
   b. Illness in the family where the student is the primary caregiver;
   c. 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);
   d. The student is the subject of an immigration action;
   e. Death of an immediate family member;
   f. Chronic or acute illness;
   g. Verifiable accidents; or
   h. 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. A student with an approved EW grade may file a petition with the district requesting a refund of the enrollment fee. Therefore, the governing board of a district shall adopt a procedure for refunding the entire fee for an approved EW grade, unless the student is awarded academic credit or they received a grant paying for the enrollment fee or waiver of these. 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 WMCCCD 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.

Appeals of Withdrawal Decisions

A student may appeal a decision regarding withdrawal in accordance with District policy, and the California Education Code. The District shall maintain procedures for such appeals and those procedures shall be published and widely available to students.

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:

• 3.30-3.49 Honors
• 3.50-3.79 High Honors
• 3.80-4.0 Highest Honors

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.

Honor Society: Alpha Gamma Sigma

Alpha Gamma Sigma is the California Community College Honor Scholarship Society. Membership in the Mission College Chapter (Sigma Iota) is open to Mission College students under the following classifications:

A. Temporary Membership - Open to new students who are life members of the California Scholarship Federation or who graduated from high school with a 3.5 GPA or higher. A CF certificate or copy of the high school transcript must be submitted with the AGS application.

B. Initial Membership - Open to students who have completed 12 or more semester (or quarter equivalent) units at any college, and have maintained a cumulative 3.0 GPA. The student must be currently enrolled at Mission College in a minimum of three units.

C. Continuing Membership - Students who were Sigma Iota members in the previous semester, who have maintained a 3.0 GPA, and are currently enrolled in a minimum of three units at Mission College, qualify as Continuing members.

D. Permanent Membership - Students who have been ACTIVE members in any Chapter of ASGGS for at least one semester with a cumulative 3.5 GPA or higher, or an ACTIVE member for at least two semesters with a cumulative 3.25 GPA or higher, and who have completed a minimum of 60 semester (or quarter equivalent) units of college, may apply for Permanent Membership.

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:

1. 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,” “I,” “RD,” or “IP” when computing grade point average.

2. All units in which the student has been officially enrolled, except those in which the student has been assigned a non-evaluative symbol of “MW,” “EW,” “RD,” or “IP,” or “I” when applying the satisfactory progress rule.

3. 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.

Probation

A student shall be placed on probation if his or her academic record of performance, at Mission and/or West Valley College(s), falls under either of the two standards below:

1. Academic grade point probation - A student who has accumulated a total of 12 or more semester grade units, at Mission and/or West Valley College(s), shall be placed on academic probation if the student's cumulative grade point average is below 2.00. A student placed on academic probation who earns at least a 1.75-grade point average during the semester on probation, but whose cumulative grade point average is still below 2.00, will be permitted to continue on such probationary status as Subject to Dismissal for one additional semester before being academically disqualified (dismissed). Notification of dismissal status will appear on the student's semester grade report and on the transcript of academic work.

2. Progress probation - A student who has enrolled in a total of 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. A student may be on progress probation after the first semester, Subject to Dismissal after the second semester and Dismissed 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.
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. 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 once, but the petition will be granted only based on a finding that unusual circumstances exist which justify a second repetition.

b. 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.

c. In no case will the unit value of the repeated course be counted more than once.

d. 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.

Grade Alleviation through Course Repetition consistent with the California Code of Regulations, Title 5, § 55762.

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):
  a. Completion of 12 with 3.0 cumulative GPA
  b. Completion of 24 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.

Student must consult with a counselor before petitioning for Academic Renewal. After obtaining the Counselor’s signature, the completed Student Petition is submitted to the Admissions & Records Office.
CREDIT FOR PRIOR LEARNING

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:

- MSCHE - Middle States Commission on Higher Education (formerly MSA – Middle States Association of Colleges and Schools)
- NWCCU - Northwest Commission on Colleges and Universities (formerly NASC - Northwest Association of Schools and Colleges)
- HLC - Higher Learning Commission (formerly NCA - North Central Association of Colleges and Schools)
- NEASC-CIHE - New England Association of Schools and Colleges-Commission on Institutions of Higher Education
- SACS - Southern Association of Colleges and Schools
- WASC-ACCJC - Western Association of Schools and Colleges- Accrediting Commission for Community and Junior Colleges
- WASC-ACACS - 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 approved for an Associate or Baccalaureate Degree from Other Institutions of Higher Education needed for an Associate in Arts or Associate in Science degree from a U.S. regionally accredited institution.

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 completed at least 12 units in residence at Mission College.
2. The student has been granted an associate's degree or a baccalaureate degree from a U.S. regionally accredited institution.
3. The student has completed all program and elective requirements of the 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.
4. The student has completed 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.
5. The student has completed at least 12 units 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 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 https://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. In most cases, these evaluations are granted without an official request.
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 CSU 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 evaluations 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 UC uses an upper-division course in its “lower-division” General Education Breadth Pattern.
3. When a 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.

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.

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) | www.ierf.org
- NACES (The National Association of Credential Evaluation Services) | www.naces.org
- WES (World Education Service) | www.wes.org
- IIC (International Institute of California | www.iicus.com
- IESCAREE (International Evaluation Service Center) | www.iescaree.com

The official foreign evaluation along with a Transcript Evaluation form must be submitted to the Admissions & Records Office. 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 https://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 a student clearance to meet or bypass a course prerequisite. Please visit prerequisites.missioncollege.edu for the most up to date information on the prerequisite clearance process.

Credit for Military Service
Up to 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 online 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 college website: missioncollege.org/admissions/forms.htm (Credit by Exam).

2. The student must be registered and in good standing at Mission College.

3. The student can demonstrate that he/she is 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 will award college credit for the following external exams. Charts with credit awarded for each exam can be found on pages 33 -36. Students must have official scores sent to the Admissions & 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 https://www2.calstate.edu/apply/transfer/Pages/upper-division-transfer.aspx for CSU and https://admission.universityofcalifornia.edu/counselors/exam-credit/ 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.

Advanced Placement Notes:

- 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 (LOT) 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 higher and can be used to meet AA/AS, CSU GE-B and IGETC general education requirements.

Guidance for 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 (AP)

<table>
<thead>
<tr>
<th>EXAM</th>
<th>AA (Major and/or GE) for Mission College</th>
<th>CSU GE</th>
<th>Units Earned toward AA &amp; CSU Transfer</th>
<th>IGETC &amp; UC Subject Area</th>
<th>Units Earned toward Transfer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art History</td>
<td>ART 001A (3) and 001B (3)</td>
<td>Area C1 or C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3A or 3B UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Biology</td>
<td>BIO 010 (3) + BIO 010L (1)</td>
<td>Area B2 and B3 4 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3C UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Calculus AB</td>
<td>MAT 003A (3)</td>
<td>Area B4 3 semester units</td>
<td>3 semester units</td>
<td>Area 2A UC-M</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Calculus BC</td>
<td>MAT 003A (3) and MAT 003B (3) (score of 5 only)</td>
<td>Area B4 3 semester units</td>
<td>6 semester units</td>
<td>Area 2A UC-M</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Calculus BC/AB Subscore</td>
<td>MAT 002A (3) and MAT 002B (3) (score of 5 only)</td>
<td>Area B4 3 semester units</td>
<td>3 semester units</td>
<td>Area 2A UC-M</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>AP Calculus Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 001A (3)</td>
<td>Areas B1 and B3 4 semester units (BFA major)</td>
<td>6 semester units</td>
<td>Area 5A and SC UC-S</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Chinese Language and Culture</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>CIS 037A (4)</td>
<td>N/A</td>
<td>3 semester units***</td>
<td>N/A</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>CIS 037A (4)</td>
<td>N/A</td>
<td>6 semester units***</td>
<td>N/A</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>Computer Science Principles</td>
<td>Departmental Approval Needed</td>
<td>Area B4 3 semester units</td>
<td>6 semester units***</td>
<td>N/A</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>AP English Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Economics - Microeconomics</td>
<td>ECON 001A (4)</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Economics - Macroeconomics</td>
<td>ECON 001B (4)</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>English - Language &amp; Composition</td>
<td>ENGL 017A (3)</td>
<td>Area A2</td>
<td>3 semester units</td>
<td>Area 1A UC-M</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>English - Literature &amp; Composition</td>
<td>ENGL 017A (3) and Area AC</td>
<td>Area A1 and A2 6 semester units</td>
<td>6 semester units***</td>
<td>Area 1A or 3B UC-A or UC-H</td>
<td>5.3 semester/6 quarter units***</td>
</tr>
<tr>
<td>AP English Language Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Environmental Science</td>
<td>Area B</td>
<td>Area B1 and B3 4 semester units</td>
<td>4 semester units</td>
<td>Area 5A and SC UC-S</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>French Language and Culture</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>German Language and Culture</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Government &amp; Politics – Comparative</td>
<td>Area D1 or D2</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Government and Politics - U.S.</td>
<td>Area D1 or D2</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>AP Government Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>History – European</td>
<td>HIS 0048 (3)</td>
<td>Area C2 or D 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B or 4 UC-R or UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>History - U.S. History</td>
<td>HIS 017A (3)</td>
<td>Area C2 or D 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B or 4 UC-R or UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>History – World History-Madison</td>
<td>Area C or Area D1</td>
<td>Area C2 or D 3 semester units</td>
<td>3 semester units</td>
<td>Area 3B or 4 UC-R or UC-H</td>
<td>5.3 semester/6 quarter units</td>
</tr>
<tr>
<td>Human Geography</td>
<td>Area D1</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Italian Language &amp; Culture</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Japanese Language &amp; Culture</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Latin</td>
<td>Area C</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Physics 1</td>
<td>PHY 004A (3)</td>
<td>Area B1 and B3 4 semester units</td>
<td>4 semester units***</td>
<td>Area 5A and SC UC-S</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>Physics 2</td>
<td>PHY 004B (3)</td>
<td>Area B1 and B3 4 semester units</td>
<td>4 semester units***</td>
<td>Area 5A and SC UC-S</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>Physics C – Electricity and Magnetism</td>
<td>PHY 004C (3)</td>
<td>Area B1 and B3 4 semester units</td>
<td>4 semester units***</td>
<td>Area 5A and SC UC-S</td>
<td>5.3 semester/8 quarter units***</td>
</tr>
<tr>
<td>AP Physics Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>PSY 001 (3)</td>
<td>Area D 3 semester units</td>
<td>3 semester units</td>
<td>Area 4 UC-R</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>Spanish Language and Culture</td>
<td>SPA 003 (3)</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Spanish Literature and Culture</td>
<td>SPA 004 (3)</td>
<td>Area C2 3 semester units</td>
<td>6 semester units</td>
<td>Area 3B and 3A UC-H</td>
<td>5.3 semester/8 quarter units</td>
</tr>
<tr>
<td>Statistics</td>
<td>MAT 010 (4)</td>
<td>Area B4 3 semester units</td>
<td>3 semester units</td>
<td>Area 2A UC-M</td>
<td>2.6 semester/4 quarter units</td>
</tr>
<tr>
<td>AP Statistics Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Studio Art – 2D Design</td>
<td>Departmental Approval Needed</td>
<td>3 semester units</td>
<td>NA</td>
<td>3.3 semester units/8 quarter units***</td>
<td></td>
</tr>
<tr>
<td>Studio Art – 3D Design</td>
<td>Departmental Approval Needed</td>
<td>3 semester units</td>
<td>NA</td>
<td>3.3 semester units/8 quarter units***</td>
<td></td>
</tr>
<tr>
<td>Studio Art – Drawing</td>
<td>Departmental Approval Needed</td>
<td>3 semester units</td>
<td>NA</td>
<td>3.3 semester units/8 quarter units***</td>
<td></td>
</tr>
<tr>
<td>AP Studio Art Exam Limitations:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**AP Calculus Exam Limitations:**
- **Maximum 3.3 semester/6 quarter units for both AB and BC, Max 2.6 semester/4 quarter for both AB and the AB subscore**
- **Maximum 5.3 semester/8 quarter units for both AB and BC, Max 2.6 semester/4 quarter for both AB and the AB subscore**

**AP English Exam Limitations:**
- **Maximum 5.3 semester/8 quarter units for both**

**AP English Language Exam Limitations:**
- **Does not fulfill AHI California Government requirement. Student can satisfy the AB requirement after transfer**

**AP Government Exam Limitations:**
- **Maximum 4 semester units toward GE and 6 semester units toward transfer**
- **Maximum 5.3 semester/8 quarter units for all**

**AP Physics Exam Limitations:**
- **Maximum 4 semester units toward GE and 6 semester units toward transfer**
- **Maximum 5.3 semester/8 quarter units for all**

**AP Studio Art Exam Limitations:**
- **Maximum 5.3 semester/8 quarter units for all**

**Additional Notes:**
- Use of AP credit varies at each transfer institution. Please check the transfer institution’s catalog for details.
- UCLA will not grant AP credit if the exam is taken after the student has completed 24 semester units of college coursework.
- For the most updated AP information for CSU and UC, visit [CSU Advanced Placement](https://www.csu.edu) or [UC AP and Exam Credits](https://www.registrar.ucla.edu).

**Mission College Catalog 2022-2023**

Approved by MECAS Spring 2009; UPDATED based on EO 1036 ASA-2019-03; rev0622
# 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>MINIMU CSU UNITS ALLOWED</th>
<th>CSU GE-B AREA and UNITS</th>
</tr>
</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>
</tr>
<tr>
<td>CLEP American Literature</td>
<td>50</td>
<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>
<td>50</td>
<td>Area C</td>
<td>3 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Biology</td>
<td>50</td>
<td>Area B</td>
<td>3 semester units</td>
<td>Area B2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Calculus</td>
<td>50</td>
<td>Math Competency and Area A2</td>
<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
</tr>
<tr>
<td>CLEP Chemistry</td>
<td>50</td>
<td>Area B</td>
<td>3 semester units</td>
<td>Area B1, 3 semester units</td>
</tr>
<tr>
<td>CLEP College Algebra</td>
<td>50</td>
<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>
<td>50</td>
<td>Math Competency and Area A2</td>
<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
</tr>
<tr>
<td>CLEP Financial Accounting</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP French Level I*</td>
<td>50</td>
<td>NA</td>
<td>6 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP French Level II*</td>
<td>59</td>
<td>Area C</td>
<td>9 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Freshman College Composition</td>
<td>50</td>
<td>NA</td>
<td>NA</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP German Level I*</td>
<td>50</td>
<td>NA</td>
<td>6 semester units</td>
<td>NA</td>
</tr>
<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>
</tr>
<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>
</tr>
<tr>
<td>CLEP Human Growth and Development</td>
<td>50</td>
<td>Area D1 or Area E</td>
<td>3 semester units</td>
<td>Area E, 3 semester units</td>
</tr>
<tr>
<td>CLEP Humanities</td>
<td>50</td>
<td>Area C</td>
<td>3 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Information Systems and Computer Applications</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Introduction to Educational Psychology</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Introduction to Business Law</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Introductory Psychology</td>
<td>50</td>
<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
</tr>
<tr>
<td>CLEP Introductory Sociology</td>
<td>50</td>
<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
</tr>
<tr>
<td>CLEP Natural Sciences</td>
<td>50</td>
<td>Area B</td>
<td>3 semester units</td>
<td>Area B1 or Area B2, 3 semester units</td>
</tr>
<tr>
<td>CLEP Pre-Calculus</td>
<td>50</td>
<td>Math Competency and Area A2</td>
<td>3 semester units</td>
<td>Area B4, 3 semester units</td>
</tr>
<tr>
<td>CLEP Principles of Accounting</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Principles of Macroeconomics</td>
<td>50</td>
<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
</tr>
<tr>
<td>CLEP Principles of Microeconomics</td>
<td>50</td>
<td>Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
</tr>
<tr>
<td>CLEP Principles of Marketing</td>
<td>50</td>
<td>NA</td>
<td>3 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Spanish Level I*</td>
<td>50</td>
<td>NA</td>
<td>6 semester units</td>
<td>NA</td>
</tr>
<tr>
<td>CLEP Spanish Level II*</td>
<td>63</td>
<td>Area C</td>
<td>9 semester units</td>
<td>Area C2, 3 semester units</td>
</tr>
<tr>
<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>
</tr>
<tr>
<td>CLEP Western Civilization II</td>
<td>50</td>
<td>Area C or Area D1</td>
<td>3 semester units</td>
<td>Area D, 3 semester units</td>
</tr>
</tbody>
</table>
# College Credit for International Baccalaureate Program Exams (IB)

<table>
<thead>
<tr>
<th>Exam</th>
<th>Minimum Score for MC and CSU</th>
<th>AA/AS GE for Mission College</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>
</tr>
</thead>
<tbody>
<tr>
<td>IB Biology HL</td>
<td>5</td>
<td>Area B</td>
<td>Area B2</td>
<td>5</td>
<td>5B</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Chemistry HL</td>
<td>5</td>
<td>Area B</td>
<td>Area B1</td>
<td>5</td>
<td>5A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Economics HL</td>
<td>5</td>
<td>Area D1</td>
<td>Area D</td>
<td>5</td>
<td>4</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Geography HL</td>
<td>5</td>
<td>Area D1</td>
<td>Area D</td>
<td>5</td>
<td>4</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB History (any region) HL</td>
<td>5</td>
<td>Area D1</td>
<td>Area C2 or D</td>
<td>5</td>
<td>3B and 4</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Language A Literature*</td>
<td>4</td>
<td>Area C</td>
<td>Area C2</td>
<td>5</td>
<td>3B and 6A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Language A – Language and Literature (except English)</td>
<td>4</td>
<td>Area C</td>
<td>Area C2</td>
<td>5</td>
<td>3B and 6A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Language B (any language) HL</td>
<td>4</td>
<td>Area C</td>
<td>NA</td>
<td>5</td>
<td>6A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Mathematics HL</td>
<td>4</td>
<td>Math Competency and Area A2</td>
<td>Area B4</td>
<td>5</td>
<td>2A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Physics HL</td>
<td>5</td>
<td>Area B</td>
<td>Area B1</td>
<td>5</td>
<td>5A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Psychology HL</td>
<td>5</td>
<td>Area D1</td>
<td>Area D</td>
<td>5</td>
<td>4</td>
<td>3 MC, 3 CSU, 5.3 UC</td>
</tr>
<tr>
<td>IB Theatre HL</td>
<td>4</td>
<td>Area C</td>
<td>Area C1</td>
<td>5</td>
<td>3A</td>
<td>6 MC, 6 CSU, 5.3 UC</td>
</tr>
</tbody>
</table>

*Some CSU campuses grant CSU GE-B Area A2 credit for the IB Language and Literature exam. Mission College will grant exceptions on a case-by-case basis if a student is wishing to transfer to a campus that grants CSU GE-B Area A2. See the Articulation Officer for more information.
MAJOR & CAREER PATHWAYS

What are Major and Career Pathways?
They are groups of related programs based on similar interests and courses. Career pathways are designed to help you find a path to reach your educational and career goals and provide a structure to help you navigate the college experience.

Ask a Counselor
We suggest scheduling an appointment with a counselor at counseling.missioncollege.edu, discuss the classes and work experience you already have accomplished and where you want to go.

Go to majors.missioncollege.edu to explore all our degrees and certificates. The Major and Career Pathways are on the following page in the following categories:

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.

BUSINESS AND HOSPITALITY
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.

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.

EXPLORATORY AND GENERAL STUDIES
The Exploratory & 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.

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.

PUBLIC SERVICE AND SOCIAL SCIENCES
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.

STEM FIELDS
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.

Explore our Career Pathways at: majors.missioncollege.edu
PROGRAMS OF STUDY

ART & DESIGN PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>AA</td>
</tr>
<tr>
<td>Art History</td>
<td>AA-T</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>AA</td>
</tr>
<tr>
<td>Digital Illustration</td>
<td></td>
</tr>
<tr>
<td>Digital Music</td>
<td></td>
</tr>
<tr>
<td>Graphic Design</td>
<td>AS</td>
</tr>
<tr>
<td>Liberal Arts: Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td>Studio Arts</td>
<td>AA-T</td>
</tr>
<tr>
<td>Three-Dimensional Arts</td>
<td></td>
</tr>
<tr>
<td>Web Design</td>
<td></td>
</tr>
<tr>
<td>User Experience &amp; Interface Design</td>
<td></td>
</tr>
<tr>
<td>Web Development</td>
<td></td>
</tr>
</tbody>
</table>

BUSINESS & HOSPITALITY PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting</td>
<td>AS</td>
</tr>
<tr>
<td>Administrative Specialist</td>
<td>AS</td>
</tr>
<tr>
<td>Baking and Pastry</td>
<td>AS</td>
</tr>
<tr>
<td>Business</td>
<td>AS</td>
</tr>
<tr>
<td>Business Administration 2.0</td>
<td>AS-T</td>
</tr>
<tr>
<td>Business Information Professional 1</td>
<td></td>
</tr>
<tr>
<td>Business Computing</td>
<td></td>
</tr>
<tr>
<td>CPA Exam Preparation 1: Auditing &amp; Attestation (AUD)</td>
<td></td>
</tr>
<tr>
<td>CPA Exam Preparation 2: Business Environment &amp; Concepts (BEC)</td>
<td></td>
</tr>
<tr>
<td>CPA Exam Preparation 3: Financial Accounting &amp; Reporting (FAR)</td>
<td></td>
</tr>
<tr>
<td>CPA Exam Preparation 4: Regulation (REG)</td>
<td></td>
</tr>
<tr>
<td>Culinary Arts</td>
<td>AS</td>
</tr>
<tr>
<td>Economics</td>
<td>AA-T</td>
</tr>
<tr>
<td>Entrepreneurship &amp; Small Business</td>
<td></td>
</tr>
<tr>
<td>Food Service &amp; Restaurant Management</td>
<td></td>
</tr>
<tr>
<td>Fundamental Food Service Skills</td>
<td></td>
</tr>
<tr>
<td>Hospitality Management</td>
<td>AS</td>
</tr>
<tr>
<td>Management and Leadership</td>
<td></td>
</tr>
<tr>
<td>Microsoft Office</td>
<td></td>
</tr>
<tr>
<td>Office Information Systems</td>
<td>AS</td>
</tr>
<tr>
<td>Project Coordinator</td>
<td></td>
</tr>
<tr>
<td>Project Management</td>
<td></td>
</tr>
</tbody>
</table>

LANGUAGE & LIBERAL ARTS PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication Studies</td>
<td>AA-T</td>
</tr>
<tr>
<td>English</td>
<td>AA-T</td>
</tr>
<tr>
<td>Liberal Arts: Communication in English &amp; Critical Thinking</td>
<td>AA</td>
</tr>
<tr>
<td>Spanish</td>
<td>AA-T</td>
</tr>
</tbody>
</table>

EXPLORATORY & GENERAL STUDIES PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberal Arts: Arts &amp; Humanities</td>
<td></td>
</tr>
<tr>
<td>Liberal Arts: Communication in English &amp; 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>
</tr>
<tr>
<td>Transfer Studies IGETC for UC</td>
<td></td>
</tr>
</tbody>
</table>

HEALTH SCIENCE PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fitness &amp; Health</td>
<td></td>
</tr>
<tr>
<td>Human Biology</td>
<td>AS</td>
</tr>
<tr>
<td>Kinesiology</td>
<td></td>
</tr>
<tr>
<td>Nursing Assistant</td>
<td>AA-T</td>
</tr>
<tr>
<td>Nutrition and Dietetics</td>
<td>AS-T</td>
</tr>
<tr>
<td>Registered Nursing (LVN to RN)</td>
<td></td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>AS</td>
</tr>
</tbody>
</table>

PUBLIC SERVICE & SOCIAL SCIENCE PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administration of Justice</td>
<td>AS-T</td>
</tr>
<tr>
<td>Anthropology</td>
<td>AA-T</td>
</tr>
<tr>
<td>Associate Teacher</td>
<td></td>
</tr>
<tr>
<td>Early Childhood Education</td>
<td>AS-T</td>
</tr>
<tr>
<td>Early Intervention Assistant</td>
<td></td>
</tr>
<tr>
<td>Economics</td>
<td>AA-T</td>
</tr>
<tr>
<td>Fire Fighter/EMT Academy</td>
<td></td>
</tr>
<tr>
<td>Fire Technology</td>
<td></td>
</tr>
<tr>
<td>Fire Prevention Internship Certification</td>
<td></td>
</tr>
<tr>
<td>History</td>
<td>AA-T</td>
</tr>
<tr>
<td>Liberal Arts: Social and Behavioral Science</td>
<td></td>
</tr>
<tr>
<td>Master Teacher</td>
<td></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>
</tr>
</tbody>
</table>

SCIENCE TECHNOLOGY ENGINEERING PATHWAY

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<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>
<td></td>
</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>
<td></td>
</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></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>
</tr>
<tr>
<td>Web Development</td>
<td></td>
</tr>
</tbody>
</table>

APPRENTICESHIP PROGRAMS

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coach Operator</td>
<td></td>
</tr>
<tr>
<td>Overhead line Worker</td>
<td></td>
</tr>
<tr>
<td>Public Transit Leadership</td>
<td></td>
</tr>
<tr>
<td>Service Mechanic</td>
<td></td>
</tr>
<tr>
<td>Track Worker</td>
<td></td>
</tr>
</tbody>
</table>

CREDIT ESL PROGRAMS

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>English as a Second Language</td>
<td>X</td>
</tr>
</tbody>
</table>

NON CREDIT PROGRAMS

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low- Beginning ESL</td>
<td>ø</td>
</tr>
<tr>
<td>High- Beginning ESL</td>
<td>ø</td>
</tr>
<tr>
<td>Beginning ESL</td>
<td>ø</td>
</tr>
<tr>
<td>ESL for Childcare</td>
<td>ø</td>
</tr>
<tr>
<td>Beginning Computer Skills</td>
<td>ø</td>
</tr>
<tr>
<td>Basic Writing Skills</td>
<td>ø</td>
</tr>
<tr>
<td>Community Health Worker</td>
<td>ø</td>
</tr>
<tr>
<td>English For Careers in Food Service</td>
<td></td>
</tr>
<tr>
<td>English for Child Development</td>
<td>ø</td>
</tr>
<tr>
<td>Low Intermediate ESL</td>
<td>ø</td>
</tr>
<tr>
<td>Preparation for Academic Success in ESL</td>
<td></td>
</tr>
</tbody>
</table>

NOT FOR CREDIT PROGRAMS

<table>
<thead>
<tr>
<th>Course</th>
<th>Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pharmacy Technician</td>
<td></td>
</tr>
</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 Achievement
x = Department issued 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 requirements are met.

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.
Academic Programs

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 52, students seeking an Associate in Arts or Associate in Science degree must fulfill the Mission College competency and general education requirements found on pages 41-43. Potential transfer students may choose to fulfill the more comprehensive CSU GE-B or IGETC 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 30 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.

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 beginning on page 52.

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 will pursue the Associate in Arts for Transfer or Associate in Science for Transfer, however that will 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 www.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. 2.4 is the minimum GPA for the UC system and 2.0 is the minimum for the CSU system (2.8 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 Bernardino, 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 Humboldt (formerly Humboldt 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 Sanoma 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 credit with a grade point average of at least 2.0 on a 4.0 scale.
2. Complete one of the following:
   a. Minimum general education requirements
   b. California State University General Education Breadth Requirements (CSU GE-B)
   c. California State University General Education Breadth for STEM Requirements (CSU GE-B for STEM)
   d. 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:

1. English Language (3.0 units)
2. Critical Thinking (3.0 units)
3. Oral Communications (3.0 units)
4. 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 www.assist.org for updated information. Complete requirements for the CSU GE-B can be found in this catalog on page 44

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 47.

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 www.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-T/AS-T) 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 www.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 19 majors: Administration of Justice, Anthropology, Art History, Biological Sciences, Business Administration, 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 sections beginning on page 52.

Requirements for an Associate Degree for Transfer

A. Completion of the AA-T or AS-T major courses with grades of C or P or better
B. Completion 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 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:
A. Complete 60 semester units of UC transferable college credit with a grade point average of at least 2.4 on a 4.0 scale. Non-residents must have a minimum 2.8 grade point average. (No more than 14 semester units may be taken Pass/No Pass) and

B. Complete one of the following General Education Patterns:
   1. UC Seven Course Pattern
   2. 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 49-51.

**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 www.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 www.assist.org.
## Mission College

### Graduation Requirements 2022-2023

#### 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 § 55061. Graduation requirements (Major, Competency, and General Education) are listed in the College Catalog at the time of graduation.

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 the studies are resumed.

**Reciprocity Agreement:** Students completing all of the general education and graduation 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:**
     - Completion of ENG 001A or ENG 001AX (grade of C or better) or REA 054 (C or P or better)
     - Completion of a transfer-level course approved to satisfy the First-Year Composition requirement at a college or university (C or P or better).

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

   - **Oral Communication:**
     - Completion of COM 001, 001H, 015, 020, 020H for the A.A. Degree
     - Completion of COM 001, 001H, 004, 015, 020 or 020H for the A.S. Degree
     - Competency determined by Communication Studies Department committee evaluation process.

   - **Mathematics:**
     - Completion of MAT 000C or equivalent (C or P or better)
     - Completion of two semesters of High School Algebra II, Integrated Math 3, Common Core Math 3 or equivalent or higher with a grade of C- or better in both semesters
     - Completion of a transfer-level course approved to satisfy the Quantitative Reasoning requirement at a college or university (C or P or better)
     - A minimum score of 70% on an Intermediate Algebra departmental exam

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 Rationale – 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:**
   - COM 001, 001H Public Speaking
   - MAT 000C or equivalent or any transfer level Math course (3-6 units)
   - FRN 003, 004 Intermediate Language (5 ea)
   - SOC 016 Introduction to Statistics in Social and Behavioral Sciences
   - SPA 003, 004 Intermediate Language (5 ea)
   - CHM 001A, 001AH, 001B, 001BH General Chemistry (5 ea)
   - CHM 001B, 001BH General Chemistry (5 ea)
   - CHM 001A, 001AH, 001B, 001BH General Chemistry (5 ea)
   - BIO 010 Introduction to Biology
   - BIO 010L Introduction to Biology Lab
   - NTR 015 Human Nutrition
   - NTR 040 Nutrition and Disease
   - PHY 002A, 002B General Physics (Sea)
   - PHY 004A, 004B, 004C Engineering Physics (Sea)
   - PHY 004D Engineering Physics - Atomic (2)
   - BIO 010 Introduction to Physics (4)
   - PHI 003 Introduction to Ethics
   - PHI 002 Logic
   - CHEM 001A, 001AH, 001B, 001BH General Chemistry (5 ea)
   - CHEM 002 Introductory Chemistry
   - CHEM 002L Introductory Chemistry Lab
   - CHEM 012A, 012AH, 012B, 012BH Organic Chemistry (5 ea)
   - CHEM 030A Fundamentals of Chemistry (4)
   - CHEM 060 Survey of General, Organic and Biological Chemistry (4)
   - GEO 001 Introduction to Physical Geography
   - NTR 015 Human Nutrition
   - NTR 040 Nutrition and Disease
   - PHY 002A, 002B General Physics (Sea)
   - PHY 004A, 004B, 004C Engineering Physics (Sea)
   - PHY 004D Engineering Physics - Atomic (2)
   - BIO 022 Anat & Physiology for Allied Health Workers (4)
   - BIO 025, 025H Environmental Biology

The requirements listed here were accurate at the time of publication. Please visit the Counseling Office (counseling.missioncollege.edu) for updated requirements.
### 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARB 001, 002</td>
<td>First, Second Semester Arabic</td>
</tr>
<tr>
<td>ART 001A</td>
<td>Survey of Western Art I</td>
</tr>
<tr>
<td>ART 001B</td>
<td>Survey of Western Art II</td>
</tr>
<tr>
<td>ART 001D</td>
<td>Survey of Modern Art</td>
</tr>
<tr>
<td>ART 004</td>
<td>Art Appreciation</td>
</tr>
<tr>
<td>ART 007</td>
<td>Survey of Asian Art</td>
</tr>
<tr>
<td>ART 011</td>
<td>The History of Modern Design</td>
</tr>
<tr>
<td>ART 031A, B</td>
<td>Drawing</td>
</tr>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional</td>
</tr>
<tr>
<td>ART 034A, B</td>
<td>Introduction to/Advanced Digital Art</td>
</tr>
<tr>
<td>ART 035A, B</td>
<td>Life Drawing</td>
</tr>
<tr>
<td>ART 039A</td>
<td>Survey of Printmaking</td>
</tr>
<tr>
<td>ART 047A, B</td>
<td>Watercolor</td>
</tr>
<tr>
<td>ART 048A, B</td>
<td>Airbrush Painting</td>
</tr>
<tr>
<td>ART 049A, B</td>
<td>Painting</td>
</tr>
<tr>
<td>ART 056A, B</td>
<td>Ceramics-Handbuilding</td>
</tr>
<tr>
<td>ART 067A, B</td>
<td>Ceramics-Potter’s Wheel</td>
</tr>
<tr>
<td>ART 075A, B</td>
<td>Metalsmithing</td>
</tr>
<tr>
<td>ART 088A, B</td>
<td>Metal Sculpture Casting</td>
</tr>
<tr>
<td>CHI 001, 002</td>
<td>First/Second Semester Chinese</td>
</tr>
<tr>
<td>COM 012</td>
<td>Intercultural Communication*</td>
</tr>
<tr>
<td>ENG 001B</td>
<td>English Composition</td>
</tr>
<tr>
<td>ENG 005A, 005B</td>
<td>English Literature</td>
</tr>
<tr>
<td>ENGL 006B</td>
<td>World Literature</td>
</tr>
<tr>
<td>ENG 007A, 007B</td>
<td>American Literature</td>
</tr>
<tr>
<td>ENG 012</td>
<td>African American Literature*</td>
</tr>
<tr>
<td>ENG 013</td>
<td>Chicana/o-Latina/o Literature*</td>
</tr>
<tr>
<td>ENG 015</td>
<td>Introduction to Film Analysis</td>
</tr>
<tr>
<td>ENG 043</td>
<td>Classical Mythology</td>
</tr>
<tr>
<td>ENG 048</td>
<td>Introduction to Shakespeare</td>
</tr>
<tr>
<td>ENG 070</td>
<td>Creative Writing</td>
</tr>
<tr>
<td>ETH 012</td>
<td>African American Literature*</td>
</tr>
<tr>
<td>ETH 013</td>
<td>Chicana/o-Latina/o Literature*</td>
</tr>
<tr>
<td>ETH 016A</td>
<td>Hispanic Roots and Culture*</td>
</tr>
<tr>
<td>ETH 018</td>
<td>African American Culture and Humanities*</td>
</tr>
<tr>
<td>ETH 024</td>
<td>The Asian American Experience*</td>
</tr>
<tr>
<td>FRN 001, 002</td>
<td>First/Second Semester French - Elementary (5 ea)</td>
</tr>
<tr>
<td>FRN 003, 004</td>
<td>Third/Forth Semester French - Intermediate (5 ea)</td>
</tr>
<tr>
<td>FRN 00L1, 02 French Lab (0.5 ea)</td>
<td></td>
</tr>
<tr>
<td>GDS 011</td>
<td>The History of Modern Design</td>
</tr>
<tr>
<td>GDS 012</td>
<td>History of Photography</td>
</tr>
<tr>
<td>GDS 015</td>
<td>Photo-media and Social Change</td>
</tr>
<tr>
<td>GDS 073</td>
<td>Digital Photography</td>
</tr>
<tr>
<td>HIS 004A, 004AH</td>
<td>History of Western Civilization</td>
</tr>
<tr>
<td>HIS 004B, 004BH</td>
<td>History of Western Civilization</td>
</tr>
<tr>
<td>HIS 015, 015H</td>
<td>World History to 1500</td>
</tr>
<tr>
<td>HIS 016, 016H</td>
<td>World History since 1500</td>
</tr>
<tr>
<td>HIS 017A, 017AH</td>
<td>History of the United States to 1877</td>
</tr>
<tr>
<td>HIS 017B, 017BH</td>
<td>History of the United States since 1877</td>
</tr>
<tr>
<td>HIS 033, 033H</td>
<td>Women’s Issues Past and Present*</td>
</tr>
<tr>
<td>HUM 001A, 001B</td>
<td>Human Values in and from the Arts</td>
</tr>
<tr>
<td>HUM 007</td>
<td>International Films</td>
</tr>
<tr>
<td>HUM 015</td>
<td>Introduction to Film Analysis</td>
</tr>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots and Culture*</td>
</tr>
<tr>
<td>HUM 018, 018H</td>
<td>African American Culture/Humanities*</td>
</tr>
<tr>
<td>HUM 020</td>
<td>Asian Roots and Culture*</td>
</tr>
<tr>
<td>HUM 022</td>
<td>Introduction to Islam*</td>
</tr>
<tr>
<td>HUM 024</td>
<td>The Asian American Experience*</td>
</tr>
<tr>
<td>HUM 030,</td>
<td>Cultural Studies*</td>
</tr>
<tr>
<td>JPN 001, 002</td>
<td>First/Second Semester Japanese - Elementary (5 ea)</td>
</tr>
<tr>
<td>KIN 041 – 048</td>
<td>All Dance Classes see catalog for complete course titles and units (1 ea)</td>
</tr>
<tr>
<td>KIN 080</td>
<td>Dance Appreciation (formerly WHP 040)</td>
</tr>
<tr>
<td>LNG 001</td>
<td>Introduction to Language and Linguistics</td>
</tr>
<tr>
<td>MUS 005</td>
<td>Fundamentals of Music Theory</td>
</tr>
<tr>
<td>MUS 006</td>
<td>Commercial Music Theory I</td>
</tr>
<tr>
<td>MUS 007</td>
<td>Commercial Music Theory II</td>
</tr>
<tr>
<td>MUS 010</td>
<td>Music Appreciation</td>
</tr>
<tr>
<td>MUS 016</td>
<td>Survey of Rock and Popular Music</td>
</tr>
<tr>
<td>MUS 017</td>
<td>Musics of the World</td>
</tr>
<tr>
<td>MUS 030A, B</td>
<td>Beginning/Intermediate Piano (1 ea)</td>
</tr>
<tr>
<td>MUS 032A, B</td>
<td>Beginning/Intermediate Voice (1 ea)</td>
</tr>
<tr>
<td>MUS 036A, B</td>
<td>Beginning Guitar (1 ea)</td>
</tr>
<tr>
<td>MUS 041A, B</td>
<td>Mission Chorus (1 ea)</td>
</tr>
<tr>
<td>MUS 048A, B</td>
<td>Symphony Orchestra (1 ea)</td>
</tr>
<tr>
<td>PHI 001</td>
<td>Introduction to Philosophy</td>
</tr>
<tr>
<td>PHI 002</td>
<td>Logic</td>
</tr>
<tr>
<td>PHI 003</td>
<td>Introduction to Problems in Ethics</td>
</tr>
<tr>
<td>POL 003</td>
<td>Introduction to Social and Political Philosophy</td>
</tr>
<tr>
<td>POL 007</td>
<td>Introduction to Social and Political Philosophy</td>
</tr>
<tr>
<td>SPA 001, 002</td>
<td>First/Second Semester Spanish - Elementary (5 ea)</td>
</tr>
<tr>
<td>SPA 001L, 02L</td>
<td>Spanish Lab (.5 ea)</td>
</tr>
<tr>
<td>SPA 003, 004</td>
<td>Third/Forth Semester Spanish - Intermediate (5 ea)</td>
</tr>
<tr>
<td>SPA 050A, B</td>
<td>Basic Conversational Spanish</td>
</tr>
<tr>
<td>VIE 001, 002</td>
<td>First/Second Semester Vietnamese - Elementary (5 ea)</td>
</tr>
<tr>
<td>VIE 049A, 049B</td>
<td>Vietnamese Language &amp; Culture for Fluent Speakers</td>
</tr>
</tbody>
</table>

**NOTE:** Course noted with an # also satisfy the AA/AS Area F requirement. See page 2 for more information.

The requirements listed here were accurate at the time of publication. Please visit the Counseling Office (counseling.missioncollege.edu) for updated requirements.
**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 Anthropology
- 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*
- COM 025 Mass Communication and Society
- COU 055 Valuing Diversity*
- ECN 001B Principles of Microeconomics
- CHD 013 Teaching Children in a Diverse Society
- ECN 006 The Global Economy
- 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*
- GEO 002 Introduction to Cultural Geography
- GEO 006 World Regional Geography
- 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 History of United States to 1877
- HIS 017B, 017BH History of United States from 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*
- KIN 081 Sports in Society
- POL 001, 001H American Government
- POL 002 Comparative Government
- POL 004 International Relations
- POL 005 Political Science Research Methodology
- 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 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 ANT/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 054 Concepts of Criminal Law
- SOC 060 Community and the Justice System
- HUM 018, 018H African American Roots and Culture*
- HUM 024 The Asian American Experience*
- HIS 017B, 017BH History of United States since 1877
- HIS 044, 044H African American History#
- HIS 020 History and Geography of California
- HIS 017A, 017AH History of United States to 1877
- HIS 017B, 017BH History of United States from 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#
- KIN 081 Sports in Society
- POL 001, 001H American Government
- POL 002 Comparative Government
- POL 004 International Relations
- POL 005 Political Science Research Methodology
- 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 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 ANT/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 054 Concepts of Criminal Law
- SOC 060 Community and the Justice System

**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*
- HIS 017A, 017AH History of United States to 1877
- HIS 017B, 017BH History of United States from 1877
- HISTORY AND GEOGRAPHY OF CALIFORNIA
- 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*
- POL 001, 001H American Government

**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 Environmental Biology
- BUS 061 Business and Society
- CHD 002 Child, Family and Community
- CHD 013 Teaching in a Diverse Society*
- 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 023 Becoming a Master Student-Athlete (2)
- 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
- LIB 010, 010H Information Competency (1)
- NTR 015 Human Nutrition
- NTR 040 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 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

**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 multietnic 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.

Please visit www.ASSIST.org for an up-to-date list of all transfer requirements.

MC Office of Articulation 062322
MISSION COLLEGE

CALIFORNIA STATE UNIVERSITY GENERAL EDUCATION
CERTIFICATION AND CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

The CSU General Education Breadth (CSU GE-B) is a 39-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. 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 a 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 Associate’s Degree and/or an Associate’s 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.

<table>
<thead>
<tr>
<th>A1. Oral Communication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 001, 001H Public Speaking</td>
</tr>
<tr>
<td>COM 015 Fundamentals of Oral Communication</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A2. Written Communication:</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 001A English Composition I or ENG 001AX English Composition with Additional Support</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>A3. Critical Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 001B English Composition II*</td>
</tr>
<tr>
<td>ENG 001C Clear Thinking in Writing*</td>
</tr>
<tr>
<td>PHI 002 Introduction to Logic</td>
</tr>
<tr>
<td>PHI 003 Introduction to Problems in Ethics*</td>
</tr>
<tr>
<td>POL 020 Controversial Legal Issues</td>
</tr>
<tr>
<td>REA 054 Critical College Reading &amp; Thinking</td>
</tr>
<tr>
<td>(*also fulfills some CSU's 2nd composition graduation requirement)</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>B1. Physical Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>AST 001 Astronomy</td>
</tr>
<tr>
<td>AST 003, 003H Astronomy with Lab (4,4)</td>
</tr>
<tr>
<td>AST 004 Astrobiology</td>
</tr>
<tr>
<td>CHM 001A, 001AH, 001B, 001BH General Chemistry (5,5)</td>
</tr>
<tr>
<td>CHM 002 Introductory Chemistry (4)</td>
</tr>
<tr>
<td>CHM 002L, Introductory Chemistry Lab (1)</td>
</tr>
<tr>
<td>CHM 012A, 012AH, 012B, 012BH Organic Chemistry I (5,5)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B2. Biological Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001 Biological Anthropology</td>
</tr>
<tr>
<td>ANT 001L Biological Anthropology Lab (1)</td>
</tr>
<tr>
<td>BIO 001A, 001AH General Biology: Cells (Sea)</td>
</tr>
<tr>
<td>BIO 001B General Biology: Organisms (5)</td>
</tr>
<tr>
<td>BIO 004 Microbiology (5)</td>
</tr>
<tr>
<td>BIO 010 Introduction to Biology (4)</td>
</tr>
<tr>
<td>BIO 010 Introduction to Biology</td>
</tr>
<tr>
<td>BIO 010L Introduction to Biology Lab (1)</td>
</tr>
<tr>
<td>BIO 011 Human Biology (4)</td>
</tr>
<tr>
<td>BIO 012 Emerging Infectious Disease</td>
</tr>
<tr>
<td>BIO 014, 014H Introductory Neuroscience</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B3. Laboratory Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>One of the selected science courses from above must contain a laboratory component. Lab courses are underlined.</td>
</tr>
</tbody>
</table>

| 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 (5,5) |
| PHY 004A,B,C Engineering Physics (5,4,4) |
| PHY 004D Atomic Physics (2) |
| PHY 010 Introduction to Physics (4) |

| 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 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) |
AREA B – SCIENTIFIC INQUIRY AND QUANTITATIVE REASONING (CONTINUED)

B4. Mathematics/Quantitative Reasoning
Courses from Area B4 must be complete with a “C” (or P) better.
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 (5,5)
MAT 004A Intermediate Calculus (5)
MAT 004B Differential Equations (4)
MAT 004C Linear Algebra (4)
MAT 009 Integrated Statistics II (5)
MAT 010, 010H Elementary Statistics (4)
MAT 010X Elementary Statistics with Additional Support (6)
MAT 011X Intermediate Calculus with Additional Support (5,5)
MAT 012 Calculus for Business (4)
MAT 019 Discrete Mathematics (4)
MAT 020 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 (Also GDES 011)
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 (Also ART 011)
GDS 012 History of Photography
GDS 015 Photo-media and Social Change
KIN 080 Dance Appreciation
MUS 005 Fundamentals of Music
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
CHI 001, 002 First/Semester Chinese
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 011 History of Modern Design (Also GDES 011)
ENG 031A Drawing
ART 033A Basic Design: Two-Dimensional
ART 034A Introduction to Digital Art

C3. One additional course from either C1 or C2. (Biology AS-T majors can defer Area C until after transfer).
**AREA D – SOCIAL SCIENCES (6 SEMESTER/8 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
- ECN 001B Principles of Microeconomics
- ECN 006 The Global Economy
- 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
- GEO 002 Introduction to Cultural Geography
- GEO 006 World Regional Geography
- 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 Culture
- HUM 018, 018H African American Culture & Humanities (FA14)
- KIN 081 Sport in Society
- KIN 068 Sport Psychology
- KIN 078 Introduction to Kinesiology
- KIN 079 Lifetime Fitness
- COM 003 Interpersonal Communication
- LIB 010, 010H Information Competency (1)
- NTR 015 Human Nutrition
- COU 005 Strategies for Success
- COU 012 Careers and Lifestyles
- COU 017 Transfer Success and Life Transitions
- COU 055 Valuing Diversity (FA15)
- HUM 001B General Psychology
- PSY 001, 001H General Psychology
- PSY 007 Biological Psychology
- PSY 010 Social Psychology
- 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)
- SIS 001 Social Justice
- SIS 002 Introduction to Gender Studies
- SIS 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)

**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 Environmental Biology
- CHD 002 Child, Family and Community (FA11)
- CHD 013 Teaching in a Diverse Society (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
- HOC 008 Community Health Problems
- KIN 068 Sport Psychology
- KIN 079 Lifetime Fitness
- LIB 010, 010H Information Competency (1)
- NTR 015 Human Nutrition
- PSY 012 Human Growth and Development
- PSY 045 Human Sexuality
- SOC 045 Human Sexuality
- SOC 047 Sociology of Criminology
- SOC 050 Introduction to Criminal Law
- SOC 060 Community and Justice System (FA15)
- Verified DD214

**AREA F – ETHNIC STUDIES (3 SEMESTER/4 QUARTER UNITS) ***FOR STUDENTS WHO BEGIN FALL 2021 OR LATER***

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

**CSU GRADUATION REQUIREMENT** – American History & Institutions (US1/US2/US3)

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 or HIS 017B, 018H United States History
- HIS 044, 044H or ETH 044, 044H African American History

Requirements are subject to change after catalog publication.

Visit the ASSIST website at [WWW.ASSIST.ORG](http://WWW.ASSIST.ORG) for a complete listing of CSU transferable courses as well as updated general education and major requirements.
MISSION COLLEGE

INTERSEGMENTAL GENERAL EDUCATION TRANSFER CURRICULUM FOR CSU
CERTIFICATION AND CERTIFICATE OF ACHIEVEMENT REQUIREMENTS

The Intersegmental General Education Transfer Curriculum for CSU (IGETC 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. **Sixty (60) UC transferable units** of Major and GE courses with a grade of “C” (or P) are required for transfer. 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 Associate’s Degree and/or an Associate’s 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. Please see Page 3 for certification details. 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 group.

**GROUP A: ENGLISH COMPOSITION**

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

**GROUP B: CRITICAL THINKING**

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

**GROUP C: ORAL COMMUNICATION**

- COM 001, 001H Public Speaking
- COM 020, 020H Argumentation and Debate

**AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (1 course, 3 semester/4-5 quarter units)**

- MAT 000G Math for Liberal Arts Students (4)
- *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)
- *MAT 003A, 003AH, 003B Analytic Geometry and Calculus (5)
- *MAT 004A Intermediate Calculus (4)
- MAT 004B Differential Equations (4)
- MAT 004C Linear Algebra (4)

**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.

**GROUP 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

**GROUP 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 024 The Asian American Experience
- FRN 002, 003, 004 French – Elementary, Intermediate, 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
- 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 003 Introduction to Social and Political Philosophy
- POL 007 International Films
- SPA 002, 003, 004 Spanish – Elementary, Intermediate, Intermediate (Sea)
- VIE 002 Second Semester Vietnamese – Elementary (5)
- VIE 049A, 049B Vietnamese Language & Culture for Fluent Speakers
**AREA 4 - SOCIAL AND BEHAVIORAL SCIENCES** (3 courses, 9 semester/12-15 quarter units)
Complete at least three courses from at least two 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 001L** Biological Anthropology Lab
- **CHM 002L** Introductory Chemistry Lab (1)
- **CHM 001A, 001AH, 001B, 001BH** General Chemistry (5 ea)
- **CHM 002** Introductory Chemistry
- **CHM 002L** Introductory Chemistry Lab (1)
- **CHM 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 016A** Hispanic Roots and Culture
- **KIN 081** Sport in Society
- **PHI 005** Introduction to Social and Political Philosophy
- **POL 001, 001H** American Government
- **POL 002** Comparative Government
- **POL 003 Introduction to Social and Political Philosophy**
- **POL 004 International Relations**
- **POL 005 Political Science Research Methodology**
- **POL 006 Politics of Race, Class and Gender**
- **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 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 H1 Introduction to Sociology**
- **SOC 002 H2 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).

**GROUP 5A: PHYSICAL SCIENCES**
- **AST 001 Astronomy**
- **AST 003, 003H Astronomy with Lab (4)**
- **AST 004 Biostatistics**
- **CHM 001A, 001AH, 001B, 001BH General Chemistry (Sea)**
- **CHM 002 Introductory Chemistry**
- **CHM 002L Introductory Chemistry Lab (1)**
- **CHM 012A, 012AH, 012B, 012BH Organic Chemistry (Sea)**
- **CHM 030A Fundamentals of Chemistry (4)**
- **AST 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)**

**GROUP 5B: BIOLOGICAL SCIENCES**
- **ANT 001 Biological Anthropology**
- **ANT 001L Biological Anthropology Lab**
- **BIO 001A, 001AH General Biology: Cells (Sea)**
- **BIO 002 Microbiology (5)**
- **BIO 004 Microbiology (5)**
- **BIO 010 Introduction to Biology**
- **BIO 010L Introduction to Biology Lab (1)**
- **BIO 011 Human Biology (4)**
- **BIO 012 Emerging Infectious Disease**
- **BIO 014, 014H Introduction to Neuroscience**
- **BIO 015 Human Genetics**
- **BIO 016 Marine Biology**
- **BIO 017, 017H Genetics and Society**
- **BIO 018, 018H Biology of Cancer**
- **BIO 019 Oceans: Life in the Sea**
- **BIO 025 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)**

**GROUP SC. LABORATORY REQUIREMENT**
One of the selected science courses from above must be a laboratory course. Lab courses are underlined.

**CSU GRADUATION REQUIREMENT - U.S. HISTORY, CONSTITUTION AND AMERICAN IDEALS** (2 courses)
Depending on the CSU campus, courses used to meet this requirement may be used to satisfy requirements for IGETC CSU.

- **POL 001, 001H + one of the following: HIS 017A, 017AH or HIS 017B, 017BH or HIS 044, 044H or ETH 044, 044H**

For students who are considering UC transfer: **AREA 6 – LANGUAGE OTHER THAN ENGLISH**
Proficiency equivalent to two years of high school study in the same language with a grade of “C” or better OR completion of one of the following (documentation required):

1. **ARB 001, CHI 001, FRN 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.

*Transfer credit may be limited by either the UC or CSU or both. Visit www.assist.org for specific limitations.
Courses may be taken to satisfy only one Area Requirement.

**MC Office of Articulation 072022**
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. **Sixty (60) UC transferable units** of Major and GE courses with a grade of “C” (or P) are required for transfer. 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 Associate’s Degree and/or an Associate’s 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. Please see Page 3 for certification details. 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.

**GROUP A: ENGLISH COMPOSITION**

| ENG 001A English Composition I |
| ENG 001AX Intensive English Composition (5, 3 for UC transfer) |

**GROUP B: CRITICAL THINKING**

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

**NOTE: Students considering CSU transfer must also complete COM 001 or 020**

**AREA 2 - MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING (1 course, 3 semester/4-5 quarter units)**

| MAT 000G Math for Liberal Arts Students (4) |
| *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) |
| *MAT 003A, 003AH, 003B Analytic Geometry and Calculus (5) |
| MAT 004A Intermediate Calculus (4) |
| MAT 004B Differential Equations (4) |
| MAT 004C Linear Algebra (4) |
| *MAT 009 Integrated Statistics II (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 Social and Behavioral Sciences |
| *UC Transfer credit is limited for most MATH courses. See [www.assist.org](http://www.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.

**GROUP 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 012 History of Photography (FA14) |
| GDS 015 Photo-media and Social Change |
| KIN 080 Dance Appreciation |
| MUS 005 Fundamentals of Music Theory I |
| MUS 010 Music Appreciation |
| MUS 016 Survey of Rock and Popular Music |
| MUS 017 Musics of the World |

**GROUP 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 014A Hispanic Roots and Culture |
| ETH 018, 018H African American Culture and Humanities |
| ETH 024 The Asian American Experience |
| 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 Chicana/o-Latina/o Literature |
| 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 |
| 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 003 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 (3 courses, 9 semester/12-15 quarter units)**

Complete at least three courses from at least two 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 (FAQ)
- ECN 003 Introduction to Social and Political Philosophy
- ECN 004 International Relations
- ECN 005 Political Science Research Methodology
- ECN 006 The Global Economy
- ETH 016A Hispanic Roots and Culture
- ETH 018, 018H African American Culture and Humanities
- ETH 024 The Asian American Experience
- HIS 033, 033H Women's Issues Past and Present (FAQ)
- HIS 202 The Asian American Experience
- HIS 044, 044H African American History
- GEO 002 Introduction to Cultural Geography
- GEO 006 World Regional Geography
- 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 (FAQ)
- HIS 044, 044H African American History
- HUM 016A Hispanic Roots and Culture
- HUM 018 (FAQ), 018H (FAQ) African American Roots and Culture
- KIN 081 Sport in Society
- PHI 005 Introduction to Social and Political Philosophy

**GROUP 5A: PHYSICAL SCIENCES**

- AST 001 Astronomy
- AST 003, 003H Astronomy with Lab (FAQ)
- AST 004 Astrophysics
- *CHM 001A, 001AH General Chemistry (Sea)
- *CHM 002 Introductory Chemistry
- CHM 002L, Introductory Chemistry Lab (FAQ)
- CHM 012A, 012AH, 012B, 012BH Organic Chemistry (Sea)
- *CHM 030A Fundamentals of Chemistry (FAQ)
- GEO 001 Introduction to Physical Geography
- *PHY 002A, 002B General Physics (Sea)
- *PHY 004A Engineering Physics – Mechanics (FAQ)
- *PHY 004B Engineering Physics - Electricity and Magnetism (FAQ)
- *PHY 004C Engineering Physics - Light and Heat (FAQ)
- *PHY 010 Introduction to Physics (FAQ)

**GROUP 5B: BIOLOGICAL SCIENCES**

- ANT 001 Biological Anthropology
- ANT 001L Biological Anthropology Lab
- BIO 001A, 001AH General Biology: Cells (Sea)
- BIO 001B General Biology: Organisms (FAQ)
- BIO 004 Microbiology (FAQ)
- *BIO 010 Introduction to Biology
- *BIO 010L Introduction to Biology Lab (FAQ)
- BIO 011 Human Biology (FAQ)
- BIO 012 Emerging Infectious Disease
- BIO 014, 014H Introduction to Neuroscience
- BIO 015 Human Genetics
- BIO 016 Marine Biology (FAQ)
- BIO 017, 017H Genetics and Society
- BIO 018, 018H Biology of Cancer
- BIO 019, 019H Biology of the Environment
- BIO 025 Environmental Biology
- BIO 030 Tropical Ecology
- BIO 030L Tropical Ecology Field Studies (FAQ)
- BIO 032 California Plants and Animals (FAQ)
- BIO 047 Human Anatomy (FAQ)
- BIO 048, 048H Human Physiology (FAQ)

**GROUP 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 (5-7 semester/8-10.5 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 (documentation required):

1. ARB 001, CHI 001, FIN 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.

*Transfer credit may be limited by either the UC or CSU or both. Visit www.assist.org for specific limitations.
Courses may be taken to satisfy only one Area Requirement*
**FREQUENTLY ASKED QUESTIONS ABOUT IGETC**

**Is IGETC right for me?**

*Maybe*. The IGETC is advisable for students who have not yet decided on a major or a particular campus and who want to keep their options open before making a final decision about transferring to either a UC or CSU campus. IGETC is not advisable for students who choose majors with substantial lower division prerequisites, such as engineering or science. See chart below.

**Do I have to complete IGETC to transfer to a CSU or UC?**

*No.* The IGETC is not a requirement for transfer to CSU or most UCs, nor is it the only way to fulfill the lower-division, general education requirements. Depending on a student’s major, the student may find it better to take courses fulfilling the CSU’s General Education requirements or those of the UC campus or college to which the student plans to transfer.

**Have I completed courses at other colleges. Will they count toward IGETC?**

Yes. Courses that are completed at any **US regionally accredited** college can be used in the IGETC certification. Students should be aware, however, that coursework from other California community colleges will be applied in the IGETC category determined by the **original** college. Courses taken at a foreign institution not accredited by a US regionally accrediting association are **NOT** permitted for certification on the IGETC.

**Will the courses I take as transfer requirements for my major be counted toward IGETC?**

Yes. UC will allow requirements completed as preparation for the major to be used in the IGETC whenever they appear, unless otherwise noted on ASSIST.

**Have I passed an AP or IB test. Can my test scores be used to satisfy an IGETC requirement?**

Yes. AP scores of 3 or higher can be used to satisfy any IGETC subject area except Critical Thinking and Oral Communication. Even though credit for more than one course can be awarded by Mission College for AP scores of 3 or higher, only one course in the subject for which the AP test was taken can be used on the IGETC. And a score of 5, 6 or 7 on Higher Level exams can grant credit for IGETC certification. Please see the Mission College catalog for specific credit information. CLEP, SAT or ACT exams cannot be used.

**Do courses completed need a minimum grade for certification?**

Yes. Only grades of “C” or better will be accepted and Pass/No Pass courses are acceptable only if the college catalog defines credit as equivalent to a letter grade of “C” or better (as it does at Mission). A “C-” grade valued at less than 2.0 grade points on a 4.0 scale cannot be used for IGETC certification.

**How do I complete the IGETC?**

The IGETC can be certified for California community college transfers who have also completed transfer units at a CSU, UC or independent college provided that the student has completed most of the transfer units at one or more California community colleges. Students who initially enroll at a UC campus, then leave and attend a community college, and subsequently return to the same campus are considered “readmits” by the University and cannot use the IGETC. However, students who enroll at a UC campus, then leave and attend a community college, and subsequently return to a different UC campus may be able to use the IGETC, but students need to check with the campus they wish to attend.

**What is IGETC for STEM?**

IGETC CSU for STEM and IGETC UC for STEM are separate IGETC tracks available for students planning to major in science, technology, engineering, or mathematics which will allow them to defer all of the above until after transfer:

- One course in Area 3
- One course in Area 4
- One course in Area 6 (for UC bound students who have not satisfied it through proficiency

These deferred lower division courses must be replaced with calculus and/or science courses required by the major before transfer. The UC will accept IGETC for STEM only if a student is earning an Associate Degree for Transfer in Biology or Chemistry at a community college that offers IGETC for STEM as an option for those degrees. For Mission College, this applies only to the Biology AS-T.

**I am a UC transfer. Do I need to complete Area 1C if I am pursuing an Associate Degree for Transfer (AA-T/AS-T)?**

- Yes. Although available for all students, the AA-T and AS-Ts are CSU programs and therefore, communication is required. However, if you are a UC-bound student with no plans for CSU transfer, you have the option of waiving Area 1C with the IGETC Area 1C Waiver Request

**What is partial certification?**

Partial certification is defined as completing all but two (2) courses on the IGETC pattern (Areas 1 and 2 excluded). These two requirements can be met after transfer with an approved IGETC course from a CCC or a course approved by the UC/CSU campus of attendance from a US regionally accredited institution.

**When do I certify the IGETC?**

IGETC certification must be **requested** in the Records Office prior to transfer. **This is not an automatic process!** All necessary documentation (secondary or other college transcripts) must be submitted to the Records Office prior to this request. Valid IGETC courses must appear on Mission’s IGETC plan the year in which they are taken. Students who leave the college, breaking continuous enrollment, will be placed under the IGETC plan in effect for the year that they return.

Requirements are subject to change after catalog publication.

Visit the ASSIST website at [WWW.ASSIST.ORG](http://WWW.ASSIST.ORG) for a complete listing of CSU and UC transferable courses as well as updated IGETC and major requirements.
Associate in Science in Accounting

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

• Students will perform transaction analysis, process accounting information, prepare and analyze reports. Students will prepare and interpret the four basic financial statements.
• Students will apply various methods, including cost-volume-profit analysis and flexible budgets, for decision-making in both manufacturing and service environments.
• Students will 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 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.

Required Courses (11 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>Financial Accounting AND</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 001B</td>
<td>Managerial Accounting AND</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 028A</td>
<td>Business Law I AND</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Courses (3-4 units):

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

Required Courses (3-4 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 060</td>
<td>Computerized Accounting: QuickBooks OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 061</td>
<td>QuickBooks: Online Software OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 073</td>
<td>Accounting Information Systems</td>
<td>4.0</td>
</tr>
</tbody>
</table>

List A: Plus at least 11-12 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>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>ACC 051A</td>
<td>Taxation of Individuals OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 051B</td>
<td>Taxation of Business Entities OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 052</td>
<td>Payroll and Business Tax Accounting OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 053A</td>
<td>Volunteer Income Tax Assistance (VITA) I OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 053B</td>
<td>Volunteer Income Tax Assistance (VITA) II OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 053C</td>
<td>Volunteer Income Tax Assistance (VITA) III OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 057A</td>
<td>Cost Accounting OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058A</td>
<td>Intermediate Accounting I OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 058B</td>
<td>Intermediate Accounting II OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 059A</td>
<td>Financial Auditing OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 066</td>
<td>Accounting for Governmental &amp; Nonprofit Entities OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 067</td>
<td>Advanced Accounting OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 070</td>
<td>Ethics in Accounting OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 073</td>
<td>Accounting Information Systems OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 075</td>
<td>Cloud Computing and Analytics in Accounting OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 077</td>
<td>Business Processes and Enterprise Resource Planning Systems</td>
<td>4.0</td>
</tr>
</tbody>
</table>

List B: Plus at least 3-4 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 070</td>
<td>Ethics in Accounting OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 073</td>
<td>Accounting Information Systems OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 077</td>
<td>Business Processes and Enterprise Resource Planning Systems OR</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 021</td>
<td>Introduction to Business Computing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L</td>
<td>Introduction to Business Computing Lab OR</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 056A</td>
<td>Marketing Principles OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 064B</td>
<td>Business Math OR</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>Introduction to American Business OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 040</td>
<td>Introduction to Personal Financial Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 041</td>
<td>Insurance Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 042</td>
<td>Investment Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 043</td>
<td>Tax Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 044</td>
<td>Retirement Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 045</td>
<td>Estate Planning OR</td>
<td>1.0</td>
</tr>
<tr>
<td>ACC 046</td>
<td>Personal Finance</td>
<td>3.0</td>
</tr>
</tbody>
</table>

* Required Units for the Major: 31.0-35.0

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

Total Required Units: 60.0
Certificate of Achievement in Accounting
Certificate of Achievement in Accounting
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
- Students will perform transaction analysis, process accounting information and prepare and analyze reports.
- Students will prepare and interpret the four basic financial statements.
- Students will apply various methods, including cost-volume-profit analysis and flexible budgets, for decision-making in both manufacturing and service environments.
- Students will 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.

Required courses (8 units):
- ACC 001A Financial Accounting AND 4.0
- ACC 001B Managerial Accounting AND 4.0

Required courses (3-4 units):
- ACC 033 Forecasting Financial Statements Using Excel AND 1.5
- ACC 034 Business Financial Planning Using Excel OR 1.5
- ACC 075 Cloud Computing and Analytics in Accounting 4.0

Plus at least 12-13 units from the following:
- ACC 023 Small Business Accounting OR 3.0
- ACC 033 Forecasting Financial Statements Using Excel OR 1.5
- ACC 034 Business Financial Planning Using Excel OR 1.5
- ACC 051A Taxation of Individuals OR 4.0
- ACC 051B Taxation of Business Entities OR 3.0
- ACC 052 Payroll and Business Tax Accounting OR 3.0
- ACC 053A Volunteer Income Tax Assistance (VITA) I OR 3.0
- ACC 053B Volunteer Income Tax Assistance (VITA) II OR 1.0
- ACC 053C Volunteer Income Tax Assistance (VITA) III OR 1.0
- ACC 057A Cost Accounting OR 4.0
- ACC 058A Intermediate Accounting I OR 4.0
- ACC 058B Intermediate Accounting II OR 4.0
- ACC 059A Financial Auditing OR 4.0
- ACC 060 Computerized Accounting: QuickBooks OR 3.0
- ACC 061 QuickBooks: Online Software OR 3.0
- ACC 066 Accounting for Governmental & Nonprofit Entities OR 3.0
- ACC 067 Advanced Accounting OR 4.0
- ACC 070 Ethics in Accounting OR 3.0
- ACC 073 Accounting Information Systems OR 4.0
- ACC 075 Cloud Computing and Analytics in Accounting OR 4.0
- ACC 077 Business Process and Enterprise Resource Planning Systems OR 4.0
- BUS 021 Introduction to Business Computing OR 3.0
- BUS 021L Introduction to Business Computing Lab OR 1.0
- BUS 028A Business Law I OR 3.0
- ACC 040 Introduction to Personal Financial Planning OR 1.0
- ACC 041 Insurance Planning OR 1.0
- ACC 042 Investment Planning OR 1.0
- ACC 043 Tax Planning OR 1.0
- ACC 044 Retirement Planning OR 1.0
- ACC 045 Estate Planning OR 1.0
- ACC 046 Personal Finance 3.0

Total Required Units: 23.0-25.0
ACCOUNTING (ACC)
accounting.missioncollege.edu

Department Chair: Jennifer Tseng
408 855-5365 | GC-341A
jennifer.tseng@missioncollege.edu
Dean: Jeff Pallin

CPA Exam Preparation 1: Auditing & Attestation (AUD) Certificate of Achievement

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

• Students will analyze the concepts, computations, and reporting requirements needed to pass the Auditing & Attestation 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.

Required courses (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>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.

Required courses (16 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 001B</td>
<td>Managerial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 057A</td>
<td>Cost Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Electives (select one):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 073</td>
<td>Accounting Information Systems OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 075</td>
<td>Cloud Computing and Analytics in Accounting</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 20.0
ACCOUNTING (ACC)
accounting.missioncollege.edu

CPA Exam Preparation 3: Financial Accounting & Reporting (FAR)
Certificate of Achievement

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

• Students will analyze the concepts, computations, and reporting requirements needed to pass the Financial Accounting & Reporting (FAR) 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.

Required courses (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 &amp; 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
MISSION COLLEGE CATALOG 2022-2023

ACCOUNTING (ACC)
accounting.missioncollege.edu

Department Chair: Jennifer Tseng
408 855-5365 | GC-341A
jennifer.tseng@missioncollege.edu
Dean: Jeff Pallin

CPA Exam Preparation 4: Regulation (REG) Certificate of Achievement

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

- Students will analyze the concepts, computations, and reporting requirements needed to pass the Regulation (REG) 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.

<table>
<thead>
<tr>
<th>Required courses (17 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A Financial Accounting</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 051A Taxation of Individuals</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 051B Taxation of Business Entities</td>
<td>3.0</td>
</tr>
<tr>
<td>ACC 070 Ethics in Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 028A Business Law</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 17.0
Associate in Arts in Anthropology (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
- Students will 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.
- Students will classify universal shared elements of culture and assess alternative ways that human groups meet needs for stability, reproduction, and social control.
- Students will 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.
- Students will 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 Required Course (9 units)  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: Select 3 units minimum from the following. Only 1 may be a statistics course: MAT 10, MAT 010H, MAT 010X, or SOC 016
ANT 001L  Biological Anthropology Laboratory  1.0
SJS 001  Social Justice  3.0
SJS 002  Introduction to Gender Studies  3.0
HIS 017A  History of the United States to 1877  3.0
HIS 017AH  History of the United States to 1877 - Honors  3.0
HIS 017B  History of the United States Since 1877  3.0
HIS 017BH  History of the United States since 1877 - Honors  3.0
MAT 010  Elementary Statistics  4.0
MAT 010H  Elementary Statistics - Honors  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: Select 1-2 courses (3-5 units) from the following:
PSY015  Introduction to Research Methods  3.0
PSY015H  Introduction to Research Methods - Honors  3.0
BIO047  Human Anatomy  5.0

List C: Choose 1 course from the following (3 units minimum):
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.

CHD 013  Teaching in a Diverse Society  3.0
COM 012  Introduction to Intercultural Communication  3.0
ENG 013  Chicano/a-Latina/o Literature  3.0
ETH 013  Chicano/a-Latina/o Literature  3.0
ETH 016A  Hispanic Roots & Culture  3.0
ETH 018  African-American Culture and Humanities  3.0
ETH 018H  African-American Culture and Humanities - Honors  3.0
ETH 044  African American History  3.0
ETH 044H  African American History - Honors  3.0
HIS 031  History of East Asia  3.0
HIS 044  African-American History  3.0
HIS 044H  African American History - Honors  3.0
HUM 016A  Hispanic Roots & Culture  3.0
HUM 018  African-American Culture and Humanities  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
MUS 017  Music of the World  3.0
POL 006  Politics of Race, Class and Gender  3.0
SOC 021  Minorities in the United States  3.0

Required Units for the Major:  18.0-23.0

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

Total Required Units:  60.0
Certificate of Achievement in Coach Operator

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:

• Students will demonstrate the skills needed to immediately contribute to quality, on-time service delivery to the riding public in a dynamic public transit environment.
• Students will display a sound command of both technical (driving) and interpersonal skills in coach operation and passenger relations.
• Students will 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).

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 101</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 401</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 402</td>
<td>5.0</td>
</tr>
<tr>
<td>TRN 403</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 404</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 405</td>
<td>1.0</td>
</tr>
<tr>
<td>WRK 300TN</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Certificate of Achievement in Overhead Line Worker

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:

• Students will 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.

• Students will demonstrate effective safety protocols in a high voltage rail system environment. Students will 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).

Required Courses:

<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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apprenticeship Fundamentals I</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 152</td>
<td>Overhead Line Worker</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Apprenticeship Fundamentals II</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 153</td>
<td>Overhead Line Worker</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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
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:
• Students will demonstrate basic working knowledge of the functions, inter-relationships, and teamwork required for effective Transit Operations functioning.
• Students will utilize positive methods and take responsibility for solving problems at the field level whenever possible, within the chain of command.
• Students will 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).

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 101</td>
<td>Foundations of Public Service for Transit Workers</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 102</td>
<td>Public Service and Stress Management for Public Transit Employees</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 103</td>
<td>Community Health Issues for Public Transit Employees</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 104</td>
<td>Peer Mentoring for Public Transit Workers: One-on-One Skills</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 105</td>
<td>Group Facilitation and Training Skills for Peer Mentors</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 106</td>
<td>Interpersonal Communication for Transit Workers</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 107</td>
<td>Labor/Management Problem Solving in Public Transit</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 108</td>
<td>Performance Coaching for Public Transit Leaders</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 109</td>
<td>Transit Business Technology and Practices for Transit Employees</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 110</td>
<td>Transit Operations for New Leaders</td>
<td>2.0</td>
</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: 18.0
Certificate of Achievement in Service Mechanic Apprenticeship

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:
- Students will demonstrate the skills needed to perform minor repair, inspection, and lubrication of public transit vehicles.
- Students will assist transit mechanics and/or other journey level maintenance mechanics in more difficult mechanical maintenance work.
- Students will 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).

Required Courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>
<td>2.5</td>
</tr>
<tr>
<td>TRN 209</td>
<td>Service Mechanic: Preventative Maintenance - PMI</td>
<td>2.5</td>
</tr>
<tr>
<td>TRN 210</td>
<td>Service Mechanic: Overhaul &amp; Repair Orientation</td>
<td>2.5</td>
</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
Certificate of Achievement in Track Worker Apprenticeship

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:
• Students will 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.
• Students will demonstrate effective safety protocols in a high
voltage rail system environment.
• Students will 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).

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 121 Way, Power, &amp; Signal Maintenance Core Training I</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 122 Way, Power, &amp; Signal Maintenance Core Training II</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 123 Way, Power, &amp; Signal Maintenance Core Training III</td>
<td>1.0</td>
</tr>
<tr>
<td>TRN 131 Basic Principles of Track Maintenance I</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 132 Basic Principles of Track Maintenance II</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 133 Advanced Principles of Track Maintenance I</td>
<td>2.0</td>
</tr>
<tr>
<td>TRN 134 Advanced Principles of Track Maintenance II</td>
<td>2.5</td>
</tr>
<tr>
<td>WRK 300TN Occupational Work Experience for the Transportation Industry</td>
<td>7.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.5
Associate in Arts in Art History for Transfer (AA-T)

The Associate in Arts in Art History for Transfer (AA-T) program at Mission College 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.

Program Learning Outcomes:

• Students will identify major, monuments, and styles in art and architecture from ancient through modern times.

• Students will use critical thinking to analyze and compare contrast world cultures and belief systems through a study of anthropology, philosophy, history, languages, and/or the humanities.

• Students will analyze, compare, and contrast works of art according to subject matter, symbolism, style, and artistic influences.

• Students will 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).

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

Core Curriculum Courses Required (9 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001A</td>
<td>Survey of Western Art I \ AND</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001B</td>
<td>Survey of Western Art II \ AND</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A. Select one (1) course from the following (3 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 007</td>
<td>Survey of Asian Art</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B. Select one (1) course from the following (3 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034A</td>
<td>Introduction to Digital Art OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 035A</td>
<td>Life Drawing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 065A</td>
<td>Ceramics-Hand-building OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 085A</td>
<td>Sculpture</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List C. Select 1 (3 units).

1) Any List A or B course not already used.
2) Any CSU transferable Art History course (Except ARTH 100 Art Appreciation)
3) Any Art or Humanities course articulated as CSU GE Area C1 or IGETC Area 3A.
4) 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
5) Any course articulated as CSU GE Area D1, D3, D4, D6 or IGETC Area 4.

Any course from List A or B not already selected

<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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ANT 055</td>
<td>Magic, Witchcraft and Religion OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001D</td>
<td>Art of the 20th Century Art OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 011</td>
<td>The History of Modern Design OR</td>
<td>3.0</td>
</tr>
<tr>
<td>COU 055</td>
<td>Valuing Diversity OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004A</td>
<td>History of Western Civilization OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004AH</td>
<td>History of Western Civilization – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004B</td>
<td>History of Western Civilization OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004BH</td>
<td>History of Western Civilization – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017A</td>
<td>History of the United States to 1877 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017AH</td>
<td>History of the United States to 1877 – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017B</td>
<td>History of the United States Since 1877 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017BH</td>
<td>History of the United States Since 1877 – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 020</td>
<td>History and Geography of California OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 031</td>
<td>History of East Asia OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001A</td>
<td>Human Values in and From the Arts OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001B</td>
<td>Human Values in and From the Arts OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 007</td>
<td>International Films OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 015</td>
<td>Introduction to Film Analysis OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots &amp; Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018</td>
<td>African American Culture and Humanities OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018H</td>
<td>African American Culture and Humanities – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PHI 001</td>
<td>Introduction to Philosophy OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PHI 003</td>
<td>Introduction to Ethics OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 050A</td>
<td>Basic Conversational Spanish and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 050B</td>
<td>Basic Conversational Spanish and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049A</td>
<td>Vietnamese for the Vietnamese-Speaking OR</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049B</td>
<td>Vietnamese Language and Culture for Fluent Speakers OR</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

Department Chair: Mark Engel
408-855-5280 | GC-337C
mark.engel@missioncollege.edu
Dean: Brian Miller
ART (ART)
art.missioncollege.edu

Associate in Arts in Studio 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 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).

Note: Completing courses prior to transfer that satisfy the U.S. History, Constitution and American Ideals requirement as part to the CSU GE or IGETC is highly recommended.

Core Curriculum Courses Required: | Units
--- | ---
ART 001B Survey of Western Art II | 3.0
ART 031A Beginning Drawing | 3.0
ART 033A Basic Design: Two-Dimensional | 3.0
ART 033B Basic Design: Three-Dimensional | 3.0

List A: Art History Restricted Electives - Select one from the following: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 001A Survey of Western Art I</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 007 Survey of Asian Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 001D Art of the 20th Century</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B: Studio Arts Restricted Electives - Select one course from any three of the following areas for a maximum of 9 units:

<table>
<thead>
<tr>
<th>Area</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drawing:</td>
<td></td>
</tr>
<tr>
<td>ART 035A Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>Painting:</td>
<td></td>
</tr>
<tr>
<td>ART 049A Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>Printmaking:</td>
<td></td>
</tr>
<tr>
<td>ART 039A Survey of Printmaking</td>
<td>3.0</td>
</tr>
<tr>
<td>Ceramics:</td>
<td></td>
</tr>
<tr>
<td>ART 065A Ceramics-Handbuilding</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067A Ceramics-Potter’s Wheel</td>
<td>3.0</td>
</tr>
<tr>
<td>Sculpture:</td>
<td></td>
</tr>
<tr>
<td>ART 085A Sculpture</td>
<td>3.0</td>
</tr>
<tr>
<td>Digital Art:</td>
<td></td>
</tr>
<tr>
<td>ART 034A Introduction to Digital Art</td>
<td>3.0</td>
</tr>
<tr>
<td>Photography:</td>
<td></td>
</tr>
<tr>
<td>GDS 073 Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>Color:</td>
<td></td>
</tr>
<tr>
<td>ART 033C Basic Design: Color</td>
<td>3.0</td>
</tr>
<tr>
<td>Applied Design:</td>
<td></td>
</tr>
<tr>
<td>ART 075A Metalsmithing</td>
<td>3.0</td>
</tr>
<tr>
<td>Other Media:</td>
<td></td>
</tr>
<tr>
<td>ART 088A Metal Sculpture Casting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 078A Furniture Design and Woodworking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Second Semester:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 035B Life Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 049B Painting</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 065B Ceramics-Handbuilding</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 067B Ceramics-Potter’s Wheel</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 085B Sculpture</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
Associate in Arts in Art
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:
• 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. Students 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:
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.

Foundation Courses: Select 18 units from categories A,B,C:
A. Survey of Art - 6 units selected from:
- ART 001A Survey of Western Art I 3.0
- ART 001B Survey of Western Art II 3.0
- ART 001D Art of the 20th Century 3.0

B. Drawing - 6 units selected from:
- ART 031A Beginning Drawing 3.0
- ART 031B Intermediate Drawing 3.0
- ART 035A Life Drawing 3.0

C. Design - 6 units selected from:
- ART 033A Basic Design: Two-Dimensional 3.0
- ART 033B Basic Design: Three-Dimensional 3.0
- ART 033C Basic Design: Color 3.0

Plus one course from either Two-Dimensional Art OR Three-Dimensional Art
Two-Dimensional Art
- ART 033A* Basic Design: Two-Dimensional 3.0
- ART 033B* Basic Design: Three-Dimensional 3.0
- ART 035A* Life Drawing 3.0
- ART 035B Life Drawing 3.0
- ART 039A Survey of Printmaking 3.0
- ART 047A Watercolor 3.0
- ART 047B Watercolor 3.0
- ART 048A Airbrush Painting 3.0
- ART 048B Airbrush Painting 3.0
- ART 049A Painting 3.0
- ART 049B Painting 3.0
- ART 034A Introduction to Digital Art 3.0
- ART 034B Advanced Digital Art 3.0

Three-Dimensional Art
- ART 065A Ceramics-Handbuilding 3.0
- ART 065B Ceramics-Handbuilding 3.0
- ART 067A Ceramics-Potter’s Wheel 3.0
- ART 067B Ceramics-Potter’s Wheel 3.0
- ART 075A Metalsmithing 3.0
- ART 075B Metalsmithing 3.0
- ART 085A Sculpture 3.0
- ART 085B Sculpture 3.0
- ART 088A Metal Sculpture Casting 3.0
- ART 088B Metal Sculpture Casting 3.0

*If not taken as a Foundation course

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
Associate in Arts in Creative Arts
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:
- 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. Students will be able to communicate orally and in writing about art and design related topics.
- Students will use critical thinking to analyze, compare and contrast world cultures and belief systems through a study of anthropology, philosophy, history, languages, and/or the humanities.
- 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
The Associate in Arts in Art transfers to most four-year colleges.

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 or IGETC.

The program requires completion of 18 units in the following two areas:
I. Applied Arts (total of 6 units from one or more of the Creative Arts disciplines). Courses in which the student participates in the arts, such as drawing, painting, singing, instrumental performance, creative writing, dancing, and oral interpretation.

II. History or Theory (total of 12 units). Courses in which the student studies the history and/or theory of Creative Arts related subjects. The student should complete 3 units in each of the following four disciplines: Art, English, Dance, and Music. The following courses are recommended in this area (relevant courses not on this list may also be approved on a course-by-course basis):

<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 004</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 006B</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 015</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 005</td>
<td>3.0</td>
</tr>
<tr>
<td>MUS 010</td>
<td>3.0</td>
</tr>
</tbody>
</table>

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.

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
Certificate of Achievement in Three-Dimensional Arts

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:

- Students will 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. Students 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 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.
- 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: 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.

Select five (5) courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>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
Associate in Science in Biology for Transfer (AS-T)

The 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.

Program Learning Outcomes:
- Students will apply the scientific method to investigate biological questions by collecting and quantitatively analyzing data.
- Students will 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.
- Students will explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.

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.

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 001A</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001B</td>
<td>5.0</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>BIO 001AH</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 001B</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A – Complete all courses listed (24-25 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>CHM 001B</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001BH</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003A</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 002A</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004A</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 002B</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY 004B</td>
<td>4.0</td>
</tr>
</tbody>
</table>

List B - Complete listed course (3 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 001</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 37.0-38.0

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

Total Required Units: 60.0
### Associate in Science in Biological Sciences

The Associate in Science in Biological Sciences is designed for students interested in acquiring a solid foundation in basic biology, evolutionary theory, and the scientific method. This program is appropriate for students seeking entry-level positions in the life sciences.

**Program Learning Outcomes:**

- Students will apply the scientific method to investigate biological questions by collecting and quantitatively analyzing data.
- Students will 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.
- Students will explain the genetic or evolutionary connections between biological structures and their function, and between organisms and their environment.

**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 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.
4. Students will follow transfers and transformations of energy and matter through biotic and abiotic systems.

**Required Courses:**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 001B</td>
<td>General Biology: Organisms</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>

Select a minimum of 8 units from the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>ANT001</td>
<td>Biological Anthropology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO004</td>
<td>Microbiology</td>
<td>5.0</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>1.0</td>
</tr>
<tr>
<td>BIO011</td>
<td>Human Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO016</td>
<td>Marine Biology</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO019</td>
<td>Oceans: Life in the Sea</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO030</td>
<td>Tropical Ecology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO030L</td>
<td>Tropical Ecology Field Studies</td>
<td>1.0</td>
</tr>
<tr>
<td>BIO032</td>
<td>California Plants and Animals</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO048</td>
<td>Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO048H</td>
<td>Human Physiology - Honors</td>
<td>5.0</td>
</tr>
<tr>
<td>NTR040</td>
<td>Nutrition and Disease</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR040H</td>
<td>Nutrition and Disease - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018</td>
<td>The Biology of Cancer</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018H</td>
<td>The Biology of Cancer - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR015H</td>
<td>Human Nutrition - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO014</td>
<td>Introductory Neuroscience</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO014H</td>
<td>Introductory Neuroscience - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO017</td>
<td>Genetics and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO017H</td>
<td>Genetics and Society - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO025</td>
<td>Environmental Biology</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO025H</td>
<td>Environmental Biology - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO012</td>
<td>Emerging Infectious Diseases</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO012H</td>
<td>Emerging Infectious Diseases - Honors</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM001A</td>
<td>General Chemistry</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM001AH</td>
<td>General Chemistry I - Honors</td>
<td>5.0</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
Associate in Science in Human Biology

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.

Required Courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 004</td>
<td>5.0</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>

Select a minimum of 9 units from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 001</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO010L</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 011</td>
<td>4.0</td>
</tr>
<tr>
<td>BIO 012</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO012H</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 014H</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 017H</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO018H</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 022</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
Year Up’s job training program is tuition free, and offers access to today’s best companies and a proven path to career success.

**YEAR UP OFFERS THE FOLLOWING**

- Hands-on training.
- Free tuition.
- Real world corporate access.
- A six-month internship.
- Support from not only Mission College’s staff, but Year Up staff.

Classes at Mission College combine courses in Computer Applications, Computer Science, Communication Studies, and Business.

**REBECCA ESPARZA**

**Data Analyst Certificate**

I'm currently a Data Analyst at Facebook, interning as a participant in the Year Up Program. Growing up in Eastside San Jose, the tech industry of Silicon Valley was never showcased to youths in my community.

When I found out I was going to intern at Facebook, it felt unbelievable. I want to give back to my community and recruit more women of color and from underserved groups to work in the tech industry. I want to close the digital divide.

In my classes, I was introduced to coding including Python and HTML. My coursework was hard, but I enjoyed it! The staff and faculty and both Year Up and Mission College provide support, training, and mentorship.
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 “P”) 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).

Core Curriculum Courses Required (19 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 001A</td>
<td>4.0</td>
</tr>
<tr>
<td>ACC 001B</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 028A</td>
<td>3.0</td>
</tr>
<tr>
<td>ECN 001A</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Complete at least one of the following (4-5 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 012</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 003A</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003AH</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Complete at least one of the following (4 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 010</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Complete at least one of the following (3 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 051</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 30.0-31.0

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

Total Required Units: 60.0
**Associate in Science in Business**

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:**
- Students will select the best software application to formulate productive solutions.
- Students will identify and describe the major legal, and/or ethical, and/or social issues confronting today’s contemporary organizations.
- Students will use well organized and accurate business communication channels, including: written research analysis, and/or verbal presentations.
- Students will 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.

**Required Courses:**

<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 AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L</td>
<td>Introduction to Business Computing Laboratory AND</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 028A</td>
<td>Business Law I AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>Introduction to American Business AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 118</td>
<td>Human Resources Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**Elective Courses (15 units):**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACC 060</td>
<td>Computerized Accounting: QuickBooks</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 010</td>
<td>Global Business 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 037</td>
<td>Fundamentals of Project Management OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 038</td>
<td>Applied Project Management OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 040</td>
<td>Professional Selling OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 041</td>
<td>Beginning Business Analytics OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 052</td>
<td>Fundamentals of Financial Investing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 054</td>
<td>Small Business Start Up and Management 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 061</td>
<td>Business and Society OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 064B</td>
<td>Business Math OR</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 074</td>
<td>Supply Chain Management OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 102</td>
<td>Leadership OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 115</td>
<td>Operations Management OR</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 001</td>
<td>Public Speaking OR</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 001H</td>
<td>Public Speaking Honors OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Up to a maximum of six (6) non-Business units may substitute for the Business electives listed Accounting, Computer Applications & Computer Information Systems.

**Required Units for the Major:** 31.0-32.0

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

**Total Required Units:** 60.0
Certificate of Achievement in Business Computing

Certificate of Achievement in Business Computing

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:

• Students will select the best software application to formulate productive solutions.
• Students will 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 Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose a minimum of 11 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 045A</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 045B</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046E</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 081B</td>
<td>1.0</td>
</tr>
<tr>
<td>CIS 001</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 007</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 051</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>3.0</td>
</tr>
<tr>
<td>CIT 011</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 012</td>
<td>4.0</td>
</tr>
</tbody>
</table>

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

Total Required Units: 18.0-21.0
Certificate of Achievement in Entrepreneurship and Small Business

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.

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 Curriculum Courses (Required):

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 054</td>
<td>Small Business Startup and Management AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 109</td>
<td>Business Law for Entrepreneurs AND</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 111</td>
<td>The Entrepreneurial Mindset AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 112</td>
<td>Business Modeling</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A Select one (1) course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</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>

List B – Select one (2) course:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</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
Certificate of Achievement in Project Coordinator

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:

- Students will apply the project management techniques, skills and tools to successfully complete a project on schedule, within budget and meet the customer's objectives.
- Students will display their written and oral communication skills with a variety of audiences.
- Students will 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.

Core Curriculum Courses Required (22 units - 18 units in the classroom plus 4 units of the work experience internship)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021L</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 037</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 105</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 044</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>2.0</td>
</tr>
<tr>
<td>COM 008</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK300GW</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 22.0
Certificate of Achievement in Project Management

Mission College offers a Project Management Certificate to students who successfully complete 18 or more units of coursework as outlined below. This 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.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>

Elective Courses - Select a minimum of 12 units from the following:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 038</td>
<td>Applied Project Management</td>
<td>3.0</td>
</tr>
<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
Certificate of Achievement in Management and Leadership

Mission College offers an 18-unit Certificate of Achievement in Management and Leadership that provides students with basic skills who are interested in the field of management. Graduates of the program will seek leadership positions in different fields such as Finance, Manufacturing, Information Systems, Marketing and Human Resources. Students learn skills such as leading cross functional teams, applying employee empowerment, identifying the importance of ethical leadership, utilizing electronic communication technology and the impact of organizational staffing. Through electives, you will have the opportunity to explore various areas of business and add a more in-depth level of skill that can use in becoming a successful entrepreneur.

Program Learning Outcomes:

- Students will analyze and recommend effective business decisions/solutions using a systematic, evaluative, and information-based approach.
- Students will effectively communicate solutions to business problems, using appropriate language and tools and demonstrating understanding of business terms and concepts.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses (9 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 03 Fundamentals of Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 102 Leadership</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 118 Human Resources Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective Courses (minimum of 9 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 010 Global Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 022 Principles of E-Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 038 Applied Project Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 054 Small Business Start Up and Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 074 Supply Chain Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 104 Project Risk Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 107 Soft Skills for Project Managers</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 115 Operations Management</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 001 Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 001H Public Speaking - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-20.0
Associate in Science in Early Childhood Education 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:

- Students will 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.
- Students will 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.
- Students will 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:

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.

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:  

<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

Note: Completing course prior to transfer that satisfy the U.S. History, Constitution and American Ideals requirement as part of the CSU GE or IGETC is highly recommended.

Students may also be interested in English for Childcare (non credit) and can see more information on page 96.
Associate in Science in Early Childhood Education

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.

Program Learning Outcomes:
- Students will apply child development theory to early care and education practice.
- Students will create individual and group curriculum that promotes physical, cognitive, and/or socio-emotional development in children in early childhood education programs.
- Students will create and implement curriculum tailored to specialized needs of children for the early care and education classroom.

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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 001</td>
<td>Child Growth and Development</td>
</tr>
<tr>
<td>CHD 002</td>
<td>Child, Family, and Community</td>
</tr>
<tr>
<td>CHD 010</td>
<td>Principles and Practices in Education</td>
</tr>
<tr>
<td>CHD 015</td>
<td>Observation and Assessment of Children</td>
</tr>
<tr>
<td>CHD 017</td>
<td>Child Health, Safety, and Nutrition</td>
</tr>
<tr>
<td>CHD 013</td>
<td>Teaching in a Diverse Society</td>
</tr>
<tr>
<td>CHD 026</td>
<td>Introduction to Curriculum</td>
</tr>
<tr>
<td>CHD 020</td>
<td>The Child with Special Needs</td>
</tr>
<tr>
<td>CHD 008A</td>
<td>Practicum A</td>
</tr>
<tr>
<td>CHD 016</td>
<td>Infant and Toddler Development</td>
</tr>
</tbody>
</table>

Plus at least 6 units from the following elective courses:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 003</td>
</tr>
<tr>
<td>CHD 004</td>
</tr>
<tr>
<td>CHD 005</td>
</tr>
<tr>
<td>CHD 006</td>
</tr>
<tr>
<td>CHD 007</td>
</tr>
<tr>
<td>CHD 014</td>
</tr>
<tr>
<td>CHD 018</td>
</tr>
<tr>
<td>CHD 021</td>
</tr>
<tr>
<td>CHD 022</td>
</tr>
<tr>
<td>CHD 024</td>
</tr>
<tr>
<td>CHD 025</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

Students may also be interested in English for Childcare (non credit) and can see more information on page 96.
Certificate of Achievement: Associate Teacher

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:
- Students will create and implement developmentally and culturally appropriate curriculum.
- Students will identify developmental milestones in the cognitive, emotional, social, and physical domains.
- Students will 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</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 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

Students may also be interested in English for Childcare (non credit) and can see more information on page 96
Certificate of Achievement:
Early Intervention Assistant

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:

- Students will demonstrate effective verbal and written communication skills to actively collaborate with families in an ongoing and positive manner to support each children’s and family's development.
- Students will recognize the typical and atypical child developmental milestones of children birth to age five.
- Students will 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.
- Students will 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.

<table>
<thead>
<tr>
<th>List A - Required Core Courses (24 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 010 Principles and Practices in Education</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 in the Community</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 024 Positive Guidance in Early Childhood Programs: Managing Challenging in Early Childhood Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 025 Inclusion Strategies and Curriculum for Child Development</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK 300CD Occupational Work Experience</td>
<td>3.0</td>
</tr>
</tbody>
</table>

| List B - Select one course from the following: | Units |
| CHD 003 Language and Literacy for the Young Child | 3.0   |
| CHD 004 Cognitive Experiences for Children     | 3.0   |
| CHD 015 Observation and Assessment of Children | 3.0   |
| CHD 018 Parenting Issues for Teachers          | 1.0   |
| CHD 017 Child Health, Safety and Nutrition     | 3.0   |
| CHD 021 Children and Play                      | 3.0   |

Total Required Units: 25.0-27.0

Students may also be interested in English for Childcare (non credit) and can see more information on page 96.
Certificate of Achievement: 
Master Teacher

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:
- Students will complete appropriate preparation for the Master Teacher Child Development Permit from the State of California.
- Students will demonstrate specialized curriculum for the early childhood education classroom.
- Students will identify and explain health, safety and nutritional needs of children in early childhood programs.

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.

Core Curriculum Courses Required:

<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 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 010</td>
<td>Principles and Practices in Education</td>
<td>3.0</td>
</tr>
<tr>
<td>CHD 008A</td>
<td>Practicum A</td>
<td>3.5</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 022</td>
<td>Adult Supervision in Early Childhood</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Plus two of the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHD 005</td>
<td>Movement and Melody</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 in Early Childhood 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 014</td>
<td>Art and Creative Development of Young 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 021</td>
<td>Children and Play</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 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>

Total Required Units: 35.5

Students may also be interested in English for Childcare (non credit) and can see more information on page 96.
Associate in Arts for Transfer in Communication Studies (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:
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 Course Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 001</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 001H</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A/B - Complete the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 004</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 008</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 012</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 020</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 020H</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List C - Select one (1) course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 003</td>
<td>3.0</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>ENG 001B</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 001C</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

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

* This Certificate of Proficiency is awarded by the academic department. The 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.

The Certificate of Proficiency in Communication Studies is designed for students who successfully complete ten or more units of communication course work at Mission College. The importance of interpersonal communication 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 certificate will not only enhance the student's chances of being selected for a job, but it may also open doors both professionally and personally. Skills learned will increase understanding, ability to communicate with other people, and give the necessary material to build bridges with other people.

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:

Career opportunities include the following: broadcasting, consumer affairs, public relations, advertising, education, marketing, government, human resources, law, community affairs, politics negotiations, journalism, customer service, recreation, management, and recruiting.

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

<table>
<thead>
<tr>
<th>Core Curriculum Course - Select one (1) course:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 001 Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 020 Argumentation and Debate</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Plus 7 units from the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM 004 Small Group Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 008 Interpersonal Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 012 Introduction to Intercultural Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 015 Fundamentals of Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 019A Communication Activities</td>
<td>1.0</td>
</tr>
<tr>
<td>COM 001* Public Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 020* Argumentation and Debate</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*If both courses are taken, one may be counted for the Core course and one for the additional units

Total Required Units: 10.0
Associate in Science in Administrative Specialist

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 Curriculum Courses Required (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>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 071E</td>
<td>Microsoft Outlook</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 092B</td>
<td>Google Apps for Personal Productivity</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>ACC 023</td>
<td>Small Business Accounting</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select 9 –11 units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>US 051</td>
<td>Introduction to American Business</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 046E</td>
<td>Intermediate Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 033B</td>
<td>Microsoft Word - Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 048</td>
<td>Microsoft Project</td>
<td>2.0</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>

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
Associate in Science in Office Information Systems

The Associate in Science in Office Information Systems is designed for students seeking employment in an automated business information environment. Courses will prepare students for possible management and supervisory positions within the business office environment.

Program Learning Outcome:
- Students will demonstrate ability to use computer skills in major software packages used in an office.

Career/Transfer Opportunities:
Career opportunities include the following: business information worker, executive secretary, and executive administrative assistant.

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 Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COU 012</td>
<td>Careers and Lifestyles</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 033A</td>
<td>Word Processing - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 033B</td>
<td>Word Processing - Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021</td>
<td>Intro to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>Introduction to Microsoft PowerPoint</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>CAP 070</td>
<td>Using MS Windows</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 092A</td>
<td>Fundamentals of Web 2.0 &amp; Cloud Technologies</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Plus 7 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 071E</td>
<td>Microsoft Outlook</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 097A</td>
<td>Creating Web Pages - Course 1</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 051</td>
<td>Introduction to American Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 054</td>
<td>Small Business Start Up and Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 27.0

Total Required Units: 60.0

Completion of General Education Requirements and electives as needed to reach 60 units.
Certificate of Achievement: Microsoft Office

The Certificate of Achievement: Microsoft Office is designed to provide students with the basic skills to work with this popular application suite, which has become an integral part of many jobs.

Program Learning Outcome:
- Students will acquire the skills needed to use the software packages contained in Microsoft Office.

Career/Transfer Opportunities:
Career opportunities include the following: business information worker, executive secretary, and executive administrative assistant.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 033A</td>
<td>Word Processing - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 033B</td>
<td>Word Processing - Course 2</td>
<td>3.0</td>
</tr>
<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 PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>Intermediate Microsoft Excel</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 071E</td>
<td>Microsoft Outlook</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 047</td>
<td>Visio for Visionaries</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Certificate of Achievement in Administrative Specialist

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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (9 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 010A Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 033A Microsoft Word - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 062B Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046D Introduction to Microsoft PowerPoint</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 071 Microsoft Outlook</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 092B Google Apps for Personal Productivity</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Select 9 units from the following:

<table>
<thead>
<tr>
<th>Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 033B</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 046E</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 048</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 063B</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 070</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 081B</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 111</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Certificate of Achievement in Office Information Systems

The Certificate of Achievement in Office Information Systems is designed for students who plan to seek employment in an automated business setting. Students will learn to develop the skills and attitudes necessary to succeed on the job. This program prepares students for a variety of positions in the modern business office, and may also increase the student’s potential for advancement.

Program Learning Outcomes:

• Students will demonstrate knowledge of computer skills and application software.
• Students will demonstrate knowledge of other office skills.

Career/Transfer Opportunities:

Career opportunities include the following: executive secretary, and executive administrative assistant.

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</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>COU 012</td>
<td>Careers and Lifestyles</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 033A</td>
<td>Word Processing - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 033B</td>
<td>Word Processing - Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021</td>
<td>Intro to Business Computing</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>Introduction to Microsoft PowerPoint</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>CAP 081B</td>
<td>Introduction to Microsoft Access</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 092A</td>
<td>Fundamentals of Web 2.0 &amp; Cloud Technologies</td>
<td>2.0</td>
</tr>
<tr>
<td>CAP 092B</td>
<td>Google Apps for Personal Productivity</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
| Plus three (3) units from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 118</td>
<td>Human Resource Management</td>
<td>3.0</td>
</tr>
<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 071E</td>
<td>Microsoft Outlook</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total Required Units: 26.0
Certificate of Achievement: Business Information Professional I

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:

- Students will apply effective business communication and presentation skills to satisfy customers’ needs.
- Students will 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.

Core Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 021</td>
<td>Introduction to Business Computing AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communications AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 107</td>
<td>Soft Skills for Project Managers AND</td>
<td>2.0</td>
</tr>
<tr>
<td>BUS 118</td>
<td>Human Resources Management AND</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard AND</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 033A</td>
<td>Word Processing - Course AND</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 046D</td>
<td>Introduction to Microsoft PowerPoint AND</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>An Introduction to Microsoft Excel AND</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 070</td>
<td>Using MS Windows AND</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 071E</td>
<td>Microsoft Outlook</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Total Required Units: 19.0

Computer Applications (CAP)

missioncollege.edu/depts/computer-applications

Department Chair: Christopher Zilg
Christopher.Zilg@missioncollege.edu
Dean: Jeff Pallin
Beginning Computer Skills Certificate of Completion (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.
Associate in Science in Computer Information Systems

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:
- Students will analyze a problem, and identify and define the computing requirements appropriate to its solution.
- Students will 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.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (12 units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 007 Python Programming</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 043 Software Development With Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 044 Introduction to Data Structures Using Java</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Plus two or more additional courses from the following electives (at least 8 units with a minimum of 6 units of CIS courses and maximum of 2 units work experience):

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 008 Advanced Python Programming</td>
</tr>
<tr>
<td>CIS 033 Robotics and Embedded Systems</td>
</tr>
<tr>
<td>CIS 037A Introduction to C Programming</td>
</tr>
<tr>
<td>CIS 039 Introduction to Computer Systems and Assembly Language</td>
</tr>
<tr>
<td>CIS 040 C++ Programming</td>
</tr>
<tr>
<td>CIS 045 Linux Essentials I</td>
</tr>
<tr>
<td>CIS 047 Linux System Administration</td>
</tr>
<tr>
<td>CIS 051 Introduction to Data Analysis</td>
</tr>
<tr>
<td>CIS 055 Database Management Systems I</td>
</tr>
<tr>
<td>CIS 056 Database Management Systems II</td>
</tr>
<tr>
<td>CIS 063 Mobile Apps Programming – Android</td>
</tr>
<tr>
<td>WRK 300GW General Work Experience</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
Certificate of Achievement in Computer Information Systems

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:

- Students will analyze a problem, identify, and define the computing requirements appropriate to its solution.
- Students will 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.
- Students will 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 Course Requirements (8 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 043</td>
<td>Software Development With Java</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 007</td>
<td>Python Programming</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Plus two or more additional courses from the following electives (at least 8 units with a minimum of 6 units of CIS courses and maximum of 2 units work experience):

<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</td>
<td></td>
</tr>
<tr>
<td></td>
<td>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
Certificate of Achievement in IT Help Desk Technician

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:

- Students will install, configure and support computing devices and software.
- Students will connect, maintain and support computing devices on a network.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required: (12.0 units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 011 Introduction to Computer Hardware AND Software</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 012 Introduction to Networking AND</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 045 Linux Essentials</td>
<td>4.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Elective courses (minimum of 6 units of the following or any CIT course work):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 017 Cyber Security Essentials OR</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 078 Microsoft Server Essentials OR</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 021 Introduction to Cisco Networks OR</td>
<td>4.0</td>
</tr>
<tr>
<td>BUS 078B Business Communication OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L Intro to Business Computer Lab OR</td>
<td>1.0</td>
</tr>
<tr>
<td>WRK 300GW General Work Experience</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-20.0
Certificate of Achievement in Cisco Certified Network Administration (CCNA)

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:
• Students will install, operate, and troubleshoot medium-sized routed and switched networks.
• Students will implement and troubleshoot various protocols to manage addressing, perform load balancing and authentication.
• Students will 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.

Core Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIT 021</td>
<td>Introduction to Cisco Networks (Cisco-1)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 022</td>
<td>Routing and Switching Essential (Cisco-2)</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 023</td>
<td>Scaling Networks (Cisco-3)</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Elective Courses (4 units):

<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>CIT 012</td>
<td>Introduction to Networking</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 013</td>
<td>AWS 1 Cloud Practitioner- Foundational</td>
<td>3.0</td>
</tr>
<tr>
<td>CIT 014</td>
<td>AWS 2 Solutions Architect- Associate</td>
<td>4.0</td>
</tr>
<tr>
<td>CIT 016</td>
<td>IT Security &amp; 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 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>

Total Required Units: 16.0
Certificate of Achievement in Data Analyst Associate

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:
- Students will analyze a problem and identify and define the computing and data requirements appropriate to its solution.
- Students will apply data analytics techniques and tools to implement and test a specified design.
- Students will 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 Curriculum Courses Required (11 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 007</td>
<td>Introduction to Python Programming AND</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 051</td>
<td>Introduction to Data Analysis AND</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 055</td>
<td>Introduction to Database and SQL AND</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Elective courses (minimum 7 units of the following or any CIS course work)

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS 001</td>
<td>Introduction to Computer Science and Tech OR</td>
<td>4.0</td>
</tr>
<tr>
<td>CIS 056</td>
<td>Database Management Systems II OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 021L</td>
<td>Intro to Business Computing Lab OR</td>
<td>1.0</td>
</tr>
<tr>
<td>BUS 078B</td>
<td>Business Communication OR</td>
<td>3.0</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>WRK 300GW</td>
<td>General Work Experience</td>
<td>1.0-4.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0-19.0
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 Curriculum Courses Required

<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>

Plus three or more additional courses from the following electives (at least 12 units):

<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>CIT 013</td>
<td>AWS 1 Cloud Practitioner - Foundational</td>
<td>3.0</td>
</tr>
<tr>
<td>CIT 014</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
Associate in Arts in Economics 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:

- Students will apply general economic theories and models to describe economic phenomena.
- Students will analyze and make predictions about the impact of government intervention and changing market conditions on consumer and producer behavior and well-being.
- Students will 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).

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

Core Curriculum Course Required (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 009</td>
<td>Integrated Statistics II OR</td>
<td>5.0</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 - Select one course (3-5 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 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 008</td>
<td>Finite Mathematics</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 - Select one course (3-5 units):

<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></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
Associate in Science in Engineering

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 Curriculum Courses Required (35 Units) + Select One Track (13-23 Units)

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>EGR 010 Introduction to Engineering OR EGR 010H Introduction to Engineering - Honors</td>
<td></td>
</tr>
<tr>
<td>5.0</td>
<td>MAT 003A Analytic Geometry and Calculus I AND MAT 003B Analytic Geometry and Calculus II AND MAT 004A Multivariable Calculus AND MAT 004B Differential Equations AND PHY 004A Engineering Physics-Mechanics AND PHY 004B Engineering Physics-Electricity and Magnetism AND PHY 004C Engineering Physics-Light and Heat</td>
<td></td>
</tr>
</tbody>
</table>

Mechanical, Aerospace, Manufacturing Engineering Track (22-23)

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>CHM 001A General Chemistry OR CHM 001AH General Chemistry – Honors</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>EGR 023 Mechanics – Statics AND EGR 024 Introduction to Circuit Analysis AND EGR 025 Engineering Graphics and Design AND EGR 026 Engineering Materials AND EGR 030 Introduction to Computing for Engineers OR MAT 005 Programming and Problem-Solving in MATLAB</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>MAT 005 Programming and Problem-Solving in MATLAB</td>
<td></td>
</tr>
</tbody>
</table>

Civil Engineering Track (22-23 Units)

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>5.0</td>
<td>CHM 001A General Chemistry OR CHM 001AH General Chemistry – Honors</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>EGR 024 Introduction to Circuit Analysis AND EGR 024L Introduction to Circuit Analysis Lab</td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>EGR 026 Engineering Materials AND EGR 030 Introduction to Computing for Engineers OR MAT 005 Programming and Problem-Solving in MATLAB</td>
<td></td>
</tr>
<tr>
<td>4.0</td>
<td>MAT 005 Programming and Problem-Solving in MATLAB</td>
<td></td>
</tr>
</tbody>
</table>

Electrical Engineering Track (13 Units)

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>CIS 044 Introduction to Data Structures w/Java AND EGR 024 Introduction to Circuit Analysis AND EGR 024L Introduction to Circuit Analysis Lab AND EGR 030 Introduction to Computing for Engineers AND MAT 019 Discrete Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

Computer, Software Engineering Track (16 Units)

<table>
<thead>
<tr>
<th>Units</th>
<th>Course Title</th>
<th>Prerequisites</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.0</td>
<td>CIS 044 Introduction to Data Structures w/Java</td>
<td></td>
</tr>
<tr>
<td>3.0</td>
<td>EGR 024 Introduction to Circuit Analysis AND EGR 024L Introduction to Circuit Analysis Lab AND EGR 030 Introduction to Computing for Engineers AND MAT 019 Discrete Mathematics</td>
<td></td>
</tr>
</tbody>
</table>

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
Certificate of Achievement in Engineering

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:
- 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 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 https://www.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 Curriculum Courses Required (35 Units) + Select One Track</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>(13-23 Units)</td>
<td></td>
</tr>
<tr>
<td>EGR010 Introduction to Engineering AND</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT003A Analytic Geometry and Calculus I AND</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT003B Analytic Geometry and Calculus II AND</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT004A Multivariable Calculus AND</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT004B Differential Equations AND</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY004A Engineering Physics-Mechanics AND</td>
<td>5.0</td>
</tr>
<tr>
<td>PHY004B Engineering Physics-Electricity AND Magnetism AND</td>
<td>4.0</td>
</tr>
<tr>
<td>PHY004C Engineering Physics-Light and Heat AND</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Mech, Aero, Manuf Track (22-23 Units)</strong></td>
<td></td>
</tr>
<tr>
<td>CHM 001A General Chemistry OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry I - Honors AND</td>
<td>5.0</td>
</tr>
<tr>
<td>EGR 023 Mechanics - Statics AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 025 Engineering Graphics and Design AND</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 026 Engineering Materials AND</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 005 Introduction to MATLAB</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Civil Track (22-23 Units)</strong></td>
<td></td>
</tr>
<tr>
<td>CHM 001A General Chemistry OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry I - Honors AND</td>
<td>5.0</td>
</tr>
<tr>
<td>EGR 023 Mechanics - Statics AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 025 Engineering Graphics and Design AND</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 026 Engineering Materials AND</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 005 Introduction to MATLAB</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Electrical Track (13 Units)</strong></td>
<td></td>
</tr>
<tr>
<td>CHM 001A General Chemistry OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry I - Honors AND</td>
<td>5.0</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 024L Introduction of Circuit Analysis Laboratory AND</td>
<td>1.0</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers AND</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Computer, Software Track (16 Units)</strong></td>
<td></td>
</tr>
<tr>
<td>CIS 044 Introduction to Data Structures Using Java AND</td>
<td>4.0</td>
</tr>
<tr>
<td>EGR 024 Introduction to Circuit Analysis AND</td>
<td>3.0</td>
</tr>
<tr>
<td>EGR 024L Introduction of Circuit Analysis Laboratory AND</td>
<td>1.0</td>
</tr>
<tr>
<td>EGR 030 Introduction to Computing for Engineers AND</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 019 Discrete Mathematics</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total Required Units:</strong></td>
<td>48.0-58.0</td>
</tr>
</tbody>
</table>
Associate in Arts in English 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:
- Students will write focused organized, well-developed essays that support clear thesis statements and demonstrate competence in Standard English grammar and usage.
- Students will demonstrate critical thinking skills by analyzing and evaluating academic essays and literature.
- Students will formulate and clearly communicate their positions on diverse issues.
- Students will 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.
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.

### Required Courses:

<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 - Select two (2) courses (a minimum of 6 units):

<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 - Select one (1) course (minimum 3 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENG 015</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 048</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 070</td>
<td>3.0</td>
</tr>
</tbody>
</table>

### List C - Select one (1) course (minimum 3 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 07B</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>5.0</td>
</tr>
<tr>
<td>FRN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 003</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>JPN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 001</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 003</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>VIE 002</td>
<td>5.0</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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 07B</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>5.0</td>
</tr>
<tr>
<td>FRN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 003</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>JPN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 001</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 003</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>VIE 002</td>
<td>5.0</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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 07B</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>5.0</td>
</tr>
<tr>
<td>FRN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 003</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>JPN 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 001</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 003</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 004</td>
<td>5.0</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>5.0</td>
</tr>
<tr>
<td>VIE 002</td>
<td>5.0</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:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>60.0</td>
</tr>
</tbody>
</table>

### Required Units for the Major:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>18.0-20.0</td>
</tr>
</tbody>
</table>

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

Total Required Units: 60.0
Certificate of Proficiency in English as a Second Language

* This Certificate of Proficiency is awarded by the academic department. The 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.

The Certificate of Proficiency in English as a Second Language at Mission College serves students who are non-native speakers of English as a second language. The program prepares students of all ages and backgrounds who want to improve English to earn a college degree, improve their employment opportunities, and participate in their local communities. The program provides students with the skills needed to achieve their academic, career, and lifelong-learning goals. Courses provide instruction in English as a second language at six different proficiency levels from high-beginning to advanced. The certificate is earned upon completion of the advanced level courses of ESL 970LS (Listening/Speaking), ESL 970GW (Grammar/Writing), and ESL 970RV (Reading/Vocabulary).

ESL Course Offerings

The English as a Second Language Department offers a total of 15 core and 10 elective lecture courses that span six levels of language proficiency, from high-beginning to advanced, to one level below transfer. These courses teach the English language skills of writing, reading, listening, speaking, grammar, and pronunciation.

Courses are usually offered twice a week, Monday/Wednesday or Tuesday/Thursday, in day or night sessions. Each course has a number of set 'units', ranging from three to five units. Each unit represents the number of hours in class time each week over the course of a 16-week semester. For example, a three unit course meets for an hour and a half twice a week. There are two online courses of Listening and Culture at the high-beginning and low-intermediate levels.

Many of our listening/speaking and pronunciation courses offer practice in our fully-equipped, state-of-the-art multimedia ESL Language Laboratory. There is an ESL Open Lab, where students can practice ESL language skills independently with the assistance from a lab instructor.

Program Learning Outcomes:

- Students will identify and use the grammatical elements of college-level Standard English to write an essay using academic vocabulary.
- Students will read a novel at the adult level and respond orally and in writing to fictional elements such as character, plot, and theme.
- Students will write an outline for and answer detailed questions about academic lectures and news broadcasts and summarize lectures, literary and non-literary works orally and in writing.
- Students will participate in a group discussion using appropriate social and linguistic forms to join an ongoing discussion, add information, disagree, agree, and summarize in both academic and professional settings on a variety of concrete and abstract topics.
- Students will produce speech which is intelligible and accurately articulated.

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

Career/Transfer Opportunities:

Many ESL students continue to study at Mission College in Career Technical Education, certificate programs and transfer majors. Popular courses of study are accounting, business, graphic arts and/or design, nurse assistant, child development hospitality management, and the flagship LVN to RN program.

<table>
<thead>
<tr>
<th>Required Courses:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 970LS Advanced Listening and Speaking</td>
<td>3.0</td>
</tr>
<tr>
<td>ESL 970GW Advanced ESL Composition and Grammar</td>
<td>5.0</td>
</tr>
<tr>
<td>ESL 970RV Advanced Reading and Vocabulary</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 11.0

Department Chair: Amelia Akers-Martin
408-855-5092 | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA

ENGLISH AS A SECOND LANGUAGE

esl.missioncollege.edu

* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.
Basic Writing Skills Certificate of Competency (Non Credit)

This certificate indicates that the student has completed two courses focused on writing improvement and has demonstrated the ability to use a variety of sentence types and rhetorical strategies.

Program Learning Outcome:
• Students will upon completion of the courses required for the Basic Writing Skills Certificate, students will assess into English 905 or above.

Career/Transfer Opportunities:
The ability to write accurate sentences and paragraphs is required in order to place into the credit English program, to successfully complete college-level coursework, to improve employment skills, and/or to reach personal goals.

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

<table>
<thead>
<tr>
<th>Students must complete the following courses:</th>
<th>Units / Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCB 901 Strategies to Improve Writing AND</td>
<td>0.00 / 54.0</td>
</tr>
<tr>
<td>NCB 902 Strategies to Improve Writing</td>
<td>0.00 / 54.0</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 108
Low-Beginning ESL Certificate of Competency (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:
- Students will 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.

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

Students must complete the following courses:

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Units/ Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 910A Foundations in ESL I</td>
<td>0.0 / 64.0</td>
</tr>
<tr>
<td>NCE 910B Foundations in ESL II</td>
<td>0.0 / 64.0</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 128
Beginning ESL Certificate of Competency (Noncredit)

This program in Beginning ESL equips students with the Basic English language skills they need in order to improve employability or to enter into an ESL credit program at the high beginning level. This includes listening, speaking, reading, and writing skills as well as test-taking skills and the computer skills needed to access course curricula.

Program Learning Outcomes:

• Students will respond adequately to spoken language appropriate for novice-mid to novice-high level learners and use common concrete vocabulary to speak about familiar topics.
• Students will read articles and short stories suitable for the level and will write simple sentences using common vocabulary.
• Students will demonstrate the reading, vocabulary, grammar, writing, listening, speaking and test taking skills necessary in order to successfully score an ESL 930 or higher placement on the college placement exam.

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.

* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.
ENGLISH AS A SECOND LANGUAGE (ESL-NON CREDIT)
esl.missioncollege.edu

Department Chair: Amelia Akers-Martin
408-855-5092 | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA

Low Intermediate ESL (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:
• Students will 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.

Students must complete the following courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units / Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 940LS</td>
<td>Listening and Speaking 0.0 / 54</td>
</tr>
<tr>
<td>NCE 940GW</td>
<td>Grammar and Writing 0.0 / 90</td>
</tr>
<tr>
<td>MCE 940RV</td>
<td>Reading and Vocabulary 0.0 / 54</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 198.0
High-Beginning ESL Certificate of Competency (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:
• Students will 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.
English for Careers in Food Service
Certificate of Competency (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.

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units / Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 930FD</td>
<td>English for Food Preparation</td>
<td>0 / 72.0 hours</td>
</tr>
<tr>
<td>NCE 940FD</td>
<td>English for Food Service</td>
<td>0 / 72.0 hours</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 144.0

Students must complete the following courses.
English for Child Development
Certificate of Competency (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:
• Students will 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.
• Students will 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.

<table>
<thead>
<tr>
<th>Courses Required</th>
<th>Units/Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 950EC English for Child Development: Introduction AND</td>
<td>0/54.0</td>
</tr>
<tr>
<td>NCE 955EC English for CHD: Factors in Child Development AND</td>
<td>0/54.0</td>
</tr>
<tr>
<td>NCE 960EC English for CHD: Domains of Child Development, Part I OR</td>
<td>0/54.0</td>
</tr>
<tr>
<td>NCE 965EC English for CHD: Domains of Child Development, Part II</td>
<td>0/54.0</td>
</tr>
<tr>
<td>Total Required Units:</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Required Hours:</td>
<td>162</td>
</tr>
</tbody>
</table>
English for Childcare Certificate of Competency (Noncredit)

This program in English for Child Care 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 child care skills.

Program Learning Outcomes:
- Students will 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.
- Students will 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.

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

Students must complete the following courses:

Courses Required: 

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units/Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 920EC</td>
<td>ESL for Child Care: Intro AND</td>
<td>0.0 / 32.0</td>
</tr>
<tr>
<td>NCE 930EC</td>
<td>ESL for Child Care: Health and Safety AND</td>
<td>0.0 / 64.0</td>
</tr>
<tr>
<td>NCE 940EC</td>
<td>ESL for Child Care: Ages and States</td>
<td>0.0 / 64.0</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 160
ENGLISH AS A SECOND LANGUAGE (ESL-NON CREDIT)
esl.missioncollege.edu

Department Chair: Amelia Akers-Martin
408-855-5092 | SEC-248H
amelia.akers-martin@missioncollege.edu
Dean: TBA

Preparation for Academic Success in ESL (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:
• Students will 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.

Students must complete the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
<th>Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE924</td>
<td>Beginning ESL College Skills</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>NCE934</td>
<td>Bridge to ESL College Success</td>
<td>0</td>
<td>32</td>
</tr>
</tbody>
</table>

Total Required Units: 0.0
Total Required Hours: 64
Associate in Science in Fire Technology

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:

- Students will be able to engage in patient assessment considering patient pathophysiology and implement appropriate emergency medical care.
- Students will be able to identify and analyze building components, hazardous materials classifications and automated suppression systems.
- Students will be able to evaluate fire behavior and combustion and apply the appropriate fire suppression 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.
FIRE PROTECTION TECHNOLOGY (FPT)
firetech.missioncollege.edu

Certificate of Achievement in Fire Fighter/EMT Academy

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:
- Students will 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
- Students will be prepared for entry-level employment as a professional and competent Emergency Medical Technician and meet the needs of the local health care community.

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.

Core Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPT 065</td>
<td>Emergency Medical Technician I Theory</td>
<td>6.0</td>
</tr>
<tr>
<td>FPT 065C</td>
<td>Emergency Medical Technician 1 Clinical Experience</td>
<td>0.5</td>
</tr>
<tr>
<td>FPT 065L</td>
<td>Emergency Medical Technician Laboratory</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 200</td>
<td>Fire Fighter 1 Fire Academy</td>
<td>14.5</td>
</tr>
</tbody>
</table>

Total Required Units: 22.5
Certificate of Achievement: Fire Prevention Internship Certification

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.
• Students will explain how to determine Occupancy Classifications & Load
• Students will explain how Site Access & Emergency Access affect life safety
• Students will describe how to complete a Hood and Duct Inspection
• Students will describe the types of Fire Suppression Systems
• Students will identify the responsibility, authority and process for fire prevention inspections and fire cause determination
• Students will identify how to Determine the Operational Readiness of a Fire Detection and Alarm systems
• Students will describe the consequences of severe wildland fire conditions on unmitigated wildland urban interface areas.
• Students will identify the history of fire in the wildland urban interface environment.
• Students will 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 FPT 301 - Fire Inspector 1A, FPT 302 - Fire Inspector 1B, FPT 303 - Fire Inspector 1C, FPT 304 - Fire Inspector 1D.
• Students will 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: 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FPT 300A Fire Prevention Internship Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300B Fire Prevention Internship Course 2</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300C Fire Prevention Internship Course 3</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 300D Fire Prevention Internship Course 4</td>
<td>3.0</td>
</tr>
<tr>
<td>FPT 301 Fire Inspector 1A Duties and Administration</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 302 Fire Inspector 1B Fire and Life Safety</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 303 Fire Inspector 1C Field Inspection</td>
<td>1.5</td>
</tr>
<tr>
<td>FPT 304 Fire Inspector 1D Field Inspection CA</td>
<td>1.0</td>
</tr>
<tr>
<td>WRK 300FP Occupational Work Experience for Fire Prevention Internship</td>
<td>12.0</td>
</tr>
</tbody>
</table>

Note: FPT 055 must be taken before FPT 300A (FPT 055 is a prerequisite of FPT 300A).

Required Courses (may be taken after completing FPT 055). WRK 300FP is a co-requisite with FPT 300A-D.

Required Units for the Major: 32.5
Certificate of Achievement in Transfer Studies - CSU GE-B

The Certificate of Achievement in Transfer Studies – CSU GE-B 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:
- Students will engage in meaningful verbal and nonverbal expression through written, oral, signed, and/or artistic communication of ideas and concepts.
- Students will apply principles of scientific and critical inquiry, including quantitative and qualitative techniques, to the analysis of relevant questions, problems, or issues.
- Students will analyze the interconnectivity between social, political, economic, and ecological systems to effectively live and work in diverse communities.
- Students will apply techniques for physical and mental development that include the application of ethical principles to personal, academic, and professional matters.

Career/Transfer Opportunities:
This certificate is designed for students who intend to complete university general education requirements prior to transfer to a California State University (CSU) campus. Completion of the California State University General Education – Breadth (CSU GE-B) will permit a student to transfer from a California Community College to a CSU 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. See pages 44-46 for approved CSU GE-B, Area D courses.

Total Required Units: 40.0 - 53.0

* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.
Certificate of Achievement in Transfer Studies – IGETC for CSU
The Certificate of Achievement in Transfer Studies – IGETC for CSU 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:
- Students will engage in meaningful verbal and non-verbal expression through written, signed, and/or artistic communication of ideas and concepts.
- Students will apply principles of scientific and critical inquiry, including quantitative and qualitative techniques, to the analysis of relevant questions, problems, or issues.
- Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation.
- Students will critically analyze and solve problems using the appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable.

Career/Transfer Opportunities:
This certificate is designed for those who intend to complete university general education requirements prior to transfer to a California State University (CSU). Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a California Community College to a CSU campus without the need, after transfer, to take additional lower-division, general education requirements.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better. See IGETC for CSU course listing on pages 47.

Total Required Units: 37.0 - 52.0
* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.

Certificate of Achievement in Transfer Studies - IGETC for UC
The Certificate of Achievement in Transfer Studies – IGETC for UC 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:
- Students will engage in meaningful verbal and non-verbal expression through written, oral, signed, and/or artistic communication of ideas and concepts.
- Students will apply principles of scientific and critical inquiry, including quantitative and qualitative techniques, to the analysis of relevant questions, problems, or issues.
- Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation.
- Students will critically analyze and solve problems using the appropriate use of logic, mathematics, multi-disciplinary, and cultural considerations where applicable.

Career/Transfer Opportunities:
This certificate is designed for those who intend to complete university general education requirements prior to transfer to a University of California (UC) campus. Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will permit a student to transfer from a California Community College to a UC campus without the need, after transfer, to take additional lower-division, general education courses.

To earn this certificate, students must complete the minimum required courses with a grade of C (or P) or better. See IGETC for UC course listing on pages 49.

Total Required Units: 34.0 - 48.0
* Federal Financial aid may not apply to this certificate program. Consult Financial aid office for more information.
# Associate in Science in Graphic Design

The Associate in 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.

## 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 Curriculum Courses Required (30 Units):

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

Plus one additional course to complete the required minimum total of 33 semester units (minimum of 3 units). Courses may not be used to satisfy elective requirements if they have already been used to satisfy core curriculum requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 067</td>
<td>Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 084</td>
<td>Portfolio Production Studio</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 072</td>
<td>Digital Imaging and User Interface Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 056</td>
<td>Presentation Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 080</td>
<td>Packaging Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 076</td>
<td>Emerging Trends in Interaction Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 077</td>
<td>Interactive Projects and Explorations in UXD</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 081</td>
<td>Motion Graphics with After Effects</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 073</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 074</td>
<td>Video Production 1</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 047</td>
<td>Web Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046</td>
<td>Intermediate Web Design 2</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034A</td>
<td>Introduction to Digital Art</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 011</td>
<td>The History of Modern Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 012</td>
<td>History of Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 015</td>
<td>Photo-media and Social Change</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 039A</td>
<td>3D Animation and Modeling Using Maya</td>
<td>3.0</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
Certificate of Achievement in Digital Illustration

The Certificate of Achievement in Digital Illustration provides the basic skills for students interested in the field of digital illustration. Graduates of the program might seek employment as medical, book, magazine, or newspaper illustrators, create illustrative work for training, and promotion in a corporate environment, or create digital illustrations for digital media projects and/or the web. Students learn technical and creative skills used in the creation of illustrations using both raster based and vector based software tools, while working on projects such as product illustrations. Many illustrators work as freelancers, and this is a competitive field which requires skill, drive, and talent to succeed. The classes in the core requirements should be taken in the general order that they are listed.

Program Learning Outcomes:

• Students will identify and apply the fundamentals of vector art creation and manipulation.
• Students will create technical product illustrations using both the vector and raster tools in Adobe Photoshop.
• Students will create original illustrations using a combination of Illustrator's creative tools, including various free-form drawing tools.

Career/Transfer Opportunities:
Career opportunities include the following: illustration, graphic arts production, advertising, web production, and fine art.

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>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing OR</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034A</td>
<td>Introduction to Digital Art OR</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 062</td>
<td>Introduction to Adobe Illustrator OR</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 066</td>
<td>Advanced Adobe Illustrator</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 068</td>
<td>Advanced Adobe Photoshop</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 085</td>
<td>Professional Portfolio and Design</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Plus additional course(s) required from the following to bring your total to a minimum of 17 units:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 035</td>
<td>Beginning Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 073</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 039A</td>
<td>3D Animation and Modeling Using Maya</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034B</td>
<td>Advanced Digital Art</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031A*</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B*</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034A*</td>
<td>Introduction to Digital Art</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 062*</td>
<td>Introduction to Adobe Illustrator</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 066*</td>
<td>Advanced Adobe Illustrator</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*If not use as a Core Curriculum Course

Total Required Units: 17.0
Certificate of Achievement in Graphic Design

Certificate of Achievement in Graphic Design is designed to provide opportunities for the student to develop fluency in contemporary graphic design issues and techniques. The emphasis of the program is on increasing the student’s 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.

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

Core Curriculum Courses Required (30 Units):

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

Plus one additional course to complete the required minimum total of 33 semester units (minimum of 3 units). Courses may not be used to satisfy elective requirements if they have already been used to satisfy core curriculum requirements.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 067</td>
<td>Graphic Design II</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 084</td>
<td>Portfolio Production Studio</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 072</td>
<td>Digital Imaging and User Interface Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 056</td>
<td>Presentation Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 080</td>
<td>Packaging Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 076</td>
<td>Emerging Trends in Interaction Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 077</td>
<td>Interactive Projects and Explorations in UXD</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 081</td>
<td>Motion Graphics with After Effects</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 073</td>
<td>Digital Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 074</td>
<td>Video Production 1</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031A</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 031B</td>
<td>Intermediate Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 047</td>
<td>Web Animation</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046</td>
<td>Intermediate Web Design 2</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033B</td>
<td>Basic Design: Three-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 034A</td>
<td>Introduction to Digital Art</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 011</td>
<td>The History of Modern Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 012</td>
<td>History of Photography</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 015</td>
<td>Photo-media and Social Change</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 039A</td>
<td>3D Animation and Modeling Using Maya</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*If not used as a Core Curriculum Course.

Total Required Units: 33.0
Certificate of Achievement: Web Development

Certificate of Achievement: 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:
- Students will develop front end code for interactive websites using technologies and languages including HTML, CSS, JavaScript and related front-end frameworks.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (12 Units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 045 Web Design and Development 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046 Web Design and Development 2</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089 JavaScript 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 089B JavaScript 2 and Web Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Plus select additional courses to complete the required minimum total of 21 semester units (minimum of 9 units):

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

Total Required Units: 21.0-22.0
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:
- Students will identify, explain and apply design principles such as typography, color and layout to the creation and evaluation of web designs.
- Students will generate documents related to User Experience Design such as wireframes and personas.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (15 Units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 035 Beginning Graphic Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 045 Web Design and Development 1</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 064 Introduction to Adobe Photoshop OR</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 072 Digital Imaging and User Interface Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 046 Web Design and Development 2</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 070 User Experience, Interface, and Multimedia Design</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A – Select two courses from the following. Courses may not be used to satisfy elective requirements if they have already been used to satisfy core curriculum requirements:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 047 Web Animation</td>
</tr>
<tr>
<td>GDS 064 introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>GDS 072 Digital Imaging and User Interface Design</td>
</tr>
<tr>
<td>GDS 049 WordPress and Content Management Systems(Check Title)</td>
</tr>
<tr>
<td>GDS 076 Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>GDS 077 interactive Projects &amp; Explorations in UXD</td>
</tr>
<tr>
<td>GDS 051 Mobile Application and Web Development with Web Standards</td>
</tr>
</tbody>
</table>

List B - Select one or more courses from the following additional to bring your total to a minimum of 24 units. Courses may not be used to satisfy elective requirements if they have already been used to satisfy core curriculum or List A requirements:

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ART 031A Beginning Drawing</td>
</tr>
<tr>
<td>ART 033A Basic Design: Two-Dimensional</td>
</tr>
<tr>
<td>BUS 084 Internet Marketing</td>
</tr>
<tr>
<td>CAP 092A Introduction to Cloud Technologies and Social Media</td>
</tr>
<tr>
<td>GDS 012 History of Photography</td>
</tr>
<tr>
<td>GDS 047 Web Animation</td>
</tr>
<tr>
<td>GDS 049 WordPress and Content Management Systems</td>
</tr>
<tr>
<td>GDS 051 Mobile Application and Web Development with Web Standards</td>
</tr>
<tr>
<td>GDS 055A Design Agency and Branding</td>
</tr>
<tr>
<td>GDS 062 Digital Illustration with Adobe Illustrator</td>
</tr>
<tr>
<td>GDS 064 Introduction to Adobe Photoshop</td>
</tr>
<tr>
<td>GDS 072 Digital Imaging and User Interface Design</td>
</tr>
<tr>
<td>GDS 073 Digital Photography</td>
</tr>
<tr>
<td>GDS 074 Digital Video Production with Final Cut Pro</td>
</tr>
<tr>
<td>GDS 076 Emerging Trends in Interaction Design</td>
</tr>
<tr>
<td>GDS 077 Interactive Projects &amp; Explorations in UXD</td>
</tr>
<tr>
<td>GDS 085 Professional Portfolio and Design Career Preparation</td>
</tr>
<tr>
<td>GDS 089 JavaScript 1</td>
</tr>
</tbody>
</table>

Total Required Units: 24.0-26.0
Certificate of Achievement in User Experience and Interface Design

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:

- Students will be able to 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.
- Students will be able to 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.
- Students will 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.

Core Curriculum Courses Required (9 units):

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

Plus at least 9 units from the following:

Note: Courses may not be used to satisfy elective requirements if they have already been used to satisfy core curriculum requirements.

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>GDS 072</td>
<td>Digital Imaging and User Interface Design OR</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 076</td>
<td>Emerging Trends in Interaction Design</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 062</td>
<td>Digital Illustration with Adobe Illustrator</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 035</td>
<td>Graphic Design I</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 065</td>
<td>Typography</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>
<tr>
<td>GDS 081</td>
<td>Motion Graphics</td>
<td>3.0</td>
</tr>
<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>ART 031A</td>
<td>Beginning Drawing</td>
<td>3.0</td>
</tr>
<tr>
<td>ART 033A</td>
<td>Basic Design: Two-Dimensional</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 055A</td>
<td>Design Agency and Branding</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 011</td>
<td>The History of Modern Design</td>
<td>3.0</td>
</tr>
<tr>
<td>GDS 061</td>
<td>Page Layout</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 18.0
Associate in Science Registered Nursing (LVN to RN)
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 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.

Admission 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.

Prerequisite Requirements for 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 (18 units):
   • Human Anatomy (one, 5-unit semester course or equivalent, e.g. BIO 047)
   • Human Physiology (one, 5-unit semester course or equivalent, e.g. BIO 048)
   • Microbiology (one, 5-unit semester course or equivalent, e.g. BIO 004)
   • English Composition (ENG 001A or equivalent with minimum grade of “C”)

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.
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 coursework 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.

LVN-to-RN Program Coursework

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 050</td>
<td>Role Transition LVN to RN</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 050A</td>
<td>Role Transition Clinical</td>
<td>1.0</td>
</tr>
</tbody>
</table>

**Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 051</td>
<td>Community Mental Health Nursing</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 052</td>
<td>Intermediate Medical-Surgical Nursing Theory</td>
<td>3.0</td>
</tr>
<tr>
<td>HOC 053</td>
<td>Introduction to Clinical Judgment</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 054</td>
<td>Intermediate Clinical Practicum</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 060</td>
<td>Advanced Maternal-Child Nursing</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 061</td>
<td>Advanced Medical-Surgical/Leadership Nursing</td>
<td>3.0</td>
</tr>
<tr>
<td>HOC 062</td>
<td>Leadership and Ethics</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 064</td>
<td>Advanced Clinical Practicum</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Additional Requirements

**LVN-to-RN Program Prerequisite Courses**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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</td>
<td>5.0</td>
</tr>
<tr>
<td>ENG 001A</td>
<td>English Composition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**BRN-mandated General Education Requirements**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>PSY 001</td>
<td>General Psychology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 012</td>
<td>Human Psychology AND</td>
<td>3.0</td>
</tr>
<tr>
<td>MAT 000C</td>
<td>Intermediate Algebra OR</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics AND</td>
<td>4.0</td>
</tr>
<tr>
<td>COM 001</td>
<td>Public Speaking</td>
<td>3.0</td>
</tr>
</tbody>
</table>

LVN Advanced-Placement Credit: 12.0 Units

**Required Units for the Major:**

- Completion of General Education and electives as needed to reach 72 units.
- Total Required Units: 72.0
HEALTH OCCUPATIONS  
(HOC)
nursing.missioncollege.edu

Associate in Science in Vocational Nursing

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). Enrollment is limited. Students may obtain information from the Mission College website, under the Nursing/Health Occupations link, for information-sessions, 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.

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.

Required Prerequisite Coursework and Certification (prior to admission to the program):
BIO 022 Anatomy & Physiology for Allied Health Workers 4.0 units.
HOC 020 Introduction to Professional Health Care 0.5 units.

Students must provide proof of current California Nursing Assistant certification and BLS-CPR certification. Students must have completed ENG 908 or the equivalent, or be eligible for ENG 001A, prior to enrolling in the program.

Major Requirements for the Vocational Nursing Degree: Admission to the program is required prior to enrollment in Nursing courses. Students are strongly encouraged to complete all General Education requirements for the Associate degree prior to beginning the required courses for the VN program.

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 Learning Outcomes:
- Students will use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Students will critically analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Students will demonstrate personal and professional growth.
- Students will successfully 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.

<table>
<thead>
<tr>
<th>Semester I (18 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 022</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 023A</td>
<td>2.5</td>
</tr>
<tr>
<td>HOC 023B</td>
<td>2.5</td>
</tr>
<tr>
<td>HOC 024</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 025A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 026A</td>
<td>5.0</td>
</tr>
<tr>
<td>HOC 027</td>
<td>2.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>18.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II (15.5 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 032</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 033A</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 033B</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 034</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 035A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 036A</td>
<td>5.0</td>
</tr>
<tr>
<td>NTR 015 *</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 040 *</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>15.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III (17 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 042</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 043A</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 043B</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 044</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 045A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 046A</td>
<td>5.0</td>
</tr>
<tr>
<td>HOC 047</td>
<td>1.5</td>
</tr>
<tr>
<td>PSY 012 *</td>
<td>3.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>17.0</td>
</tr>
</tbody>
</table>

*It is highly recommended that these courses be completed prior to starting the program.

Required Units for the Major: 50.5
Completion of General Education Requirements and electives as needed to reach 68.5 units.
Total Required Units: 68.5
Certificate of Achievement in Vocational Nursing

The licensed vocational nurse is a member of the health care team and works under the direction of a registered nurse or physician. The certificate requirements consist of three semesters of study. 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). 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.

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.

Required Prerequisite Coursework and Certification:
BIO 022 Anatomy & Physiology for Allied Health Workers 4.0 units.
HOC 020 Introduction to Professional Health Care 0.5 units.

Students must provide proof of current California Nursing Assistant certification and BLS-CPR certification. Students must have completed ENG 908 or the equivalent, or be eligible for ENG 001A, prior to enrolling in the program.

Major Requirements for the Vocational Nursing Degree Admission to the program is required prior to enrollment in these courses.

Program Learning Outcomes:
- Students will use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Students will critically analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Students will demonstrate personal and professional growth. Students will successfully complete all requirements for eligibility to apply for the Psychiatric Technician 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.

<table>
<thead>
<tr>
<th>Semester I (18 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 022</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 023A</td>
<td>2.5</td>
</tr>
<tr>
<td>HOC 023B</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 024</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 025A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 026A</td>
<td>5.0</td>
</tr>
<tr>
<td>HOC 027</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 028 *</td>
<td>1.0</td>
</tr>
<tr>
<td>PSY 001</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester II (15.5 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 032</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 033A</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 033B</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 034</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 035A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 036A</td>
<td>5.0</td>
</tr>
<tr>
<td>NTR 015 *</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 040 *</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semester III (17 Units)</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 042</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 043A</td>
<td>2.0</td>
</tr>
<tr>
<td>HOC 043B</td>
<td>1.5</td>
</tr>
<tr>
<td>HOC 044</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 045A</td>
<td>1.0</td>
</tr>
<tr>
<td>HOC 046A</td>
<td>5.0</td>
</tr>
<tr>
<td>HOC 047</td>
<td>1.5</td>
</tr>
<tr>
<td>PSY 012 *</td>
<td>3.0</td>
</tr>
</tbody>
</table>

*It is highly recommended that these courses be completed prior to starting the program.

Total Required Units: 50.5
Certificate of Proficiency: Nursing Assistant

* This Certificate of Proficiency is awarded by the academic department. The 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.

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:

**Nursing Assistant Program:**

- Attendance at an information session (dates will be posted online)
- Completion of the College Placement Exam (assesses English, reading, and math)
- Submission of an application for the CNA program by the specified deadline. Applications are available online at www.missioncollege.org/depts/health/index.html/nursing
- It is recommended that students have completed HOC 001 prior to applying for this program.

For any questions regarding non-acceptance into a program, please contact a counselor for an educational plan.

**Program Learning Outcomes:**

- Students will use the language of the profession of nursing to communicate appropriately using verbal, written and technological methods.
- Students will analyze relevant information in the utilization of the nursing process, applying principles of evidence-based practice as needed.
- Students will identify personal and professional growth through retrospection of nursing care.
- Students will 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 (i.e., hospice care or public health aide).

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

**Core Curriculum Courses (Required)**

<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 019B</td>
<td>Nursing Assistant Clinical Experience</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Required Units:** 6.0
### Community Health Worker Certificate of Completion (Non Credit)

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 as 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:
- Students will describe public health concepts and information for health promotion.
- Students will assess and integrate professional skills necessary for employment in the CHW field.
- Students will 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.

#### Students must complete the following courses:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units / Required Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCH 001CW</td>
<td>Introduction to Community Health Work</td>
<td>0 / 54.0</td>
</tr>
<tr>
<td>NCH 002CW</td>
<td>Introduction to Chronic Disease Management</td>
<td>0 / 54.0</td>
</tr>
<tr>
<td>NCH003CW</td>
<td>Externship for Community Health Worker</td>
<td>0 / 54.0</td>
</tr>
</tbody>
</table>

**Total Required Units:** 0.0  
**Total Required Hours:** 162
Associate in Arts in History 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.

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).

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

Core Curriculum Courses Required (6 total units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 017A</td>
<td>History of the United States to 1777 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017AH</td>
<td>History of the United States to 1777 - Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017B</td>
<td>History of the United States Since 1777 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 017BH</td>
<td>History of the United States Since 1777 - Honors OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A: Select 2 courses (6 total units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 004A</td>
<td>History of Western Civilization OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004AH</td>
<td>History of Western Civilization – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 015</td>
<td>World History to 1500 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 015H</td>
<td>World History to 1500 – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004B</td>
<td>History of Western Civilization OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 004BH</td>
<td>History of Western Civilization - Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016</td>
<td>World History Since 1500 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016H</td>
<td>World History Since 1500 – Honors OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B: Select one course from Area 1 and one course from Area 2 (6-8 total units)

You may not select a course already selected for List A.

Area 1 – Diversity: Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 015</td>
<td>World History to 1500 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 015H</td>
<td>World History to 1500 – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016</td>
<td>World History Since 1500 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 016H</td>
<td>World History Since 1500 – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 033</td>
<td>Women’s Issues Past and Present OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 033H</td>
<td>Women’s Issues Past and Present – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018</td>
<td>African-American Culture and Humanities OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018H</td>
<td>African-American Culture and Humanities – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>FRN 001</td>
<td>First Semester French (Elementary Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 002</td>
<td>Second Semester French (Elementary Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 003</td>
<td>Third Semester French (Intermediate Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>FRN 004</td>
<td>Fourth Semester French (Intermediate Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>HIS 031</td>
<td>History of East Asia OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001A</td>
<td>Human Values in and From the Arts OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 001B</td>
<td>Human Values in and From the Arts OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 022</td>
<td>Introduction to Islam OR</td>
<td>3.0</td>
</tr>
<tr>
<td>JPN 001</td>
<td>First Semester Japanese OR</td>
<td>5.0</td>
</tr>
<tr>
<td>JPN 002</td>
<td>Second Semester Japanese OR</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 001</td>
<td>First Semester Spanish (Elementary Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>Second Semester Spanish (Elementary Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 003</td>
<td>Third Semester Spanish (Intermediate Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 004</td>
<td>Fourth Semester Spanish (Intermediate Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 005A</td>
<td>Basic Conversational Spanish and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SPA 005B</td>
<td>Basic Conversational Spanish and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 001</td>
<td>First Semester Vietnamese (Elementary Level) OR</td>
<td>5.0</td>
</tr>
<tr>
<td>VIE 002</td>
<td>Second Semester Vietnamese OR</td>
<td>5.0</td>
</tr>
<tr>
<td>VIE 049A</td>
<td>Vietnamese for the Vietnamese – Speaking OR</td>
<td>3.0</td>
</tr>
<tr>
<td>VIE 049B</td>
<td>Vietnamese Language and Culture for Fluent Speakers OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Area 2: Units

<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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>COM 012</td>
<td>Introduction to Intercultural Communication OR</td>
<td>3.0</td>
</tr>
<tr>
<td>COU 055</td>
<td>Valuing Diversity OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 007</td>
<td>International Films OR</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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 004</td>
<td>International Relations OR</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 007</td>
<td>International Films OR</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 OR</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 OR</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
MISSION COLLEGE CATALOG 2022-2023

HOSPITALITY MANAGEMENT (HMT)
hm.missioncollege.edu

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 Curriculum Courses Required:

<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>5.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>6.0</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 060A</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>
<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>
<tr>
<td>CAP 010A</td>
<td>Learning the Keyboard</td>
<td>1.0</td>
</tr>
<tr>
<td>CAP 062B</td>
<td>Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Optional Recommended Courses (not included in core requirements):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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 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 082</td>
<td>Introduction to Chocolate and Confectionery</td>
<td>2.0</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>Food Trucks: Starting a Mobile Food Business</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106B</td>
<td>Food Trucks: Mobile Food Operations</td>
<td>1.5</td>
</tr>
<tr>
<td>HMT 075</td>
<td>Housekeeping in Hotels, Motels and Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>HMT 076</td>
<td>Hotel and Motel Front Office Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Required Units for the Major: 45.0-46.0

* Five (5) units of Work Experience is composed of approximately 400 hours of hands-on experience in viable food service operations.

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

Total Required Units: 60.0

HOSPITALITY MANAGEMENT

Department Chair: Daniel Arias
408-855-5434 | HM-116
daniel.arias@missioncollege.edu
Dean: Jackie Escajeda

HOSPITALITY MANAGEMENT
Associate in Science in Baking and Pastry

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:
• Students will demonstrate mastery of all basic baking formulas necessary to manage a pastry operation or department.
• Students will demonstrate skills needed to produce finished top tier cakes, wedding and special occasion cakes, pastries, and chocolate and confectionary craftsmanship.
• Students will plan and operate a successful bakery or pastry department and effectively manage its staff.
• Students will 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 Curriculum Courses Required (30 Units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>FDR051*</td>
<td>Basic Food Preparation</td>
<td>5.0</td>
</tr>
<tr>
<td>FDR058*</td>
<td>Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR059*</td>
<td>Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR073*</td>
<td>Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR074*</td>
<td>Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR078*</td>
<td>Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR082*</td>
<td>Introduction to Chocolate and Confectionary</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR086*</td>
<td>Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>INFO50*</td>
<td>Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK300HM**</td>
<td>Occupational Work Experience for Hospitality</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
</tr>
</tbody>
</table>

Optional Recommended Courses (minimum of 2 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP033A</td>
<td>Word Processing - Course 1</td>
<td>3.0</td>
</tr>
<tr>
<td>CAP062B</td>
<td>An Introduction to Microsoft Excel</td>
<td>1.0</td>
</tr>
<tr>
<td>FDR055</td>
<td>Procurement for Foodservice Operations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR072</td>
<td>Intermediate Cuisine</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR075</td>
<td>Menu Planning</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR076</td>
<td>Sales and Marketing in the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR079</td>
<td>Introduction to Food and Wine Pairing</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR081</td>
<td>Introduction to Wines and Spirits of the World</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR085</td>
<td>Foundations for Sustainability in</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Hospitality, Tourism and Leisure Services</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR096</td>
<td>Healthy Cuisine</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR105</td>
<td>Catering Management and Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR106A</td>
<td>Starting a Mobile Food Business</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR106B</td>
<td>Mobile Food Operations</td>
<td>2.0</td>
</tr>
<tr>
<td>NTR015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
<tr>
<td>WRK300HM</td>
<td>Occupational Work Experience for Hospitality</td>
<td>1.0-2.0</td>
</tr>
<tr>
<td></td>
<td>Management</td>
<td></td>
</tr>
</tbody>
</table>

Total Required Units: 32.0-33.0

*Current Courses in the Baking and Pastry AS Pathway

** 3 (3) units of Work Experience is composed of approximately 225 hours of hands-on experience in viable food service operations.

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

Total Required Units: 60.0
Certificate of Achievement in Baking and Pastry

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:
- Students will be able to apply practical knowledge and efficiency of baking and pastry production practices.
- Students will be proficient in classical as well as modern and trend-based baking and pastry techniques and production methods.
- Students will 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.

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required (30 Units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050* Introduction to the Hospitality Industry</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051* Basic Food Preparation</td>
<td>5.0</td>
</tr>
<tr>
<td>FDR 058* Cost Control for Foodservice Organizations</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059* Supervision, Management &amp; Leadership</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 073* Fundamentals of Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 074* Intermediate Baking and Confectionery</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 078* Advanced Baking and Pastry</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082* Introduction to Chocolate and Confectionary</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 086* Beginning Bread Making</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050* Sanitation and Safety</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM** Occupational Work Experience for Hospitality Management</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Optional Recommended Courses (minimum of 2 units):

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP 0010A Learning the Keyboard</td>
</tr>
<tr>
<td>CAP 062B An Introduction to Microsoft Excel</td>
</tr>
<tr>
<td>FDR 055 Procurement for Foodservice Operations</td>
</tr>
<tr>
<td>FDR 072 Intermediate Cuisine</td>
</tr>
<tr>
<td>FDR 075 Menu Planning</td>
</tr>
<tr>
<td>FDR 076 Sales and Marketing in the Hospitality Industry</td>
</tr>
<tr>
<td>FDR 079 Introduction to Food and Wine Pairing</td>
</tr>
<tr>
<td>FDR 081 Introduction to Wines and Spirits of the World</td>
</tr>
<tr>
<td>FDR 085 Foundations for Sustainability in Hospitality, Tourism and Leisure Services</td>
</tr>
<tr>
<td>FDR 096 Healthy Cuisine</td>
</tr>
<tr>
<td>FDR 105 Catering Management and Operations</td>
</tr>
<tr>
<td>FDR 106 Starting a Mobile Food Business</td>
</tr>
<tr>
<td>FDR 106B Mobile Food Operations</td>
</tr>
<tr>
<td>NTR 015 Human Nutrition</td>
</tr>
<tr>
<td>WRK 300HM** Occupational Work Experience for Hospitality Management (150 hours)</td>
</tr>
</tbody>
</table>

*Current Courses in the Baking and Pastry AS Pathway

** 3 (3) units of Work Experience is composed of approximately 225 hours of hands-on experience in viable food service operations.

Total Required Units: 32.0-33.0
Certificate of Achievement in Food Service and Restaurant Management

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 Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course 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>5.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>Restaurant Operations</td>
<td>6.0</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>Food, Beverage and Labor Cost Controls</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 060A</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>
<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>

*Five (5) units of Work Experience is composed of approximately 400 hours of hands-on experience in viable food service operations.

Optional Recommended Courses not included in core requirements:

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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 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 082</td>
<td>Introduction to Chocolate and Confectionary</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 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>1.5</td>
</tr>
<tr>
<td>HMT 075</td>
<td>Housekeeping in Hotels, Motels, and Institutions</td>
<td>3.0</td>
</tr>
<tr>
<td>HMT 076</td>
<td>Hotel and Motel Front Office Management</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>Human Nutrition</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 44.0-45.0
Certificate of Achievement in Fundamental Food Service Skills I

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:

• Students will identify the overall service objectives as they related to specific tasks. Students will apply basic hands-on food service skills, employing practical knowledge of fundamental practices.

• Students will demonstrate sanitation and safety practices and standards as they apply to food service and hospitality 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 Curriculum Courses Required:

<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>5.0</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: 15.0

*The two (2) units of work experience are composed of 150 hours (minimum) of actual hands-on experience in food service operations.
HOSPITALITY MANAGEMENT (HMT)
hm.missioncollege.edu

Department Chair: Daniel Arias
408-855-5434 | HM-116
daniel.arias@missioncollege.edu
Dean: Jackie Escajeda

Associate in Science in Culinary Arts
The Culinary Arts Associate 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:
• Students entering the Culinary Arts program will complete the Associates of Science Degree in Culinary Arts.
• Students will be able to use forecasting techniques to translate strategic business objectives and financial documents into effective and efficient daily operational processes.
• Students will be confident and skillful in 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.
• Student’s completing the Associate of Science Degree in Culinary Arts will 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 Curriculum Courses Required (38 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 050A</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 051</td>
<td>5.0</td>
</tr>
<tr>
<td>FDR 053</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 058</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 059</td>
<td>4.0</td>
</tr>
<tr>
<td>FDR 072</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 073</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 075</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 079</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 096</td>
<td>2.0</td>
</tr>
<tr>
<td>INF 050</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Choose a minimum of 6 units from the listed of selected electives below:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDR 054</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 055</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 060A</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 074</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 076</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 078</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 081</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 082</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 085</td>
<td>3.0</td>
</tr>
<tr>
<td>FDR 086</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 105</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106A</td>
<td>2.0</td>
</tr>
<tr>
<td>FDR 106B</td>
<td>2.0</td>
</tr>
<tr>
<td>WRK 300HM</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Total Required Units: 44.0

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

Total Required Units: 60.0
Certificate of Achievement in Culinary Arts

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 Curriculum Courses Required:

<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>5.0</td>
</tr>
<tr>
<td>FDR 053*</td>
<td>Restaurant Operations</td>
<td>6.0</td>
</tr>
<tr>
<td>FDR 058*</td>
<td>Cost Control for Foodservice Operations</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>

Choose a minimum of 6 units from the listed of selected electives below:

<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 060A</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>

*Part of required core for the Culinary Arts AS Pathway

Total Required Units: 44.0
Associate in Arts in Kinesiology for Transfer (AA-T)

The Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology) 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 Kinesiology. California Community College students who are awarded an Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology) 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 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, and fitness. Courses 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 Associate in Arts in Kinesiology for Transfer (AA-T in Kinesiology) meet the lower-division requirements for transfer to a four-year program of study in Kinesiology.

Program Learning Outcomes:
- Students will 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 will 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).

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

Core Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 047</td>
<td>Human Anatomy</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048</td>
<td>Human Physiology</td>
<td>5.0</td>
</tr>
<tr>
<td>KIN 078</td>
<td>Introduction to Kinesiology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Movement Based Courses: Select three (3) courses from three (3) different movement based areas for a minimum of three (3) units: Combatives, Dance, Fitness, Individual Sports, Team Sports.

Combatives:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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 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 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 055A</td>
<td>Self-Defense - Introduction</td>
<td>1.0</td>
</tr>
</tbody>
</table>

Dance:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 040A</td>
<td>Modern Dance - Introduction</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 046A</td>
<td>Ballroom Dancing - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 046C</td>
<td>Ballroom Dance - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 046B</td>
<td>Ballroom Dancing - Beginning</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 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>
</tbody>
</table>

Fitness:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 030A</td>
<td>Pilates Matwork - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 030B</td>
<td>Pilates Matwork - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 031A</td>
<td>Step Aerobics - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 031B</td>
<td>Step Aerobics - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032A</td>
<td>Aerobics-Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032B</td>
<td>Aerobics- Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 033A</td>
<td>Kickboxing Fitness- Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 033B</td>
<td>Kickboxing Fitness - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035A</td>
<td>Weight Training - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035B</td>
<td>Weight Training - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035C</td>
<td>Weight Training - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 037A</td>
<td>Cardio-Cross Training - Introduction</td>
<td>1.0</td>
</tr>
</tbody>
</table>
ASSOCIATE IN ARTS IN KINESIOLOGY FOR TRANSFER (AA-T) CONTINUED

KIN 037B Cardio-Cross Training - Beginning 1.0
KIN 038A Lower Body Conditioning Introduction 1.0
KIN 038B Lower Body Conditioning Beginning 1.0
KIN 038C Lower Body Conditioning - Intermediate 1.0
KIN 038D Lower Body Conditioning Advanced 1.0
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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 021A</td>
<td>Tennis - Introduction 1.0</td>
</tr>
<tr>
<td>KIN 021B</td>
<td>Tennis - Beginning 1.0</td>
</tr>
<tr>
<td>KIN 021C</td>
<td>Tennis - Intermediate 1.0</td>
</tr>
<tr>
<td>KIN 021D</td>
<td>Tennis - Advanced 1.0</td>
</tr>
<tr>
<td>KIN 021E</td>
<td>Tennis - Tournament 2.0</td>
</tr>
<tr>
<td>KIN 021F</td>
<td>Tennis - Doubles Strategies and Play 1.5</td>
</tr>
<tr>
<td>KIN 023A</td>
<td>Archery: Introduction 1.0</td>
</tr>
<tr>
<td>KIN 020A</td>
<td>Badminton - Introduction 1.0</td>
</tr>
<tr>
<td>KIN 020B</td>
<td>Badminton: Beginning 1.0</td>
</tr>
<tr>
<td>KIN 020C</td>
<td>Badminton - Intermediate 1.0</td>
</tr>
</tbody>
</table>

Team Sports:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 014A</td>
<td>Volleyball - Introduction 1.0</td>
</tr>
<tr>
<td>KIN 014B</td>
<td>Volleyball - Beginning 1.0</td>
</tr>
<tr>
<td>KIN 015A</td>
<td>Basketball - Introduction 1.0</td>
</tr>
<tr>
<td>KIN 015B</td>
<td>Basketball - Beginning 1.0</td>
</tr>
<tr>
<td>KIN 019A</td>
<td>Soccer - Introduction 1.0</td>
</tr>
<tr>
<td>KIN 019B</td>
<td>Soccer - Beginning 1.0</td>
</tr>
</tbody>
</table>

Select two (2) courses from the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 011</td>
<td>Human Biology 4.0</td>
</tr>
<tr>
<td>CHM 001A</td>
<td>General Chemistry I 5.0</td>
</tr>
<tr>
<td>CHM 030A</td>
<td>Fundamentals of Chemistry 4.0</td>
</tr>
<tr>
<td>MAT 010</td>
<td>Elementary Statistics 4.0</td>
</tr>
<tr>
<td>PHY 002A</td>
<td>General Physics - Mechanics and Thermodynamics 5.0</td>
</tr>
</tbody>
</table>

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
Certificate of Achievement in Fitness & Health

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:

- Students will 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.
- Students will demonstrate the ability to conduct safe, motivational, and effective individual and group exercise training programs.
- Students will 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.

Core Courses Required (12.5 units)

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 004</td>
<td>0.5</td>
</tr>
<tr>
<td>KIN 066</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN 067</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN 068</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN 079</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following list of electives: 3 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS 023 Social Media Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS 051 Introduction to American Business</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN 069 Stress Management Through Fitness and Lifestyle</td>
<td>3.0</td>
</tr>
<tr>
<td>KIN 081 Sport in Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Select one to two courses from the following list of Kinesiology activity courses: 2 units

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIN 014A Volleyball - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 014B Volleyball - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 014C Volleyball - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 014D Volleyball - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 015A Basketball - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 015B Basketball - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 015C Basketball - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 015D Basketball - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 019A Soccer - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 019B Soccer - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 020A Badminton - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 020B Badminton: Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 020C Badminton - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 020D Badminton - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 021A Tennis - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 021B Tennis - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 021C Tennis - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 021D Tennis - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 023A Archery - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 023B Archery – Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 023C Archery - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 023D Archery - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 030A Pilates Matwork - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 030B Pilates Matwork - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 030C Pilates Matwork - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 030D Pilates Matwork - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032A Cardio and Core Fitness - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032B Cardio and Core Fitness - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032C Cardio and Core Fitness - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 032D Cardio and Core Fitness - Advanced</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 033A Kickboxing Fitness - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 033B Kickboxing Fitness - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 033C Kickboxing Fitness - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035A Weight Training - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035B Weight Training - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 035C Weight Training - Intermediate</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 037A Cardio-Cross Training - Introduction</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 037B Cardio-Cross Training - Beginning</td>
<td>1.0</td>
</tr>
<tr>
<td>KIN 037C Cardio-Cross Training - Intermediate</td>
<td>1.0</td>
</tr>
</tbody>
</table>
Certificate of Achievement in Fitness & Health Continued

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<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>
</tr>
<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>
</tr>
</tbody>
</table>

Total Required Units: 17.5
Associate in Arts in Liberal Arts

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

Choose option A or B or C for the General Education pattern related to your educational goal:

A. Associate of Arts/Associate of Science General Education;
B. California State University General Education Breadth (CSU GE-B); or
C. Intersegmental General Education Transfer Curriculum (IGETC)

Complete a minimum of 18 units in one of the four Areas of Emphasis:
- Arts and Humanities
- Communication in the English Language and Critical Thinking
- Natural Science and Mathematics
- Social and Behavioral Sciences

For all options, complete necessary Mission College Graduation and Proficiency requirements.

Associate in Arts in Liberal Arts: Arts and Humanities

The Associate in Arts in Liberal Arts with an emphasis in Arts and Humanities provides students the opportunity to cultivate intellect, imagination, sensibility and sensitivity. Students will respond subjectively as well as objectively to aesthetic experiences and will develop an understanding of the integrity of both emotional and intellectual responses. Students will also refine their affective, cognitive, and physical faculties through studying great works of the human imagination. Critical thinking skills and self-understanding through these courses provide a framework for lifelong study in the arts and 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.

Program Learning Outcomes:
- Students will explain or demonstrate the connections between language, communication, and culture.
- Students will create, critique or analyze key elements of artistic expression by individuals or cultures.
- Students will interpret art forms and analyze humanistic texts in their historical and social contexts.

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.

Select a minimum of 18 units from the approved CSU GE-B Area C. Include courses from at least two different disciplines.

These courses emphasize the study of cultural, literary, and humanistic activities as well as artistic expression of human beings. Students will evaluate and interpret the ways in which people through the ages in different cultures have responded to themselves and the world around them in artistic and cultural creation. Students will also learn to value aesthetic understanding and incorporate these concepts when constructing value judgments.

See pages 45-47 for approved CSU GE-B, Area C courses.

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

Total Required Units: 60.0
Associate in Arts in Liberal Arts: Communication in the English Language and Critical Thinking

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. Students will practice the discovery, critical evaluation, and reporting of information, as well as reading, writing, and listening effectively. Students will also understand logic and its relation to language; elementary inductive and deductive processes, including an understanding of the formal and informal fallacies of language and thought; and the ability to distinguish matters of fact from issues of judgment or opinion. 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:
- Students will comprehend and analyze written and oral information effectively.
- Students will 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.

Select a minimum of 18 units from the approved CSU GE-B Area A. Include courses from at least two different disciplines.

These courses emphasize the content of communication as well as the form and should provide an understanding of the psychological basis and social significance of communication. Students will be able to assess communication as the process of human symbolic interaction. Students will also develop skills in the areas of reasoning and advocacy, organization, accuracy, reading and listening effectively. Students will be able to integrate important concepts of critical thinking as related to the development of analysis, critical evaluation, to reason inductively and deductively that will enable them to make important decisions regarding their own lives and society at large.

See pages 45-47 for approved CSU GE-B, Area A courses.

Completion of General Education Requirements and electives as needed

Total Required Units: 60.0
Associate in Arts in Liberal Arts: Natural Science and Mathematics

The Associate in Arts in Liberal Arts with an emphasis in Natural Science and Mathematics provides students the opportunity to develop knowledge of scientific theories, concepts, and data about both living and nonliving systems. Students will achieve an understanding and appreciation of scientific principles and the scientific method, as well as the potential limits of scientific endeavors and the value systems and ethics associated with human inquiry. In addition, students shall develop skills and understanding beyond the level of intermediate algebra. Students will not just practice computational skills, but will be able to explain and apply basic mathematical concepts and will be able to solve problems through quantitative reasoning. Critical thinking skills and self-understanding through these courses provide a framework for lifelong learning in the math and science areas and offers students a breadth of knowledge that could be focused into single discipline degrees as well as applied towards an interdisciplinary degree.

Program Learning Outcomes:
• Students will solve problems using quantitative information in verbal, numeric, graphic, and symbolic form.
• Students will apply scientific and/or mathematical processes and theories to address real-world applications.
• Students will understand how findings and ideas in science can be applied to explain phenomena and events and influence the larger 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.

Select a minimum of 18 units from the approved CSU GE-B Area B list. At least one mathematics course and one science course must be included.

These courses emphasize the natural sciences which examine the physical universe, its life forms and its natural phenomena. Courses in math emphasize the development of mathematical and quantitative reasoning skills beyond the level of intermediate algebra. Students will be able to demonstrate an understanding of the methodologies of science as investigative tools. Students will also examine the influence that the acquisition of scientific knowledge has on the development of the world’s civilizations.

See pages 45-47 for approved CSU GE-B, Area B courses.

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

Total Required Units: 60.0
Associate in Arts in Liberal Arts: Social and Behavioral Sciences

The Associate in Arts in Liberal Arts with an emphasis in Social and Behavioral Sciences provides students with a broad perspective on human behavior. It is designed to stimulate appreciation for, and understanding of, values, ideas, and artifacts of culture and society. Critical thinking skills and self-understanding through these courses provide a framework for lifelong study in liberal arts. Successful completion of the curriculum in Social and Behavioral Sciences 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:
• Students will evaluate and critique the interactions between individuals and the societies and/or social subgroups of which they are a part.
• Students will think critically about ways people have acted in response to their societies.
• Students will apply the principles, methodologies, value systems, ethics, and thought processes employed in human inquiry.

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.

Select a minimum of 18 units from the approved CSU GE-B Area D list. Include courses from at least two different disciplines. These courses emphasize the perspectives, concepts, theories, and methodologies of the disciplines typically found in the vast variety of disciplines that comprise study in the Social and Behavioral Sciences.

Students will study about themselves and others as members of a larger society. Topics and discussion to stimulate critical thinking about ways people have acted in response to their societies will allow students to evaluate how societies and social subgroups operate.

See pages 45-47 for approved CSU GE-B, Area D courses.

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

Total Required Units: 60.0
**Associate in Science in Mathematics for Transfer (AS-T)**

The Associate in Science in Mathematics for Transfer (AS-T in Mathematics) 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:**

- Students will solve mathematical problems using techniques appropriate to the course content and level of study.
- Students will solve applied problems using mathematical methods appropriate to the course content and the level of study.
- Students will apply technology to analyze and solve problems.
- Students will 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).

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

---

**Required Courses:**

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 003A Analytic Geometry and Calculus I OR</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003AH Analytic Geometry and Calculus I – Honors AND</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 003B Analytic Geometry and Calculus II AND</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 004A Multivariable Calculus</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List A - Select one (1) course from the following:**

<table>
<thead>
<tr>
<th>List A</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 004B Differential Equations OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 004C Linear Algebra</td>
<td>4.0</td>
</tr>
</tbody>
</table>

**List B - Select one (1) course from the following:**

Any course not selected from List A

| Required Units for the Major: | 22.0 |

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

**Total Required Units:**

| Total Required Units: | 60.0 |
Associate in Science in Mathematics

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:
- Students will solve mathematical problems using techniques appropriate to the course content and level of study.
- Students will solve applied problems using mathematical methods appropriate to the course content and the level of study.
- Students will 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 Curriculum Courses Required:

- MAT 003A Analytic Geometry and Calculus I OR 5.0
- MAT 003AH Analytic Geometry and Calculus I – Honors AND 5.0
- MAT 003B Analytic Geometry and Calculus II AND 5.0
- MAT 004A Multivariable Calculus AND 4.0
- MAT 004B Differential Equations OR 4.0
- MAT 004C Linear Algebra AND 4.0
- MAT 010 Elementary Statistics OR 4.0
- MAT 010H Elementary Statistics – Honors 4.0
- Select one course from the following: 3.0
  - AST 001 Astronomy OR
  - AST 003 Astronomy with Lab OR
  - BIO 010 Introduction to Biology OR
  - CHM 00 Introductory Chemistry OR
  - PHY 002A General Physics - Mechanics and Thermodynamics 5.0
- Plus one of the following: 4.0
  - CIS 007 Python Programming OR
  - CIS 008 Advanced Python Programming OR
  - CIS 037A Introduction to C Programming OR
  - CIS 040 C++ Programming OR
  - CIS 043 Software Development With Java
  - EGR 030 Introduction to Computing for Engineers OR
  - MAT 005 Introduction to MATLAB OR
  - MAT 019 Discrete Mathematics

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
Associate in Science in Mechatronic Technology

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:
- Students will integrate electrical, electronic, and mechanical systems and devices.
- Students will demonstrate written and verbal communication skills through technical documentation and oral presentations.
- Students will 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.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 025</td>
<td>4.0</td>
</tr>
<tr>
<td>MTT 010</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 012</td>
<td>2.0</td>
</tr>
<tr>
<td>MAT 001</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 002</td>
<td>6.0</td>
</tr>
</tbody>
</table>

Plus at least 10 units from the following electives (10 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 020 PLC Process Control Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 022 PLC and Robotic System Components OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 030 Electrical Motors and Control Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 032 Microcontroller Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 034 Fluid Power Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 040 Analog Circuits and Semiconductor Devices OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 042 Digital Logic Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 050 Digital Manufacturing</td>
<td>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
Certificate of Achievement in Mechatronic Technology

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:
• Students will analyze and integrate electrical, electronic, and mechanical systems and devices.
• Students will demonstrate written and verbal communication skills through technical documentation and oral presentations.
• Students will 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.

### Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MTT 010</td>
<td>Introduction to Technology and Careers AND</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 012</td>
<td>Electronic Systems Measurement and Troubleshooting AND</td>
<td>2.0</td>
</tr>
</tbody>
</table>

### Plus at least 14 units from the following electives (14 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EGR 025</td>
<td>Engineering Graphics and Design OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MTT 020</td>
<td>PLC Process Control Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 022</td>
<td>PLC and Robotic System Components OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 030</td>
<td>Electrical Motors and Control Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 032</td>
<td>Microcontroller Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 034</td>
<td>Fluid Power Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 040</td>
<td>Analog Circuits and Semiconductor Devices OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 042</td>
<td>Digital Logic Systems OR</td>
<td>2.0</td>
</tr>
<tr>
<td>MTT 050</td>
<td>Digital Manufacturing</td>
<td>2.0</td>
</tr>
</tbody>
</table>

**Total Required Units:** 18.0-24.0
Certificate of Achievement in Digital Music

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:

- Students will be able to operate the MIDI (Musical Instrument Digital Instrument) and audio functions of a Digital Audio Workstation (DAW).
- Students will be able to construct an original piece of music using a DAW while applying music theory and knowledge of various musical genres to the creative process.
- Students will 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

Core Curriculum Courses Required:

<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
Associate in Science in Nutrition and Dietetics 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. To earn an Associate of Science in Nutrition for Transfer degree, a student must complete 60 semester units that are eligible for transfer to the CSU system that consist of the IGETC pattern or CSU GE breadth and a major of 18 units more. Students must have a minimum GPA of 2.0 in all CSU-transferable coursework to receive an associate degree for transfer and all courses in the major must be completed with a C or better. Students earning an associate degree for transfer will not be required to complete any other local graduation requirements.

Program Learning Outcomes:
- Students will explain physiological processes such as digestion, absorption, transport and metabolism of nutrients.
- Students will critically analyze information on nutrition and separate scientifically supported information from misinformation.
- Students will 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).

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 001A General Chemistry OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001AH General Chemistry I - Honors AND</td>
<td>5.0</td>
</tr>
<tr>
<td>PSY 001 General Psychology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H General Psychology - Honors AND</td>
<td>3.0</td>
</tr>
<tr>
<td>NTR 015 Human Nutrition AND</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 004 Microbiology</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List A: Two courses (8-10 Units):

<table>
<thead>
<tr>
<th>List A: Two courses (8-10 Units):</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 012A Organic Chemistry I OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 012AH Organic Chemistry I - Honors OR</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 010 Elementary Statistics OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H Elementary Statistics - Honors OR</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC 016 Introduction to Statistics in Social And Behavioral Sciences OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 047 Human Anatomy OR</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048 Human Physiology OR</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 048H Human Physiology - Honors</td>
<td>5.0</td>
</tr>
</tbody>
</table>

List B: Select One course (3-5 units) Students take an additional course from List A or one of the following:

<table>
<thead>
<tr>
<th>List B: Select One course (3-5 units) Students take an additional course from List A or one of the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHM 001B General Chemistry OR</td>
<td>5.0</td>
</tr>
<tr>
<td>CHM 001BH General Chemistry II - Honors OR</td>
<td>5.0</td>
</tr>
<tr>
<td>BIO 011 Human Biology OR</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 030A Fundamentals of Chemistry OR</td>
<td>4.0</td>
</tr>
<tr>
<td>CHM 002 Introductory Chemistry AND</td>
<td>3.0</td>
</tr>
<tr>
<td>CHM 002L Introductory Chemistry Laboratory</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 does not require 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
- Compounding Computer Processing
- Compounding • Institutional Pharmacy Practice
- Outpatient Pharmacy Practice
- Clinical Pharmacy Externship
Associate in Science in Physics for Transfer (AS-T)

The Associate in Science in Physics for Transfer (AS-T in Physics) 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 Physics. California Community College students who are awarded an Associate in Science in Physics for Transfer (AS-T in Physics) 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 Physics for Transfer (AS-T in Physics) provides a foundation in physics and mathematics for students planning to transfer into a baccalaureate program in physics or physics education. Successful completion of the program guarantees the student acceptance to a local California State University to pursue a baccalaureate degree in Physics or a related field. Upon completion of the program, students will understand the principles of physics and be able to apply these theoretical and analytical principles to real world situations.

Program Learning Outcomes:
- Students will apply the scientific method to investigate physics problems by collecting and quantitatively analyzing data.
- Students will 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.
**Associate in Arts in Political Science 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).

<table>
<thead>
<tr>
<th>Core Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 001 American Government OR</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 001H American Government – Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**List A: Select three (3) courses from the following:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 002 Comparative Government</td>
</tr>
<tr>
<td>POL 003 Introduction to Social and Political Philosophy</td>
</tr>
<tr>
<td>POL 004 International Relations</td>
</tr>
<tr>
<td>POL 005 Political Science Research Methodology OR</td>
</tr>
<tr>
<td>MAT 009 Integrated Statistics II OR</td>
</tr>
<tr>
<td>MAT 010 Elementary Statistics OR</td>
</tr>
<tr>
<td>MAT 010H Elementary Statistics - Honors OR</td>
</tr>
<tr>
<td>SOC 016 Introduction to Statistics in Social and Behavioral Sciences</td>
</tr>
</tbody>
</table>

**List B: Select two (2) from the following:**

<table>
<thead>
<tr>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>POL 006 Politics of Race, Class and Gender</td>
</tr>
<tr>
<td>POL 007 International Films</td>
</tr>
<tr>
<td>POL 020 Controversial Legal Issues</td>
</tr>
<tr>
<td>GLB 001 Global Perspectives</td>
</tr>
<tr>
<td>GLB 002 Global Issues</td>
</tr>
<tr>
<td>GLB 004 The Developing World</td>
</tr>
<tr>
<td>GEO 002 Introduction to Cultural Geography</td>
</tr>
<tr>
<td>GEO 006 World Regional Geography</td>
</tr>
<tr>
<td>ECN 001A Principles of Macroeconomics</td>
</tr>
<tr>
<td>ECN 001B Principles of Microeconomics</td>
</tr>
<tr>
<td>ECN 006 The Global Economy</td>
</tr>
<tr>
<td>BUS 028A Business Law I</td>
</tr>
<tr>
<td>ANT 003 Introduction to Cultural Anthropology</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

Note: Completing courses that satisfy CSU’s U.S. History, Constitution and American Ideals requirement prior to transfer is highly recommended.
Associate in Arts in Psychology for Transfer (AA-T)

The Associate in Arts in Psychology for Transfer (AA-T in Psychology) 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:
- Students will 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.
- Students will describe how an appreciation of cultural relativity and human diversity might enrich the understanding of psychology.
- Students will identify research models and relate the findings of research to life situations.
- Students will 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.

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 Curriculum Courses Required:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 009 Integrated Statistics II OR</td>
<td>5.0</td>
</tr>
<tr>
<td>MAT 010 Elementary Statistics OR</td>
<td>4.0</td>
</tr>
<tr>
<td>MAT 010H Elementary Statistics – Honors OR</td>
<td>4.0</td>
</tr>
<tr>
<td>SOC 016 Introduction to Statistics in Social And Behavioral Sciences AND</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001 General Psychology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 001H General Psychology – Honors AND</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 015 Introduction to Research Methods OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 015H Introduction to Research Methods - Honors</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List A - Select one (1) course from the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 010 Introduction to Biology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>BIO 011 Human Biology OR</td>
<td>4.0</td>
</tr>
<tr>
<td>PSY 007 Biological Psychology</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List B - Select one (1) course from the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any List A course not used above.</td>
<td></td>
</tr>
<tr>
<td>PSY 012 Human Growth and Development</td>
<td>3.0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>List C - Select one (1) course from the following:</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Any course not selected above.</td>
<td></td>
</tr>
<tr>
<td>PSY 010 Social Psychology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 025 Introduction to Abnormal Psychology OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 030 Psychology of Addiction and Substance Abuse OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 045 Introduction Human Sexuality OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 045 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
ASSOCIATE IN ARTS IN SOCIAL JUSTICE STUDIES (AA-T)

This CSU transfer-degree 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 (Minimum of 9 units):

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SJS 001</td>
<td>Social Justice OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 021</td>
<td>Minorities in the United States AND</td>
<td>3.0</td>
</tr>
<tr>
<td>SJS 002</td>
<td>Introduction to Gender Studies</td>
<td>3.0</td>
</tr>
<tr>
<td>SJS 003</td>
<td>Introduction to LGBTQ Studies</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Support Courses: 3 courses, 9 minimum units List A.

Select 3 courses from at least two of the following areas: 9-12 units

Area 1 - History or Government - Articulation as CSU GE Area D

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIS 033</td>
<td>Women's Issues Past and Present OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HIS 033H</td>
<td>Women's Issues Past and Present – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>POL 006</td>
<td>Politics of Race, Class and Gender</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Area 2 – Arts and Humanities - Articulation as CSU GE Area C

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 016A</td>
<td>Hispanic Roots &amp; Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018</td>
<td>African-American Culture and Humanities OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 018H</td>
<td>African-American Culture and Humanities – Honors OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 020</td>
<td>Asian Roots and Culture OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 022</td>
<td>Introduction to Islam OR</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 024</td>
<td>The Asian-American Experience OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Area 3 – Social Science - Articulation as CSU GE Area D

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECN 001A</td>
<td>Principles of Macroeconomics OR</td>
<td>4.0</td>
</tr>
<tr>
<td>ECN 001B</td>
<td>Principles of Microeconomics OR</td>
<td>4.0</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 OR</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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>PSY 045</td>
<td>Introduction to Human Sexuality OR</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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 045</td>
<td>Human Sexuality OR</td>
<td>3.0</td>
</tr>
</tbody>
</table>

Area 4 - Quantitative Reasoning and Research Methods - Only one course from the following may be used:

<table>
<thead>
<tr>
<th>Course</th>
<th>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>POL 005</td>
<td>Political Science Research Methodology OR</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 OR</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 016</td>
<td>Introduction to Statistics in Social and Behavioral Sciences OR</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
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:

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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 050</td>
<td>Introduction to Criminal Justice</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 054</td>
<td>Concepts to Criminal Law</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List A - Complete the following two (2) courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOC 060</td>
<td>Community and Justice System</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 058</td>
<td>Introduction to Corrections</td>
<td>3.0</td>
</tr>
</tbody>
</table>

List B - Choose any two (2) of the following courses:

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 009</td>
<td>Integrated Statistics II OR</td>
<td>5.0</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 OR</td>
<td>4.0</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>
<tr>
<td>SOC 016</td>
<td>Introduction to Statistics in Social and Behavioral Sciences</td>
<td>3.0</td>
</tr>
<tr>
<td>SOC 047</td>
<td>Sociology of Criminology</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

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

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

Required Courses:

- SOC 001 Introduction to Sociology OR 3.0
- SOC 001H Introduction to Sociology – Honors AND 3.0
- SOC 002 Social Problems OR 3.0
- SOC 002H Social Problems – Honors 3.0
- MAT 009 Integrated Statistics II OR 5.0
- MAT 010 Elementary Statistics OR 4.0
- MAT 010H Elementary Statistics - Honors OR 4.0
- SOC 016 Introduction to Statistics in Social and Behavioral Sciences 3.0

List A - Complete the following two (2) courses:

- PSY 010 Social Psychology OR 3.0
- SOC 021 Minorities in the United States OR 3.0
- SOC 040 Marriage and Family OR 3.0
- SOC 047 Sociology of Criminology 3.0

List B - Choose any one course of the following courses:

- ANT 003 Introduction to Cultural Anthropology OR 3.0
- ECN 001A Principles of Macroeconomics OR 4.0
- POL 001 American Government OR 3.0
- POL 001H American Government – Honors OR 3.0
- PSY 001 General Psychology OR 3.0
- PSY 001H General Psychology – Honors OR 3.0
- SOC 045 Human Sexuality 3.0

Required Units for the Major: 18.0-22.0

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

Total Required Units: 60.0
Associate in Arts in Spanish 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:

- Students will compare and contrast cultural topics such as colonization, geography, nationality, ethnicity, politics, worldviews, and/or socioeconomic disparities within the Spanish-speaking world.
- Students will 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.
- Students will 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 completion of an oral interview.
- Students will 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.
- Students will demonstrate reading 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 questions based on reading passages in Spanish.

Core Curriculum Courses Required:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPA 001</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 002</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 003</td>
<td>5.0</td>
</tr>
<tr>
<td>SPA 004</td>
<td>5.0</td>
</tr>
</tbody>
</table>

Select one (1) course from the following:

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 003</td>
<td>3.0</td>
</tr>
<tr>
<td>ENG 013</td>
<td>3.0</td>
</tr>
<tr>
<td>HUM 016A</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>
</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

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

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
Prerequisites are placed on courses to require students to have either completed another Mission College course or met some other indicator prior to enrollment in this 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 ART 048B by completing either ART 031A or ART 033C.

ART 048A  AIRBRUSH PAINTING  3.0 units
Prerequisite: ART 031A or ART 033C

More Than One Requisite: Some courses may have more than one requisite. In the example below a 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 BUS 021L or CAP 063B (but not both) as well as complete MAT 010 or MAT 009 (but not both) prior to enrollment in BUS 041.

BUS 041  BEGINNING BUSINESS ANALYTICS  3.0 units
Prerequisite: (BUS 021L or CAP 063B) and (MAT 010 or MAT 009)
Advisory: BUS 021

On 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 BIO001A or BIO022 or BIO010 and BIO010L. 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)

OR

BIO 010  CHEMISTRY I  5.0 units
Prerequisite: BIO 004 and (CHM 003A or CHM 001A or CHM 060)

Our Placement and Assessment Services team can assist with having prerequisites cleared with coursework taken at other colleges, AP/CLEP Test Scores, in limited instances with high school coursework, of if the knowledge or skills have been acquired through alternative means.

Visit them at placement.missioncollege.edu
ACCOUNTING (ACC)

ACC 001A  FINANCIAL ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Advisory: MAT 903 or High School Algebra I
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: MAT 903 or High School Algebra I
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 structure 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 040  INTRODUCTION TO PERSONAL FINANCIAL PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course introduces the major areas of personal financial planning (insurance, investment, tax, retirement, and estate). Income statements, balance sheets and budgets are introduced, and students prepare their own personal budgets and statements of net worth. The time value of money and its importance in the financial planning process is stressed. Pass/No Pass Option.

ACC 041  INSURANCE PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course introduces fundamental insurance concepts, then uses these concepts to determine insurance needs. Life, health, disability, property and liability insurance are studied. Students prepare their own personal insurance plans. Pass/No Pass Option.

ACC 042  INVESTMENT PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course introduces fundamental investment concepts such as risk, return, diversification, and how financial markets work. The course covers common stock, fixed-income securities, mutual funds and other investments. Students prepare their own personal statement of net worth and use asset allocation to design an investment portfolio. Pass/No Pass Option.

ACC 043  TAX PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course covers calculation of the federal income tax and strategies to help save or defer taxes. Students calculate their own federal income tax liability, then use at least one method to plan a reduction in taxes for next year. Pass/No Pass Option.

ACC 044  RETIREMENT PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course covers company pension plans, other company retirement plans, individual retirement plans and social security benefits. Students use a retirement savings worksheet to estimate their own savings needs for retirement using data from their personal budget and personal statement of net worth. Pass/No Pass Option.

ACC 045  ESTATE PLANNING  1.0 UNIT
Total Lecture: 18 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course covers estate planning techniques and terminology such as wills, probate, trusts, contractual transfers, gift tax and estate tax. Methods of holding title to property, e.g., joint tenancy with right of survivorship, are also discussed. Pass/No Pass Option.
ACC 046 PERSONAL FINANCE 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MAT 903 or High School Algebra I
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. Students prepare their own personal budgets and statements of net worth. The time value of money and its importance in the financial planning process is stressed. Pass/No Pass Option.

ACC 051A TAXATION OF INDIVIDUALS 4.0 UNITS
Total Lecture: 72 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This course covers Federal and California income tax theories, 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 (MAT 903 or High School Algebra I)
Acceptable for credit: California State University
The 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: MAT 903 or High School Algebra I
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 053A VOLUNTEER INCOME TAX ASSISTANCE (VITA) I 3.0 UNITS
Total Lecture: 54 hours
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This is the first course in a sequence of three courses designed for students who want to be a part of the Volunteer Income Tax Assistance (VITA) program at Mission College. This course covers Federal and California tax theories and laws appropriate for the current tax year. Students apply their knowledge by taking the IRS exams for VITA volunteers. Upon successful completion of the IRS VITA Basic and Intermediate exams, the students are able to assist low-income individuals and families with tax return preparation through the VITA program for the current year. Pass/No Pass Option.

ACC 053B VOLUNTEER INCOME TAX ASSISTANCE (VITA) II 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Prerequisite: ACC 053A
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This is the second course in a sequence of three courses designed for students who want to be a part of the Volunteer Income Tax Assistance (VITA) program at Mission College. This course allows students who have successfully passed ACC 053A to apply their tax knowledge by assisting low-income individuals and families with their tax preparation through the VITA program for the current year. In this course, students learn to research current tax issues, use the TaxWise software to accurately prepare individual federal and state income tax returns within the scope of the VITA program. Students also learn how to work within a cooperative and quality controlled environment and develop their communication skills through taxpayer interviews and explanation of tax return results. Pass/No Pass Only.

ACC 053C VOLUNTEER INCOME TAX ASSISTANCE (VITA) III 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Prerequisite: ACC 053B
Advisory: MAT 903 or High School Algebra I
Acceptable for credit: California State University
This is the third course in a sequence of three courses designed for students who want to be a part of the Volunteer Income Tax Assistance (VITA) program at Mission College. This course allows students who have successfully passed ACC 053B to work on advanced tax situations and take part in running the tax center for the current year. In this course, students cover advanced tax topics and develop the skills necessary in running a tax center including site organization, quality control procedures, and providing guidance to both taxpayers and tax preparers. Pass/No Pass Option.

ACC 057A COST ACCOUNTING 4.0 UNITS
Total Lecture: 72 hours
Advisory: ACC 001B and (MAT 903 or High School Algebra I)
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 (MAT 903 or High School Algebra I)
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 (MAT 903 or High School Algebra I)
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 060  COMPUTERIZED ACCOUNTING: QUICKBOOKS  3.0 UNITS
Total Lecture: 54 hours
Advisory: ACC 001A
Acceptable for credit: California State University
Students use QuickBooks Desktop 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 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 & 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 & Nonprofit Entities includes topics tested on the Financial Accounting and Reporting (FAR) section of the CPA exam. This course 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 075  CLOUD COMPUTING AND ANALYTICS IN ACCOUNTING  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: ACC 001A
Acceptable for credit: California State University
Students will learn cloud accounting and analytics theory through hands-on exercises using SAP Business ByDesign. SAP (Systems, Applications, & Products in Data Processing) is the number one Enterprise Resource Planning (ERP) software vendor in the world. Its ByDesign system is a cloud-based ERP solution for small-to-medium enterprises. Students will also use Excel and Power BI for data analytics and visualization capabilities. This course is useful as preparation for higher level business, accounting, and/or analytics courses, for careers in accounting and finance, or for work as an analyst, data scientist, 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.
### ANTHROPOLOGY (ANT)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| ANT 001     | BIOLOGICAL ANTHROPOLOGY                | 3.0      | **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. CSUGE: B2; IGETC: 5B. |
| ANT 001L    | BIOLOGICAL ANTHROPOLOGY LABORATORY     | 1.0      | **Total Lab:** 54 hours  
**Prerequisite or Corequisite:** ANT 001  
**Acceptable for credit:** University of California, California State University  
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/hominin fossil record, and other resources to investigate processes that affect human evolution. Pass/No Pass Option. CSUGE: B3; IGETC: 5C. |
| ANT 002     | INTRODUCTION TO ARCHEOLOGY             | 3.0      | **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. CSUGE: D; IGETC: 4. |
| ANT 003     | CULTURAL ANTHROPOLOGY                  | 3.0      | **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. |
| ANT 055     | MAGIC, WITCHCRAFT AND RELIGION         | 3.0      | **Total Lecture:** 54 hours  
**Advisory:** ANT 003  
**Acceptable for credit:** University of California, California State University  
A cross-cultural study of beliefs and practices dealing with the supernatural. Using the major theoretical approaches of anthropology, the student will study the cultural context in which each belief and practice is found, including ritual, symbolism, totems, magic, myth, witchcraft, and pantheism. The cultural function of individual experiences, such as altered states of consciousness, development of a “belief” system, and revitalization are explored. Pass/No Pass Option. CSUGE: D; IGETC: 4. |

### APPRENTICESHIPS

Please refer to courses in the following apprenticeships found alphabetically in the catalog.

### TRANSPORTATION (TRN)

### ARABIC (ARB)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| ARB 001     | FIRST SEMESTER ARABIC                   | 5.0      | **Total Lecture:** 90 hours  
**Acceptable for credit:** University of California, California State University  
ARB 001 is a first-semester introductory course that introduces fundamental concepts of standard Arabic. Comprehension of both written and spoken Arabic is covered, as well as related cultural topics. This course is designed for the beginner. All four language skills (listening, speaking, reading, and writing) are introduced in a cultural context. Pass/No Pass Option. CSUGE: C2; IGETC: 6A. |
| ARB 002     | SECOND SEMESTER ARABIC                  | 5.0      | **Total Lecture:** 90 hours  
**Prerequisite:** ARB 001 or two years high-school Arabic  
**Acceptable for credit:** University of California, California State University  
ARB 002 is the 2nd-semester course which continues to develop the fundamental concepts of ARB 001, while emphasizing listening and reading comprehension, grammar fundamentals, oral expression, and writing skills in standard Arabic. Pass/No Pass Option. CSUGE: C2; IGETC: 3B, 6A. |

### ART (ART)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
</table>
| ART 001A    | SURVEY OF WESTERN ART I                | 3.0      | **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      | **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 001D  ART OF THE 20TH CENTURY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course provides a general survey of painting, sculpture, and architecture in the Western World, from the Impressionists to the present day, emphasizing the evolution of style and content. The course consists of illustrated lectures and discussion. A museum field trip is required. Pass/No Pass Option. CSUGE: C1; IGETC: 3A.

ART 002  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. CSUGE: C1; IGETC: 3A.

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 structure and materials appropriate to three-dimensional problems, and contemporary attitudes in design. Materials Fee. 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
Prerequisite: ART 034A
Acceptable for credit: University of California, California State University
This course is an introduction to the principles and elements of design. It introduces students to microcomputers and visual design software. Applications that manipulate flat images and 3D space are explored. 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 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 031A or ART 033C
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 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 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 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 advanced studio practice which focuses on advanced techniques and portfolio development.
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
普雷先示: ART 049A
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. C-ID # ARTS 210.

ART 049B PAINTING 3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
普雷先示: ART 049B
Acceptable for credit: University of California, California State University
This course is a low intermediate studio practice which focuses on strengthening the basic skills learned in ART 049A.
Emphasis is placed upon self-expression, composition, and color theory.
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
普雷先示: ART 049C
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
普雷先示: ART 049D
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
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 advanced 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 065B
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 focuses on specialized clay bodies for a variety of glaze firing, specialized glazes for specific glaze characteristics, and specific artistic styles. Materials Fee. This course is approved for credit by exam. Pass/No Pass Option.

ART 075A  METALSMITHING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART075A
Acceptable for credit: California State University
This course is an advanced course in metalsmithing that provides students with an opportunity to build on skills learned in previous course levels and explore new techniques. Topics may include advanced techniques in jewelry casting, metal sculpture construction, and color on metal. Pass/No Pass Option.

ART 075B  METALSMITHING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075B
Acceptable for credit: California State University
This course is a studio course which introduces students to the elements of design and metal-smithing techniques to the creation of metal objects. Problems involve those concepts specific to the potential of metal, i.e., structure, surface, color, function, etc. Materials Fee. Pass/No Pass Option.

ART 075C  METALSMITHING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075C
Acceptable for credit: California State University
ART 075C is an advanced course in metalsmithing that provides students with an opportunity to build on skills learned in previous course levels and explore new techniques. Topics may include advanced techniques in jewelry casting, metal sculpture construction, and color on metal. Pass/No Pass Option.

ART 075D  METALSMITHING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 54 hours
Prerequisite: ART 075D
Acceptable for credit: California State University
This course is approved for credit by exam. Materials Fee. Pass/No Pass Option.

ART 078A  FURNITURE DESIGN AND WOODWORKING:  INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Advisory: ART 033B
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 078B  FURNITURE DESIGN AND WOODWORKING:  BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078A
Acceptable for credit: California State University
This course introduces more advanced techniques and design skills in furniture construction. The students develop individual and/or group projects under the direction of the instructor, focusing on special aspects of furniture and woodworking. Materials Fee. Pass/No Pass Option.
ART 078C  FURNITURE DESIGN AND WOODWORKING: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078B
Acceptable for credit: California State University
ART 078C is an intermediate-to-advanced 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. Pass/No Pass Option.

ART 078D  FURNITURE DESIGN AND WOODWORKING: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 078C
Acceptable for credit: California State University
ART 078D is an advanced 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. Pass/No Pass Option.

ART 085A  SCULPTURE: INTRODUCTION  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Advisory: ART 031A and ART 033B
Acceptable for credit: University of California, California State University
ART 085A is an introductory course in sculpture emphasizing individual expression. Subtractive, additive and fabrication techniques including modeling, casting and carving are covered. Utilizing clay, wood, plaster and metal in construction are covered as well. Pass/No Pass Option.

ART 085B  SCULPTURE: BEGINNING  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 085A
Acceptable for credit: University of California, California State University
This course builds on skills and concepts learned in ART 085A, and introduces new techniques. Students explore the development of a personal style of sculpture design. Materials Fee. Pass/No Pass Option.

ART 085C  SCULPTURE: INTERMEDIATE  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 085B
Acceptable for credit: University of California, 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 085D  SCULPTURE: ADVANCED  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 hours
Prerequisite: ART 085C
Acceptable for credit: University of California, California State University
This course focuses on different aspects of 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.

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 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 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 focuses on different aspects of 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.

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 focuses on different aspects of 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.
## BIOLOGICAL SCIENCES (BIO)

### BIO 004  MICROBIOLOGY  5.0 UNITS

Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: (BIO 010 and BIO 010L) or BIO 011 or BIO 001A or BIO 0022 and (CHM 003A or CHM 001A 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; IGETC: 5B, 5C.

### BIO 010  INTRODUCTION TO BIOLOGY  3.0 UNITS

Total Lecture: 54 hours
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. Pass/No Pass Option.

### 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 overviews of characteristics and the inhabitants of a variety of 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: MAT 903 or High School Algebra I
Acceptable for credit: University of California, California State University
This course provides 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 sample 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.
**BUS 010**  GLOBAL BUSINESS  3.0 UNITS
Total Lecture: 54 hours
Advisory: MAT 903 or High School Algebra I
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 provides 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 UNIT
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 UNIT
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 038  APPLIED PROJECT MANAGEMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
In this course, students apply project management skills to real life project situations. Students also learn how to control project schedules, budgets, and scope using a variety of techniques. In-class exercises and case studies lead students to skills they can immediately apply to their own projects. 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: 45 hours, Total Lab: 27 hours
Prerequisite: (BUS 021L or CAP 063B) and (MAT 010 or MAT 009)
Advisory: BUS 021
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. C-ID # BUS 110.

BUS 052  FUNDAMENTALS OF FINANCIAL INVESTING  3.0 UNITS
Total Lecture: 54 hours
Advisory: MAT 903 or High School Algebra I
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. C-ID # BUS 115.

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 060  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.

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: MAT 903 or High School Algebra I
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 one’s 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 and 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. C-ID # ACCT 110.

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, product 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 in the loop of product development. Students will learn Kanban and how this flow-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
Prerequisite: BUS 037
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
Advisory: BUS 054
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
Advisory: BUS 054
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
Advisory: BUS 054
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
Prerequisite: BUS 021L or CAP 062B
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. C-ID # BUS 125.

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.

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 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 (MAT 000C or MAT 00CM or High School Algebra II)
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 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
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 001BH 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 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 120S. CSUGE: B1; B3; IGETC: 5A, 5C.

CHM 002 INTRODUCTORY CHEMISTRY 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MAT 000C or High School Algebra II
Acceptable for credit: University of California, California State University
Chem 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

Total Lab: 54 hours
Prerequisite or Corequisite: CHM 002
Acceptable for credit: University of California, California State University

CHM 012A — ORGANIC CHEMISTRY I

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 - ORGANIC CHEMISTRY I - HONORS

Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001B or CHM 001BH
Acceptable for credit: University of California, California State University

CHM 012B — ORGANIC CHEMISTRY II

Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 001B or CHM 001BH
Acceptable for credit: University of California, California State University

CHM 012BH - ORGANIC CHEMISTRY II - HONORS

Total Lecture: 54 hours, Total Lab: 108 hours
Prerequisite: CHM 012A or CHM 012AH
Acceptable for credit: University of California, California State University

CHM 030A — FUNDAMENTALS OF CHEMISTRY

Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 903 or High School Algebra I
Acceptable for credit: University of California, California State University

CHM 060 — SURVEY OF GENERAL, ORGANIC, AND BIOLOGICAL CHEMISTRY

Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 903 or MAT 903M or High School Algebra I
Acceptable for credit: California State University

CHD 001 — CHILD GROWTH DEVELOPMENT

Total Lecture: 54 hours
Acceptable for credit: California State University, University of California

CHD 002 — CHILD, FAMILY, AND COMMUNITY

Total Lecture: 54 hours
Advisory: CHD 001
Acceptable for credit: California State University, University of California

CHD 003 — LANGUAGE AND LITERACY FOR THE YOUNG CHILD

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. 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 focuses on the administration of programs in early childhood education. 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 introduces students to developmentally appropriate early childhood teaching competencies under guided supervision. Students utilize practical classroom experiences to make connections between theory and practice, develop professional behaviors, and build a comprehensive understanding of children and families. All aspects of curriculum development and implementation are emphasized. Students are required to complete 108 hours of scheduled work under the supervision of a practicum supervisor at the Mission College Child Development Center. Grade only. C-ID # ECE 210.

CHD 010 PRINCIPLES AND PRACTICES IN EDUCATION 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
Advisory: CHD 001 and CHD 002
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.

CHD 013 TEACHING IN A DIVERSE SOCIETY 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001 and CHD 002
Acceptable for credit: California State University, University of California
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, social and educational access, media and schooling. Grade only. C-ID # ECE 230. CSUGE: D, E.

CHD 014 ART AND CREATIVE DEVELOPMENT OF YOUNG CHILDREN 3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001
Acceptable for credit: California State University
This course focuses on creative art experiences for the child. Students explore the factors that affect the development of creativity, artistic expression, and aesthetics in children. Developmentally appropriate art experiences are explored with the 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.
CHD 015  OBSERVATION AND ASSESSMENT
OF CHILDREN  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001 and CHD 002
Acceptable for credit: California State University
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. C-ID # ECE 200.

CHD 016  INFANT AND TODDLER
DEVELOPMENT  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
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.

CHD 017  CHILD HEALTH, SAFETY
AND NUTRITION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course is an introduction to the laws, regulations, standards, policies and procedures of health, safety and nutrition in early childhood programs. 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. Grade only. C-ID # ECE 220. CSUGE: E.

CHD 018  PARENTING ISSUES FOR TEACHERS 1.0 UNIT
Total Lecture: 18 hours
Acceptable for credit: California State University
This course is designed to give teachers or caregivers the skills to help parents develop positive attitudes, behavior and skills in their parent-child relationship. Students learn how to conduct parent/family meetings, parent/family conferences, and make other parent/family contacts. This course is approved for credit by exam. Grade only.

CHD 020  THE CHILD WITH SPECIAL NEEDS
IN THE COMMUNITY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: CHD 001 and CHD 002
Acceptable for credit: California State University
This course provides an overview of atypical development, a variety of disabilities and the impact a child with disabilities has on families. 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 required. Grade only.

CHD 021  CHILDREN AND PLAY  3.0 UNITS
Total Lecture: 54 hours
Advisory: CHD 001
Acceptable for credit: California State University
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.

CHD 022  ADULT SUPERVISION IN
EARLY CHILDHOOD PROGRAMS  2.0 UNITS
Total Lecture: 36 hours
Advisory: CHD 001 and CHD 010
Acceptable for credit: California State University
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 on-going 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.

CHD 024  POSITIVE GUIDANCE IN EARLY
CHILDHOOD PROGRAMS: MANAGING
CHALLENGING  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
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.

CHD 025  INCLUSION STRATEGIES AND CURRICULUM
IN EARLY CHILDHOOD EDUCATION  3.0 UNITS
Total Lecture: 54 hours
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 assessment 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
The course presents an overview of knowledge and skills related to providing appropriate curriculum and environments for young children from birth to age 6. Students examine the teacher’s role in supporting development and fostering the joy of learning for all young children. Students use observation and assessment strategies emphasizing the essential role of play. An overview of content areas includes but is not limited to: language and literacy, social and emotional learning, sensory learning, art and creativity, math and science. 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.

PLEASE REFER TO NON CREDIT ENGLISH AS A SECOND LANGUAGE FOUND ALPHABETICALLY IN THE CATALOG.

COM 001  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 is a basic course in speech communication that emphasizes the fundamentals of informative and persuasive speaking presented extemporaneously. The theory and techniques that are stressed include: research, critical evaluation, reasoning, organization, style, and delivery; the role of the listener in oral communication; and understanding the audience-speaker relationship. Grade only. C-ID # COMM 110. CSUGE: A1; IGETC: 1C.

COM 004  SMALL GROUP 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 is designed to provide students with theoretical and practical experiences in problem solving, conflict management, decision making, and leadership in various group contexts. Students learn and practice effective oral communication skills important to the social-emotional, task and leadership functions of small groups in a variety of situations. 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  INTRODUCTION TO 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 is an introductory course examining the effects of culture on interpersonal communication. Students learn about overcoming barriers to intercultural communication such as ethnocentrism, prejudice, and lack of awareness. Emphasis is given to the influence of culture upon the interpretation of the communication act and to the skills that improve intercultural communication. This course satisfies Area C Humanities. Grade only. C-ID # COMM 150. CSUGE: C2, E; IGETC: 3B.

COM 015  FUNDAMENTALS OF ORAL COMMUNICATION  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
An introduction to the basic principles and methods of oral communication with emphasis on improving research, speaking and listening skills applied in multicultural contexts including interpersonal, small group, organizational, media, and public communication. Grade Only. CSUGE: A1.

COM 019A  COMMUNICATION ACTIVITIES: INTERVIEWING SKILLS  1.0 UNIT
Total Arranged Lab: 54 hours
Acceptable for credit: California State University
In this course students develop and practice successful interviewing skills, including techniques for pre-interview preparation, dynamics of an interview, salary negotiations and follow-up. Pass/No Pass Option.
COM 020 ARGUMENTATION 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 is an introductory course in rhetorical theory and practice. Students engage in
argumentation and debate while learning the meanings of discovering and supporting
intelligent decisions and adapting them to particular audiences. Attention is given to
distinguishing fact from inference; presenting, analyzing and refuting propositions of
fact, value, and policy; identifying and applying types and methods of reasoning;
correct use and analysis of evidence, and the identification and analysis of fallacies.
Grade only. C-ID # COMM 120. CSUGE: A1, A3; IGETC: 1C.

COM 020H ARGUMENTATION 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 is an introductory course in rhetorical theory and practice. Students engage in
argumentation and debate while learning the means of discovering and supporting
intelligent decisions and adapting them to particular audiences. Attention is given to
distinguishing fact from inference; presenting, analyzing and refuting propositions of
fact, value, and policy; identifying and applying types and methods of reasoning;
correct use and analysis of evidence, and the identification and analysis of fallacies. 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.

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 013 TEN-KEY NUMERIC KEYPAD 1.0 UNIT
Total Lab: 54 hours
This course develops entry-level vocational proficiency in the use of 10-key
numeric keypad. This course can be taken concurrently with CAP 010A or
CAP 010C. 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 033B MICROSOFT WORD - COURSE 2 3.0 UNITS
Total Lecture: 54 hours
Advisory: CAP 010A and CAP 033A
Acceptable for credit: California State University
Students develop an in-depth knowledge of Microsoft Word in order to develop
documents. This course includes text-editing, formatting, storage, retrieval,
macros, mail-merge, document filing and management, printing, and special
features of the program. Advanced software capabilities are covered including
review features, themes, sorting, lists, etc. Pass/No Pass Option.

CAP 044 USING PROJECT MANAGEMENT SOFTWARE
TO MANAGE A PROJECT 1.0 UNITS
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.

CAP 045A INTRODUCTORY MICROSOFT
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 Microsoft Project. Students utilize Microsoft Project to create
and link tasks; add and assign work and cost resources to tasks; modify the
work calendar; and format and print the project plan. Pass/No Pass Option.

CAP 045B INTERMEDIATE MICROSOFT PROJECT 2.0 UNITS
Total Lecture: 36 hours
Advisory: CAP 045A
Acceptable for credit: California State University
This course covers more advanced concepts of project management and
advanced features of Microsoft Project. Students work with the project
management tools of Microsoft Project to analyze schedules, solve resource
problems, and monitor the progress of a project. Pass/No Pass Option.

CAP 046D INTRODUCTION TO
MICROSOFT POWERPOINT 1.0 UNITS
Total Lecture: 18 hours
Advisory: CAP 010A
Acceptable for Credit: California State University
This course introduces students to Microsoft PowerPoint. Students learn the
basic techniques to create a presentation with multiple slides, transitions,
animation and formatting of slides. Pass/No Pass Option.

CAP 046E INTERMEDIATE MICROSOFT
POWERPOINT 1.0 UNITS
Total Lecture: 18 hours
Advisory: CAP 010A and CAP 046D
Acceptable for credit: California State University
This course covers advanced features of Microsoft PowerPoint. Students
integrate PowerPoint with MS Word, Excel, and web pages. They learn to
customize a slide show and use other advanced features. Pass/No Pass Option.

CAP 048 MICROSOFT PROJECT 2.0 UNITS
Total Lecture: 36 hours
Advisory: CAP 070
Acceptable for credit: California State University
This course covers the essential features of MS Project. Students work with the
project management tools of Microsoft Project to plan a project, create
and assign resources, analyze schedules, solve resource problems, and track
the progress of a project. Pass/No Pass Option.
CAP 062B  AN INTRODUCTION TO MICROSOFT EXCEL  1.0 UNIT
Total Lecture: 18 hours
Advisory: CAP 070
Acceptable for credit: California State University
This is an introduction to Microsoft Excel. The course covers basic formulas, functions, charts, and formatting. Students create 3-D charts, use loan amortization functions, enhance worksheets, utilize functions, and modify print options. Pass/No Pass Option.

CAP 063B  INTERMEDIATE MICROSOFT EXCEL  2.0 UNITS
Total Lecture: 36 hours
Advisory: CAP 062B
Acceptable for credit: California State University
This course is the second in a series of Microsoft Excel courses designed to help students learn Excel features that are used in business decisions. Students apply What-IF Analysis such as scenario tables, goal seek, and solver. Students also utilize advanced functions such as VLOOKUP, Nested IF’s, Pivot tables and Pivot charts, macros and more. This course is designed for students who are computer literate and have a previous working knowledge of Excel formulas, functions, and charts. Pass/No Pass Option.

CAP 070  USING MS WINDOWS  1.0 UNIT
Total Lecture: 18 hours
Advisory: CAP 070
Acceptable for credit: California State University
This course introduces students to the current version of the Windows operating system and helps students acquire fundamental Windows skills including file management, Internet connectivity, network file sharing, hardware management, troubleshooting and customizing settings. Pass/No Pass Option.

CAP 071E  MICROSOFT OUTLOOK  1.0 UNIT
Total Lecture: 18 hours
Advisory: CAP 070
Students learn the most important features of Microsoft Outlook. Students learn how to manage email with rules and folders, enter appointments and events, create, and manage a daily, weekly, or monthly schedule, track tasks, and manage contacts and contact groups. Computer literacy and keyboarding skills are recommended. Pass/No Pass Option.

CAP 081B  INTRODUCTION TO MICROSOFT ACCESS  1.0 UNIT
Total Lecture: 18 hours
Advisory: CAP 070
Acceptable for credit: California State University
Microsoft Access is part of the Microsoft Office suite of products and is a powerful relational database. Learn to create database tables and enter data, organize, and retrieve data from the tables. Create simple forms to enter data into a database and format reports from the data in the database. This course is for students who are computer literate and who would like to start working with a database. Pass/No Pass Option.

CAP 092B  GOOGLE APPS FOR PERSONAL PRODUCTIVITY  2.0 UNITS
Total Lecture: 36 hours
Advisory: CAP 010A or CAP 037A
Acceptable for credit: California State University
This course introduces students to Google Drive and Google applications. Students learn to use GMail, Google Calendar, Document, Spreadsheet, Chrome and Presenter to achieve personal and professional productivity goals. Students also identify opportunities to utilize Google apps to communicate and collaborate within a virtual-social network. Pass/No Pass Option.

CAP 100  LEARNING THE KEYBOARD  NONCREDIT
Total: 54 hours
This noncredit 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. Satisfactory Progress.

CAP 101  COMPUTERS SIMPLIFIED FOR BEGINNING LEARNERS  NONCREDIT
Total: 54 hours
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  3.0 UNITS
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.

CAP 092B  INTRODUCTION TO CLOUD TECHNOLOGIES AND SOCIAL MEDIA  2.0 UNITS
Total Lecture: 36 hours
Advisory: CAP 010A
Acceptable for credit: California State University
This course is designed for anyone who wants to learn more about Web 2.0 and cloud technologies. This course provides an introduction to Web 2.0 applications, such as social networking sites (SNS), video-sharing sites, wikis, blogs and mashups. Students utilize Web 2.0 applications to facilitate interactive information sharing and collaboration via the Internet. Pass/No Pass Option.

NOTE: Maximum credit that can be transferred to UC is a total of six CIS courses.

CIS 001  INTRODUCTION TO COMPUTER SCIENCE AND TECHNOLOGY  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 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  4.0 UNITS
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 required. Students learn to design, code, and execute programs using the Python programming language. 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 GUI programming concepts and topics. Pass/No Pass Option. C-ID # COMP 112.

CIS 008  ADVANCED PYTHON PROGRAMMING  4.0 UNITS
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.

CIS 033  ROBOTICS AND EMBEDDED SYSTEMS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 037A
Acceptable for Credit: California State University
This course is an introduction to microcontrollers and interfacing. It covers the 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 035  INTRODUCTION TO DRONES AND UNMANNED AERIAL VEHICLES  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 033 and CIS 039
Acceptable for credit: California State University
This course is an introduction to unmanned aerial vehicles (UAV). It covers the basic rules and regulations of flying a commercial drone and its applications. It also covers the components of a drone system, maintenance, applications, simulations, and hands-on training on how to fly and control a drone in different environments. 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.

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.

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.

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.

MISSION COLLEGE CATALOG 2022-2023

COURSES

183
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  3.0 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 included-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.

CIS 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, and architecture. Entity-relationship and enhanced entity models. Relational model, normalization techniques, emerging standard of SQL query language, XML, embedded, and dynamic SQL. 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.

CIS 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.

CIS 060  MOBILE APPS PROGRAMMING - IOS  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: CIS 040 or CIS 043
Acceptable for credit: California State University
This course is an introduction to programming iOS applications using an object-oriented paradigm. Students learn to develop simple to more advanced applications using Swift, Model-View-Control framework, graphical-user interface, classes, methods, and messages. Pass/No Pass Option.

CIS 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.

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. 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 Virtual Laptop 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. The use of Packet Tracer supports alignment with the new CompTIA A+ certification objectives. 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.

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 2016. It covers general installation tasks and considerations and the installation and configuration of Nano Server, in addition to the 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, Disaster Recovery, Storage Spaces Direct, and Failover Clustering solutions. The course also covers Hyper-V and containers, along with the maintenance and monitoring of servers in physical and compute environments, DNS, DHCP, and IPAM implementations, 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, and implementation of software-defined networking (SDN) solutions, such as Hyper-V Network Virtualization (HNV) and Network Controller. Pass/No Pass Option. C-ID # ITIS 155.
COUNSELING (COU)

COU 000A ORIENTATION TO MISSION COLLEGE 0.5 UNIT
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: 18 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.

COU 007H UNIVERSITY TRANSFER PLANNING-HONORS 1.0 UNIT
Total Lecture: 18 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: University of California, California State University
This honors course provides in-depth information and assistance with the transfer process to four-year colleges/universities. Lower division major and general education requirements, college/university selection, admission procedures, state-wide transfer policies, application deadlines, financial aid and scholarship information are covered. Students have the opportunity to broaden their perspectives by examining the changes in the education policies and regulations that impact society and may influence their transfer planning and admission to a university. Use of college catalogs, printed directories and the Internet are necessary to complete assignments. Students cannot get credit for both COU 007 and COU 007H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option.

COU 012 CAREERS AND LIFESTYLES 3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 908 or ESL 980
Acceptable for credit: California State University
This course assists the student in examining the components of career choice. 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 1.0 UNIT
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. Pass/No Pass Option.

COU 012C CAREERS AND LIFESTYLES 1.0 UNIT
Total Lecture: 18 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
This course assists students in the area of job search skills. Students learn to market themselves using resume writing and interview skills, and to identify different types of skills and how they relate to job requirements. Occupational trends are examined. Pass/No Pass Option.

COU 017 TRANSFER SUCCESS AND LIFE TRANSITIONS 3.0 UNITS
Total Lecture: 54 hours
Advisory: ENG 001A or ENG 001AX
Acceptable for credit: University of California, California State University
Through the context of transferring from a community college to a university, this course introduces students to appropriate life skills that can help them achieve greater success in their educational, personal, and professional lives. The course is designed specifically for students interested in successfully navigating the process of transferring to a college or university. Topics include: self-awareness; goal setting; motivation; learning styles; critical thinking; decision making; degree options; university systems and transfer programs; education planning; time management and procrastination; money management and financial aid; effective communication; unique transitional considerations for transfer students; and maintaining a healthy lifestyle. Pass/No Pass Option. CSUGE: E.

COU 023 BECOMING A MASTER STUDENT-ATHLETE 2.0 UNITS
Total Lecture: 36 hours
Advisory: (ENG 001A or ENG 001AX) and REA 054
Acceptable for credit: California State University
In this course, student-athletes learn tools for success to be applied in the classroom and in their sport. This survey course includes a study of the following topics: the role of education in life, college systems, 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.

COU 055 VALUING DIVERSITY 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course addresses the complexities of interpersonal relationships within the diverse cultures and ethnic groups in our society. Students examine cultural perceptions, while exploring self-concepts, values, beliefs, communication styles, religion, gender, ageism, and lifestyles in order to promote respect for differences and develop a sense of community. Pass/No Pass Option. CSUGE: D, E.
ECONOMICS (ECN)

ECN 001A  PRINCIPLES OF MACROECONOMICS  4.0 UNITS
ECN 001A (replaces ECN 001A/001AL)
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 903 or High School Algebra I
Advisory: MAT 000C or High School Algebra II
Acceptable for credit: University of California, California State University
This course is an introduction to macroeconomic analysis. Topics include aggregate measures of economic activity, such as gross domestic product, unemployment, and inflation; market systems; macroeconomic models and their equilibria; effects of fiscal and monetary policy; economic growth; evolution of economic thought; and international economics. The course also includes an online lab component that reinforces concepts learned through deeper learning and applications, and offers additional practice with solving problems in economics. This course is approved for credit by exam. Grade only. C-ID # ECON 202. CSUGE: D; IGETC: 4.

ECN 001B  PRINCIPLES OF MICROECONOMICS  4.0 UNITS
ECN 001B (replaces ECN 001B/001BL)
Total Lecture: 54 hours, Total Lab: 54 hours
Prerequisite: MAT 903 or High School Algebra I
Advisory: MAT 000C or High School Algebra II
Acceptable for credit: University of California, California State University
This course is an introduction to microeconomic analysis that focuses on choices of individual economic decision makers. Topics include scarcity and resource allocation, elasticity, market equilibrium in competitive and noncompetitive market structures, consumer behavior, production decisions, income distribution, market failure and effects of government intervention. This course includes a lab component, which provides additional practice with solving problems in microeconomics. This course is approved for credit by exam. Grade only. C-ID # ECON 201. CSUGE: D; IGETC: 4.

ECN 006  THE GLOBAL ECONOMY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
This course examines the core concepts and prominent forces of international economics and the relationships of nations and their economic policies. Opinions and viewpoints from a range of individuals in the private and public sector from around the globe are presented to expand insight into the increasing economic interdependence of nations. Pass/No Pass Option. C-ID # ECON 202. CSUGE: D; IGETC: 4.

ENGINEERING (EGR)

EGR 010  INTRODUCTION TO ENGINEERING  4.0 UNITS
Total Lecture: 54 hours, Total Lab: 54 hours
Advisory: MAT 903 or MAT 903M or High School Algebra I
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: MAT 903 or MAT 903M or High School Algebra I
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 Thévenin’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.

ECONOMICS (ECN)

PLEASE REFER TO FIRE PROTECTION TECHNOLOGY (FPT) FOUND ALPHABETICALLY IN THE CATALOG.
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.  
5 units

**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

**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.
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.

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.

ENGLISH (ENG)

ENGLISH COMPOSITION 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Completion of the Mission College Placement Process or ENG 905AC or ENG 908 or ESL 980.
Acceptable for credit: University of California, California State University
This course emphasizes the techniques of English composition with an emphasis on the process of learning to write clearly and effectively. English 001A fulfills the English requirement for the Associate degree; this is a baccalaureate course. Pass/No Pass Option. C-ID # ENGL 100, ENGL 110. CSUGE: A2; IGETC: 1A.

ENGLISH COMPOSITION WITH ADDITIONAL SUPPORT 5.0 UNITS
Total Lecture: 90 hours
Prerequisite: Completion of the Mission College Placement Process or ENG 905AC or ENG 908 or ESL 980.
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.

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 emphasizes the techniques of English composition 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, ENGL-LIT 100. CSUGE: A3; C2; IGETC: 1B.

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 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 105, ENGL 115. CSUGE: A3; IGETC: 1B.

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, ENGL-LIT 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, ENGL-LIT 185. 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:** University of California, California State University  
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 cross listed as ETH 012. Pass/No Pass Option. CSUGE: C2; IGETC: 3B.

### 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: F.

### 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. C-ID # ENGL 135. 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 value and their influence on modern life and culture. 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, comedic, 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. CSUGE: C2.

### ENG 900  WRITING SKILLS LAB  0.5 UNITS

**Total Lab:** 27 hours  
**This course provides instruction designed to help students improve their writing by having them practice the steps of the writing process and apply writing strategies. Any student may enroll in the course. In order to receive credit, students must complete the required coursework. Pass/No Pass Only. Non-degree applicable course.

### ENG 905AC  ACCELERATED ESSAY WRITING  6.0 UNITS

**Total Lecture:** 108 hours  
**Prerequisite:** Completion of the Mission College Placement Process prior to registration. Concentration is on the writing and revision process, academic essays and introduction to research skills. Pass/No Pass Option, Non-degree applicable course.

### ENG 908  EFFECTIVE WRITING  3.0 UNITS

**Total Lecture:** 54 hours  
**Prerequisite:** Completion of the Mission College Placement Process prior to registration. Concentration is on the writing process, academic essays, and introduction to research skills. Pass/No Pass Option. Non-degree applicable course.
### ENGLISH AS A SECOND LANGUAGE (ESL)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Total Lecture</th>
<th>Prerequisites</th>
<th>Advisory</th>
</tr>
</thead>
<tbody>
<tr>
<td>ESL 930LC</td>
<td>HIGH BEGINNING LANGUAGE AND CULTURE</td>
<td>3.0</td>
<td>54 hours</td>
<td>Appropriate placement by multiple measures.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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.</td>
<td></td>
</tr>
<tr>
<td>ESL 940GW</td>
<td>LOW INTERMEDIATE GRAMMAR AND WRITING</td>
<td>5.0</td>
<td>54 hours</td>
<td>ESL 940LS or a qualifying score on the ESL placement test.</td>
<td>Advisories: ESL 940LS and ESL 940RV.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This course develops basic writing and grammar skills of standard written English at the low intermediate level. The course focuses on the study and practice of simple and compound sentences including modification with adjectives, adverbs, and noun phrases, present, past and future verb tenses, articles, prepositions, spelling and punctuation. Pass/No Pass Option, Non-degree applicable course.</td>
<td></td>
</tr>
<tr>
<td>ESL 940LC</td>
<td>LOW INTERMEDIATE LANGUAGE AND CULTURE</td>
<td>3.0</td>
<td>54 hours</td>
<td>ESL 940LC or appropriate placement by multiple measure.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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 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.</td>
<td></td>
</tr>
<tr>
<td>ESL 940LS</td>
<td>LOW INTERMEDIATE LISTENING AND SPEAKING</td>
<td>3.5</td>
<td>54 hours, 27 hours</td>
<td>ESL 930LC or concurrent enrollment in ESL 940GW and ESL 940RV.</td>
<td>Advisories: ESL 940GW and ESL 940RV.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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 Option, Non-degree applicable course.</td>
<td></td>
</tr>
<tr>
<td>ESL 940PL</td>
<td>LOW INTERMEDIATE PRONUNCIATION AND LISTENING</td>
<td>3.0</td>
<td>54 hours</td>
<td>ESL 930PL.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intermediate 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.</td>
<td></td>
</tr>
<tr>
<td>ESL 940RV</td>
<td>LOW INTERMEDIATE READING AND VOCABULARY</td>
<td>3.0</td>
<td>54 hours</td>
<td>Placement on the ESL Assessment Tool.</td>
<td>Advisories: ESL 940GW and ESL 940RV.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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 Option, Non-degree applicable course.</td>
<td></td>
</tr>
<tr>
<td>ESL 950EC</td>
<td>ESL FOR CHILD DEVELOPMENT: INTRODUCTION</td>
<td>3.0</td>
<td>54 hours</td>
<td>NCE 940EC.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></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>
<td></td>
</tr>
<tr>
<td>ESL 950GW</td>
<td>INTERMEDIATE GRAMMAR AND WRITING</td>
<td>5.0</td>
<td>90 hours</td>
<td>ESL 940LS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>This intermediate-level course develops students' writing and grammar competency through the study of targeted intermediate grammar structures and written materials. Students focus on writing a variety of sentences (compound, complex, and compound/complex) by utilizing adverb, adjective, and noun clauses, and half sentences, phrases, and participles. Pass/No Pass Option, Non-degree applicable course.</td>
<td></td>
</tr>
<tr>
<td>ESL 950LS</td>
<td>HIGH INTERMEDIATE LISTENING AND SPEAKING</td>
<td>3.0</td>
<td>54 hours</td>
<td>ESL 940LS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>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 Option, Non-degree applicable course.</td>
<td></td>
</tr>
<tr>
<td>ESL 950PL</td>
<td>INTERMEDIATE PRONUNCIATION AND LISTENING</td>
<td>3.5</td>
<td>54 hours, 27 hours</td>
<td>ESL 940LS.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Intermediate level students receive guidance and extensive practice in oral production and listening skills. Listening focuses on comprehension of sentences, dialogues and paragraphs and on discrimination of sound patterns in American English. Pronunciation focuses on stress, intonation, rhythm, phrasing and linking as well as consonants and vowels. The course emphasis is on overall pronunciation improvement so as to make spoken communication more intelligible. This course consists of two-thirds lecture and one-third lab work that facilitates skill development. Pass/No Pass Option, Non-degree applicable course.</td>
<td></td>
</tr>
</tbody>
</table>
ENGLISH AS A SECOND LANGUAGE COURSE SEQUENCE

- **Core Classes**
  - Noncredit
    - Low Beginning
      - 910
      - 910B
      - 910A
      - 920
      - 920B
      - 920A
      - 930
      - 930A
      - 931
      - 932
      - 933
      - 940
      - 940B
      - 940A
      - 941
      - 942
      - 943
    - 924
    - 920B
    - 920A
    - 930
    - 930A
    - 931
    - 932
    - 933
    - 940
    - 940B
    - 940A
    - 941
    - 942
    - 943

- **Electives**
  - 010

- **Integrated Skills**
  - 980
    - High Advanced
    - 970
    - Advanced
    - 960
    - High Intermediate
    - 950
    - Intermediate
    - 940
    - Low Intermediate
    - 930
    - High Beginning
  - 924
  - 920B
  - 920A
  - 910B
  - 910A

- **Listening & Speaking**
  - 980
  - 970 LS
  - 960 LS
  - 950 LS
  - 940 LS
  - 930 LS

- **Reading & Vocabulary**
  - 980
  - 970 RV
  - 960 RV
  - 950 RV
  - 940 RV
  - 930 RV

- **Writing**
  - 980
  - 970 GW
  - 960 GW
  - 950 GW
  - 940 GW
  - 930 GW

- **Pronunciation & Listening**
  - 980
  - 970 AM
  - 960 AM
  - 950 AM
  - 940 AM
  - 930 AM

- **Electives**
  - 965 EC
  - 956 EC
  - 955 EC
  - 940 LC
  - 940 EC
  - 940 FD
  - 930 LC
  - 930 EC
  - 930 FD
  - 920 LC
  - 920 EC
  - 920 FD
  - 910 LC
  - 910 EC
  - 910 FD
  - 900 LC
  - 900 EC
  - 900 FD

- **Child Development**
  - 960 EC
  - 956 EC

- **Food Service**
  - 965 EC

- **Citizenship**
  - 940 LC
  - 940 EC
  - 940 FD
  - 930 LC
  - 930 EC
  - 930 FD
  - 920 LC
  - 920 EC
  - 920 FD
  - 910 LC
  - 910 EC
  - 910 FD
  - 900 LC
  - 900 EC
  - 900 FD

ESL 950RV  INTERMEDIATE READING AND VOCABULARY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 940GW and ESL 940RV)
Advisory: ESL 940LS
This intermediate level course develops students' reading skills through the study of a variety of fiction and nonfiction reading materials. The course focuses on reading skills such as comprehending main ideas and details in intermediate level readings, the acquisition and use of new vocabulary, and the strategies to understand and interpret content. Pass/No Pass Option. Non-degree applicable course.

ESL 955EC  ENGLISH FOR CHD: FACTORS IN CHILD DEVELOPMENT  3.0 UNITS
Total Lecture: 54 hours
Advisory: ESL 950EC
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.

ESL 956GR  INTERMEDIATE TO ADVANCED GRAMMAR REVIEW  2.0 UNITS
Total Lecture: 36 hours
Advisory: ESL 940GW
In this intensive intermediate-to-advanced level ESL course students review and refine grammatical structures to develop sentence variety and accuracy in standard written and spoken English. The course focuses on the study and practice of complex sentences in various tenses, varied placement of sentence elements, and error correction. Pass/No Pass Option, Non-degree applicable course.

ESL 960EC  ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART I  3.0 UNITS
Total Lecture: 54 hours
Advisory: Recommended placement on the ESL assessment tool or ESL 950EC or recommended placement on the ESL assessment tool.
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.

ESL 960GW  HIGH INTERMEDIATE GRAMMAR AND WRITING  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 950G and ESL 950RW) or (ESL 950GW and ESL 960RV)
Advisory: ESL 950LS
This course develops students' knowledge of grammar in order to analyze, understand, write, and edit English sentences and paragraphs at a high-intermediate level. The course focuses on comprehensible simple, compound, and complex sentences with a high level of grammatical accuracy and word choice. Focus is also on various rhetorical styles in cohesive, well-organized, and grammatically correct paragraphs on abstract as well as concrete topics. Pass/No Pass Option, Non-degree applicable course.

ESL 960LS  HIGH INTERMEDIATE LISTENING AND SPEAKING  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or ESL 950LS
Advisory: ESL 950GW and ESL 950RV
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.

ESL 960RV  HIGH INTERMEDIATE READING AND VOCABULARY  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 950GW and ESL 950RV)
Advisory: ESL 950LS and ESL 960GW
In this course students develop reading comprehension strategies, vocabulary acquisition techniques, and analytical reading skills. Using a variety of fiction and non-fiction texts, students learn to recognize main ideas and supporting details, distinguish between fact and opinion, and infer meaning. Students also learn techniques for summarizing short texts. Students increase their academic vocabulary by using context clues, stems and affixes, and practice with the Academic Word List. In addition, they become familiar with the denotations and connotations of words. Pass/No Pass Option, Non-degree applicable course.

ESL 965EC  ENGLISH FOR CHD: DOMAINS OF CHILD DEVELOPMENT, PART II  3.0 UNITS
Total Lecture: 54 hours
Advisory: ESL 960EC
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.

ESL 970AM  ACCENT MODIFICATION  3.0 UNITS
Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or ESL 960LS
Advisory: ESL 950PL
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 970GW  ADVANCED ESL COMPOSITION AND GRAMMAR  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 960GW and ESL 960RV)
This course continues developing skills attained in ESL 960GW in writing expository paragraphs and introduces the structure of the essay in standard academic written form. Students write paragraphs and essays in a variety of rhetorical styles. Emphasis is on the writing process, paragraph development, and essay organization. The course provides extensive practice with advanced grammar and sentence structure and helps students develop effective editing skills. Pass/No Pass Option, Non-degree applicable course.
**ESL 970LS** ADVANCED LISTENING AND SPEAKING 3.0 UNITS

Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or ESL 960LS
Advisory: Concurrent enrollment in ESL 970GW and ESL 970RV.

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 970RV** ADVANCED READING AND VOCABULARY 3.0 UNITS

Total Lecture: 54 hours
Prerequisite: Recommended placement on the ESL assessment tool or (ESL 960GW and ESL 960RV)
Advisory: ESL 960LS and ESL 970GW

Students will continue developing academic vocabulary using context clues, stems and affixes, and dictionary skills. Reading skills focus on inferencing, identifying bias, distinguishing between fact and opinion, determining main and supporting ideas, paraphrasing, and summarizing. A novel and a library project are required. 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
Advisory: NCE 910B

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
Advisory: NCE 910B

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
Advisory: NCE 920A

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
Advisory: NCE 910

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
Advisory: NCE 910B

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
Advisory: NCE 920A

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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Level</th>
<th>Type</th>
<th>Total Hours</th>
<th>Advisory Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>NCE 924</td>
<td>BEGINNING ESL COLLEGE SKILLS</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>32</td>
<td>NCE 910B</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 930EC</td>
<td>NC ESL FOR CHILD CARE: HEALTH AND SAFETY</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>64</td>
<td>NCE 920B</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 930FD</td>
<td>ENGLISH FOR FOOD PREPARATION</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>72</td>
<td>NCE 920B</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 931</td>
<td>HIGH BEGINNING LISTENING AND SPEAKING</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>72</td>
<td>NCE 920B</td>
<td>This is the first course in a noncredit certificate program in High Beginning ESL. Students learn about American workplace culture and explore opportunities in food-related fields. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
</tr>
<tr>
<td>NCE 932</td>
<td>HIGH BEGINNING GRAMMAR AND WRITING</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>72</td>
<td>NCE 920B and NCE 931</td>
<td>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. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
</tr>
<tr>
<td>NCE 933</td>
<td>HIGH BEGINNING READING AND VOCABULARY</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>72</td>
<td>NCE 932</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 940EC</td>
<td>NC ESL FOR CHILD CARE: AGES AND STAGES</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>64</td>
<td>NCE 930 EC</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 940FD</td>
<td>ENGLISH FOR FOOD SERVICE</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>72</td>
<td>NCE 930FD</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 940GW</td>
<td>LOW INTERMEDIATE GRAMMAR AND WRITING</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>90</td>
<td>NCE 932</td>
<td>This course develops basic writing and grammar skills of standard written English at the low intermediate level. The course focuses on the study and practice of simple and compound sentences including modification with adjectives, adverbs, and noun phrases, present, past and future verb tenses, articles, prepositions, spelling and punctuation. Pass/No Pass, Satisfactory Progress. Non-degree applicable course.</td>
</tr>
<tr>
<td>NCE 940LS</td>
<td>LOW INTERMEDIATE LISTENING AND SPEAKING</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>54</td>
<td>NCE 931</td>
<td>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.</td>
</tr>
<tr>
<td>NCE 940RV</td>
<td>LOW INTERMEDIATE READING AND VOCABULARY</td>
<td>Noncredit</td>
<td>Noncredit</td>
<td>54</td>
<td>NCE 933</td>
<td>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.</td>
</tr>
</tbody>
</table>
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 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 cross listed 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/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 ENG 013. Pass/No Pass Option. CSUGE: F.

ETH 044 AFRICAN AMERICAN HISTORY 3.0 UNITS
Total Lecture: 54 hours
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, 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.

ETH 044H AFRICAN AMERICAN HISTORY-HONORS 3.0 UNITS
Total Lecture: 54 hours
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 Africans 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.

FIRE PROTECTION TECHNOLOGY (FPT)

FPT 051 FIRE PROTECTION ORGANIZATION 3.0 UNITS
Total Lecture: 54 hours
Advisory: MAT 903 or High School Algebra I
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 (MAT 903 or High School Algebra I)
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 and (MAT 903 or High School Algebra I)
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.

FPT 054  BUILDING CONSTRUCTION FOR FIRE PROTECTION  3.0 UNITS
Total Lecture: 54 hours
Advisory: FPT 051 and (MAT 903 or High School Algebra I)
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.

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 and FPT 052 and (MAT 903 or High School Algebra I)
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: 36 hours, Total Lab: 72 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 I 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  3.0 UNITS
Total Lecture: 36 hours, Total Lab: 72 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 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. 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 065 and FPT 065C  
Advisory: MAT 903 or High School Algebra I  
Acceptable for credit: California State University  
The purpose of this EM 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 skills-laboratory requirements at the mandated instructor: student ratio of 1:10 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 successfully complete concurrently FPT 065 and FPT 065C to be eligible for certification. Pass/No Pass Option.

FPT 180  EMERGENCY MEDICAL TECHNICIAN - I REFRESHER COURSE  2.0 UNITS
Total Lecture: 36 hours  
Prerequisite: HOC 002 or American Heart Association BLS for the Healthcare Provider or equivalent.  
Advisory: MAT 903 or High School Algebra I  
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 039B  
Corequisite: KIN 039C or 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 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: 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.

FDR 050A 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, customer service, and cultural and economic trends. Students survey the economic and employment impact of food service, lodging, resorts, recreation, customer service, and cultural and economic trends. Information about the Hospitality Management Program is explained. Pass/No Pass Option. C-ID # HOSP 100.

FDR 051 BASIC FOOD PREPARATION 5.0 UNITS
Total Lecture: 36 hours, Total Lab: 162 hours
Corequisite: FDR 051S
Advisory: 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
This course is required as a supplement to instruction in FDR 051: Basic Food Preparation. 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 OPERATION 6.0 UNITS
Total Lecture: 18 hours, Total Lab: 270 hours
Prerequisite: FDR 051 and FDR 058 and FDR 075 and INF 050.
Corequisite: FDR 052S
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. A lab fee and uniform requirements apply. Pass/No Pass Option.

FDR 052S QUANTITY FOODS CATERING LAB 0.5 UNITS
Total Arranged Lab: 27 hours
Corequisite: FDR 052
This course is a required supplement for students enrolled in FDR 052, Quantity Foods. Students must fulfill 24-27.5 hours working on department on-site or 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 6.0 UNITS
Total Lecture: 18 hours, Total Lab: 270 hours
Prerequisite: FDR 052
Corequisite: FDR 053S
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, quantity food preparation, 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
This course is a required supplement for students enrolled in FDR 053, 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.
### COURSES

#### FDR 054 HOTEL AND RESTAURANT ACCOUNTING 3.0 UNITS
- **Total Lecture:** 54 hours
- **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 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 051
- **Acceptable for credit:** California State University
- This course is a comprehensive study of the purchasing essentials 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. Main themes are the definition and focus on “control points” within the purchasing process. Current trends, e-purchasing, current product information, distributor and operator ethics are also covered. **Pass/No Pass Option.**

#### FDR 058 COST CONTROL FOR FOODSERVICE ORGANIZATIONS 3.0 UNITS
- **Total Lecture:** 54 hours
- **Advisory:** FDR 051 and FDR 075 and Students should have basic arithmetic skills.
- **Acceptable for credit:** California State University
- This course covers the scope of food and beverage control systems used in small and large food and beverage operation. Pre-cost control, inventory systems, cost analysis, food and beverage cost percentages and profit and loss statement are covered. Also included is the cycle of product handling, federal, state and local laws and requirements and licensing as they apply to the Hospitality Industry. **Pass/No Pass Option.**

#### FDR 059 SUPERVISION, MANAGEMENT & LEADERSHIP 4.0 UNITS
- **Total Lecture:** 72 hours
- **Advisory:** FDR 050A
- **Acceptable for credit:** California State University
- Traditional and contemporary theories, principles and practices of supervising and leading people will be discussed. The concepts introduced apply across all industries, with a focus on tourism, hospitality and foodservice industries; the combined engagement of which, account for the 2nd largest employer segment in the US. 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 sustainable business practices in this current and 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 060A 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. Pass/No Pass Option.**

#### FDR 073 FUNDAMENTALS OF BAKING AND CONFECTIONERY 2.0 UNITS
- **Total Lecture:** 18 hours, **Total Lecture:** 54 hours
- **Advisory:** FDR 051
- **Acceptable for credit:** California State University
- 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 the 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
- **Acceptable for credit:** California State University
- 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
- **Advisory:** Students should have basic arithmetic skills.
- **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.**

#### FDR 076 SALES AND MARKETING IN THE HOTELITY INDUSTRY 3.0 UNITS
- **Total Lecture:** 54 hours
- **Advisory:** Students should have basic arithmetic skills.
- **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 marketing 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
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 be 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 foot prints. 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.

FDR 096 HEALTHY CUISINE 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: INF 050
An examination of the physical, social and environmental impact of our dietary choices, as well as our relationship with food in general. A progressive analysis of The Standard American Diet as well as basic components of improved eating patterns are presented. This course does not advocate that you adopt a particular way of eating, as everyone has their own unique dietary needs and preferences. However, a wide variety of special diets and plant-based diet variations, along with the appropriate preparation methods, will be introduced, demonstrated and practiced. A uniform is required, and a fee is charged for food supplies. Pass/No Pass Option.

FDR 105 CATERING MANAGEMENT AND OPERATIONS 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54
Advisory: INF 050
This course provides an in-depth look at the professional caterer, from prospecting and initial client contact to executing the event and follow-up. Students learn about the physical and mental challenges of managing a full service catering operation. A lab fee and uniform requirements apply. Pass/No Pass Option.

FDR 106A STARTING A MOBILE FOOD BUSINESS 2.0 UNITS
Total Lecture: 36 hours
Food trucks are the single fastest growing sector of the restaurant industry. Discover how to develop your business, build your brand, and gain a loyal following. Students learn how to comply with regulatory requirements, to overcome common obstacles, and to measure your success. Pass/No Pass Option.

FDR 106B MOBILE FOOD OPERATIONS 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Prerequisite or Corequisite: INF 050
This is a continuation of Food Truck Course FDR 106A. Students engage in an in-depth study of managing food truck operations. Students gain hands-on experience at planning, preparing for, and execution of actual food truck concession events. Uniform and fee requirements apply. Pass/No Pass Option.

FOREIGN 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)
FRN 001  FIRST SEMESTER FRENCH  5.0 UNITS  
(ELEMENTARY LEVEL) 
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  5.0 UNITS  
(ELEMENTARY LEVEL) 
Total Lecture: 90 hours  
Prerequisite: FRN 001 or two years high-school French or equivalent with a grade of "C" or better.  
Acceptable for credit: University of California, California State University  
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 course 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 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 continue 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.

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.

GEO 002  INTRODUCTION TO CULTURAL GEOGRAPHY  3.0 UNITS  
Total Lecture: 54 hours  
Acceptable for credit: University of California, California State University  
This course examines human interactions with the natural environment and how the interactions shape the cultural landscape. Its focus is on describing and analyzing how and why population distribution, migration/mobility, languages, religions, folk/ popular cultures, political systems, and economic activities vary from place to place. Pass/No Pass Option. CSUGE: D; IGETC: 4.

GEO 006  WORLD REGIONAL GEOGRAPHY  3.0 UNITS  
Total Lecture: 54 hours  
Acceptable for credit: University of California, California State University  
World Regional Geography deals with the study of a particular group of world regions or realms as each compares with the rest of the world in terms of both physical and cultural landscapes. It uses the fundamental geographic concepts and themes to provide a framework for understanding development patterns around the world. Development is viewed from the perspective of the natural environment that provides the basis for development as well as the cultural, social, political, and the economic factors that vary from region to region. Pass/No Pass Option. CSUGE: D; IGETC: 4.

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.
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. This class introduces students to the basic principles of photography, lighting, video production and layout. 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 043A  3D GAME CHARACTER ANIMATION WITH MAYA  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  MOBILEAPPLICATIONANDWEB 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 graphic designers, illustrators and artists. Students learn how to create original illustrations and designs using Adobe Illustrator. Basic art principles are explored. 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 Adobe Photoshop course for graphic designers, artists, and photographers. Students learn how to create original artwork, refine photographs and manipulate digital imagery. Basic design principles are explored. 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 and GDS 064
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 063
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 methodology 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. Comp ing 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 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.

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 Lecture: 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 methodology are explored in lecture and in lab. Previous experience with Adobe Photoshop and Adobe Illustrator is advised. 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 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, events, DOM Scripting dynamic content, cookies and Web storage, and an introduction to advanced topics such as AJAX and JavaScript libraries. Pass/No Pass Option.
HEALTH OCCUPATIONS
(HOC)

HOC 001  MEDICAL TERMINOLOGY 3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: California State University
This course provides techniques for medical word building and interpretation using basic word elements (root words, prefixes and suffixes) of Greek and Latin origin. Students learn anatomical, physiological, and pathological medical terminology, as well as therapeutic and diagnostic words, with an overview of each body system. Students demonstrate their ability to define, pronounce, and understand the meaning of medical terms through assignments such as analyzing medical records and creating a PowerPoint presentation. Pass/No Pass Option.

HOC 001A  HEALTH OCCUPATIONS BOOTCAMP 2.0 UNITS
Total Lecture: 36 hours
Advisory: Basic arithmetic skills
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.

HOC 002  CARDIOPULMONARY RESUSCITATION 0.5 UNITS
Total Lecture: 9 hours
Acceptable for credit: California State University
The course is designed to prepare the student to provide mouth-to-mouth rescue breathing and closed chest heart compression (Basic Life Support) to a victim of sudden death. This course is taught according to guidelines of the American Heart Association. AHACPR/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.

HOC 003  EMERGENCY/DISASTER PREPAREDNESS FOR ALLIED HEALTH PROFESSIONALS 0.5 UNITS
Total Lecture: 9 hours
The course is designed to assist allied health workers in assessing and developing plans for emergency and disaster situations in the home, community agency or clinical setting. Note: The student must purchase and read the textbook prior to the start of the class. Pass/No Pass Option.

HOC 004  FIRST AID AND CPR 0.5 UNITS
Total Lecture: 9 hours
The American Heart Association (HeartSavers) CPR/AED and First Aid course is a training program to prepare individuals to respond to life-threatening emergencies and to injuries and sudden illness that may arise in the workplace and in the community. This course covers CPR for adults, children and infants and the use of AEDs (automated external defibrillators), and has scenarios to facilitate discussion of appropriate care in first aid emergencies. Successful participants receive an American Heart Association Adult/Child/Infant CPR, AED and First-Aid certificate. 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 function of Community Health Workers. This course introduces important core competencies for providing direct services, including, cultural humility, scope of practice, ethics, client-centered coaching, care management, and home visiting. Pass/No Pass Option.

HOC 006  PERSONAL HEALTH AND LIFE STYLE 3.0 UNITS
Total Lecture: 54 hours
Advisory: HOD 033A
Acceptable for credit: California State University
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 and weight control, stress management, drug and alcohol abuse, reproductive issues, self-care and the use of the health care system. Pass/No Pass Option.

HOC 007  COMMUNITY HEALTH PROBLEMS 3.0 UNITS
Total Lecture: 54 hours
Advisory: Students should have basic arithmetic skills.
Acceptable for credit: California State University
This is an introductory community health course with a focus on vulnerable populations and associated chronic and common diseases and disorders. Included are identified populations at risk and associated chronic disease and public health concerns that are common in these populations and community 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 in the community health worker program and for individuals 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
Advisory: Basic Arithmetic Skills
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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOC 012</td>
<td>COMMUNITY HEALTH WORKER INTERNSHIP</td>
<td>3.0</td>
<td>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.</td>
</tr>
<tr>
<td>HOC 019A</td>
<td>NURSING ASSISTANT FUNDAMENTALS</td>
<td>4.0</td>
<td>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 019B, are eligible to apply for the California Certified Nurse Assistant (CNA) examination. Grade only.</td>
</tr>
<tr>
<td>HOC 019B</td>
<td>NURSING ASSISTANT CLINICAL EXPERIENCE</td>
<td>2.0</td>
<td>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 019A, are eligible to apply for the National Nurses Aide Assessment Program (NNAAP) examination. Pass/No Pass Only.</td>
</tr>
<tr>
<td>HOC 019F</td>
<td>HOME HEALTH AIDE FUNDAMENTALS</td>
<td>1.5</td>
<td>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.</td>
</tr>
<tr>
<td>HOC 019G</td>
<td>HOME HEALTH AIDE CLINICAL</td>
<td>0.5</td>
<td>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.</td>
</tr>
<tr>
<td>HOC 020</td>
<td>INTRODUCTION TO PROFESSIONAL HEALTH CARE</td>
<td>0.5</td>
<td>This course helps acquaint incoming vocational nursing and psychiatric technician 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.</td>
</tr>
<tr>
<td>HOC 022</td>
<td>PATIENT NURSING CARE FUNDAMENTALS</td>
<td>1.5</td>
<td>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. Acceptable for credit: California State University.</td>
</tr>
<tr>
<td>HOC 023A</td>
<td>BEG. MEDICAL-SURGICAL NURSING THEORY</td>
<td>2.5</td>
<td>This course focuses on beginning level nursing care and interventions for patients with diseases or disorders of particular body systems. 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. Grade only.</td>
</tr>
<tr>
<td>HOC 023B</td>
<td>BEG. COGNITIVE DISABILITIES—MENTAL HEALTH THEORY</td>
<td>1.0</td>
<td>This beginning course is designed to present theoretical concepts of mental health disorders, legal and ethical principles, and approaches to assist the vocational nursing and psychiatric technician students to identify and understand therapeutic communication skills, psycho-pharmacological concepts and assessment skills in caring for persons with psychiatric disorders. Grade only.</td>
</tr>
<tr>
<td>HOC 023C</td>
<td>BEG. COGNITIVE DISABILITIES—DEVELOPMENTAL DISABILITY THEORY</td>
<td>1.0</td>
<td>This is a beginning course in which the causes of intellectual and development disorders are explored. Grade only.</td>
</tr>
<tr>
<td>HOC 025A</td>
<td>HOME HEALTH AIDE CLINICAL</td>
<td>0.5</td>
<td>This course helps acquaint incoming vocational nursing and psychiatric technician 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.</td>
</tr>
</tbody>
</table>
COURSES

HOC 024  PHARMACOLOGY A  1.0 UNIT
Total Lecture: 18 hours
Prerequisite: HOC 028
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 023C and
HOC 025A and HOC 025B and HOC 026A and HOC 026B and HOC 027 and
(PSY 001 or PSY 001H) and PSY 012.
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, and reproductive systems. Pass/No Pass Only.

HOC 025A  FUNDAMENTALS SKILLS/
SIMULATION LAB  1.0 UNIT
Total Lab: 54 hours
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC
026A and HOC 027 and HOC 028 and (PSY 001 or PSY 001H).
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, and reproductive systems. Pass/No Pass Only.

HOC 025B  FUNDAMENTALS SKILLS/
SIMULATION LAB  1.0 UNIT
Total Lab: 54 hours
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC
026A and HOC 027 and HOC 028 and (PSY 001 or PSY 001H).
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, and reproductive systems. Pass/No Pass Only.

HOC 026A  BEG. CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Prerequisite: HOC 028
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 024 and HOC
025A and HOC 025B and HOC 026A and HOC 026B and HOC 027 and
(PSY 001 or PSY 001H) and HOC 027 and (PSY 001 or PSY 001H) and PSY 012.
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 026B  BEG. CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 023C and
HOC 024 and HOC 025B and HOC 027 and PSY 012.
Acceptable for credit: California State University
This is a foundation course which provides the beginning psychiatric technician
student clinical experiences during which they integrate research-based
standards of professional practice, theoretic principles of nursing science,
therapeutic communication, nursing process and basic nursing skills during
supervised care to patients/clients with acute or chronic medical-surgical
concerns, intellectual, developmental and mental health disabilities and disorders
throughout the lifespan. Students spend approximately seventeen hours each week

HOC 027  NURSING PROCESS
AND COMMUNICATION  2.0 UNITS
Total Lecture: 36 hours
Prerequisite: HOC 028
Corequisite: HOC 022 and HOC 023A and HOC 023B and HOC 023C and
HOC 024 and HOC 025A and HOC 025B and HOC 026A and HOC 026B and
(PSY 001 or PSY 001H) and HOC 027 and (PSY 001 or PSY 001H) and PSY 012.
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 and psychiatric technician 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
Corequisite: HOC 033A and HOC 033B and HOC 034 and HOC 035A and
HOC 036A and (NTR 015 or NTR 040).
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, labor and delivery, and during the
postpartum period. 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.
### COURSES

**HOC 033A  INT. MEDICAL/ SURGICAL NURSING THEORY  2.0 UNITS**

Total Lecture: 36 hours  
Corequisite: HOC 032 and HOC 033B and HOC 033C and HOC 033D and HOC 034 and HOC 035A and HOC 035B and HOC 036A and HOC 036B and (NTR 015 or NTR 040) and PSY 001.  
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 roles of vocational nurses and psychiatric technicians 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  
Corequisite: HOC 032 and HOC 033A and HOC 034 and HOC 035A and HOC 036A and (NTR 015 or NTR 040).  
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 033C  INT. COGNITIVE DISABILITIES – MENTAL HEALTH THEORY  2.5 UNITS**

Total Lecture: 45 hours  
Corequisite: HOC 033A and HOC 033D and HOC 034 and HOC 035A and HOC 036B and HOC 036D and HOC 036B and PSY 001.  
Acceptable for credit: California State University  
This is an intermediate continuation course which is designed for psychiatric technician students to integrate previously learned theoretical mental health concepts with critical thinking as utilized in clinical practice. Students plan and evaluate therapeutic patient-centered goals and interventions considering cultural differences and the use of oral and written communication. These skills contribute to the establishment of the group process. Includes two hours of related pharmacology content. Grade only.

**HOC 033D  INT. COGNITIVE DISABILITIES – DEVEL. DISABILITY THEORY  2.5 UNITS**

Total Lecture: 45 hours  
Corequisite: HOC 033A and HOC 033C and HOC 034 and HOC 035B and HOC 036B and PSY 001.  
Acceptable for credit: California State University  
This is an intermediate continuation course in which psychiatric technician students explore genetic causes of intellectual and developmental disorders and integrate previously learned principles of cognitive and behavioral theory. They will explore planning and implementation interventions for enhancing quality of life through education and work by addressing social inclusion, interpersonal relations, personal development, self-determination and material well-being for the intellectually and developmentally disabled client. Includes two hours of related pharmacology content. Grade only.

**HOC 034  PHARMACOLOGY B  1.0 UNIT**

Total Lecture: 18 hours  
Corequisite: HOC 032 and HOC 033A and HOC 033B and HOC 033C and HOC 033D and HOC 035A and HOC 035B and HOC 035A and HOC 035B and (NTR 015 or NTR 040) and PSY 001.  
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 and psychiatric technician student. 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  
Corequisite: HOC 032 and HOC 033A and HOC 033B and HOC 034 and HOC 035A and HOC 036A and (NTR 015 or NTR 040).  
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 035B  INT. SKILLS/SIMULATION LAB  1.0 UNIT**

Total Lab: 54 hours  
Corequisite: HOC 032 and HOC 033A and HOC 033B and HOC 034 and HOC 035A and HOC 036A and (NTR 015 or NTR 040).  
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 roles of vocational nurses and psychiatric technicians 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 036B  INT. CLINICAL PRACTICUM  5.0 UNITS
Total Lab: 270 hours
Corequisite: HOC 033A and HOC 033C and HOC 033D and HOC 034 and PSY 001.
Acceptable for credit: California State University
This is a continuation course which provides the intermediate psychiatric technician student with supervised clinical experiences during which they integrate research-based standards of professional practice, theoretic principles of nursing science, therapeutic communication, nursing process and basic nursing skills during supervised care to patients/clients with acute or chronic medical-surgical concerns, mental illnesses and developmental disabilities. The focus is on application of theoretical principles utilized to increase individual levels of functioning; observation, management, and documentation of behavioral problems; and utilizing interpersonal skills and therapeutic strategies for communication. The emphasis throughout is on the practical application of theoretical principles for clients with cognitive disabilities and acute or chronic medical-surgical disorders throughout the lifespan. Students spend approximately fifteen hours each week in community agencies. Pass/No Pass Only.

HOC 042  CARE OF THE PEDIATRIC PATIENT  2.0 UNITS
Total Lecture: 36 hours
Corequisite: HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 046A and HOC 047 and PSY 012.
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
Corequisite: HOC 042 and HOC 043B and HOC 043C and HOC 043D and HOC 044 and HOC 045A and HOC 046A and HOC 046B and HOC 047 and (NTR 015 or NTR 040) and PSY 012.
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
Corequisite: HOC 042 and HOC 043A and HOC 044 and HOC 045A and HOC 046A and HOC 047 and PSY 012.
Acceptable for credit: California State University
This course is designed to provide vocational nursing student 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 043C  ADVANCED COGNITIVE DISABILITIES – MENTAL HEALTH THEORY  2.5 UNITS
Total Lecture: 45 hours
Corequisite: HOC 043A and HOC 043D and HOC 044 and HOC 045B and HOC 046B and HOC 047 and (NTR 015 or NTR 040).
Acceptable for credit: California State University
This is an advanced continuation course designed for psychiatric technician students to focus on previously learned mental health concepts and skills which constitute critical thinking as utilized in clinical practice. Students develop, analyze and evaluate principles of mental health, therapeutic, patient-centered, comprehensive plans of care for vulnerable and diverse populations in community and acute care settings. Includes two hours of related pharmacology content. Grade only.

HOC 043D  ADV COGNITIVE DISAB – DEVELOPMENTAL DISAB. THEORY  2.5 UNITS
Total Lecture: 45 hours
Corequisite: HOC 043A and HOC 043C and HOC 044 and HOC 045B and HOC 046B and HOC 047 and (NTR 015 or NTR 040).
Acceptable for credit: California State University
This is an advanced course which focuses on integration of previous learning and skills which constitute critical thinking. It is designed to provide the psychiatric technician student with an understanding of the principles needed for the provision of comprehensive care for quality of life enhancement with a focus on self-determination, emotional well-being, social inclusion, rights, personal development, and physical well-being for mental healthcare and health promotion for the developmentally and intellectually disabled client. Students integrate their nursing knowledge with the principles of behavioral therapy and group communication process to plan care to a unique population of individuals with a multitude of physical and intellectual challenges. Includes two hours of related pharmacology content. Grade only.

HOC 044  PHARMACOLOGY C  1.0 UNIT
Total Lecture: 18 hours
Corequisite: HOC 042 and HOC 043A and HOC 043B and HOC 043C and HOC 043D and HOC 043D and HOC 045A and HOC 045B and HOC 046A and HOC 046B and HOC 047 and (NTR 015 or NTR 040) and PSY 012.
Acceptable for credit: California State University
This is a continuation course in pharmacology designed to assist the psychiatric technician and vocational nursing student with the principles of pharmacology. Emphasis is on defining pharmacological agents, classes, precautions for use, side effects, medication interactions, contraindications, and patient teaching for safe and proper pharmacological agents used for patients with disorders of the endocrine, hemotologic, integumentary, and gastrointestinal systems and for pediatric clients. Grade only.

HOC 045A  ADVANCED SKILLS/SIMULATION LAB  1.0 UNIT
Total Lab: 54 hours
Corequisite: HOC 042 and HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 045B and HOC 046A and HOC 047 and PSY 012.
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 045B ADVANCED SKILLS/SIMULATION LAB 1.0 UNIT
Total Lab: 54 hours
Corequisite: HOC 043A and HOC 043C and HOC 043D and HOC 044 and HOC 045B and HOC 047 and (NTR 015 or NTR 040).
Acceptable for credit: California State University
This course allows the advanced psychiatric technician 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 mental health and developmental disability disorder 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
Corequisite: HOC 042 and HOC 043A and HOC 043B and HOC 044 and HOC 045A and HOC 047 and PSY 012.
Acceptable for credit: California State University
This is an advanced level experiential course designed to give the 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 046B ADVANCED CLINICAL PRACTICUM 5.0 UNITS
Total Lab: 270 hours
Corequisite: HOC 043A and HOC 043C and HOC 043D and HOC 044 and HOC 045B and HOC 047 and (NTR 015 or NTR 040).
Acceptable for credit: California State University
This continuation course provides the advanced psychiatric technician student with supervised clinical experiences with clients with developmental disabilities, psychiatric and medical-surgical disorders in a variety of community agencies. Emphasis is on the use of the nursing process and therapeutic communication techniques to identify and address the needs of fragile and vulnerable clients. Students plan and provide direct resident/client care, facilitate a variety of group activities, administer medications, and participate as collaborative members of the health care team. Pass/No Pass Only.

HOC 047 LEADERSHIP AND PROFESSIONAL PRACTICE 1.5 UNITS
Total Lecture: 27 hours
Corequisite: HOC 042 and HOC 043A and HOC 043B and HOC 043C and HOC 043D and HOC 044 and HOC 045A and HOC 045B and HOC 046A and HOC 046B and (NTR 015 or NTR 040) and PSY 012.
Acceptable for credit: California State University
The focus of this course is to prepare the vocational nursing and psychiatric technician 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 JUDGEMENT 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, clinical 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 professional 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 062
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: MAT 903 or High School Algebra I
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 prehistoric times to 1600. Emphasis is on the major political, economic, social, cultural and intellectual movements that have molded Western society. Students cannot get credit for both HIS 004A and HIS 004AH. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # HIST 170. CSUGE: C2, D; IGETC: 3B, 4.
HIS 004B  HISTOR Y OF WESTERN CIVILIZATION 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 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 004BH HISTOR Y OF WESTERN CIVILIZATION - 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 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. Students cannot get credit for both HIS 004B and HIS 004BH. Enrollment in the Honors Program is required. Pass/No Pass Option. C-ID # HIST 180. CSUGE: C2, D; IGETC: 3B, 4.

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 societies. 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, isolationism 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
History 017AH is a survey of the political, economic, social, and cultural development of the United States from Native American settlement in America through Reconstruction. More rigorous assignments and research are expected in this course than in HIS 017A. 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, isolationism 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. Students cannot get credit for both HIS 017A and HIS 017AH. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # HIST 130. CSUGE: D, US-2; 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 017B.) 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. 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. CSUGE: D; IGETC: 4, C2, 3B.
COURSES

COURSES

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, WWI, WWII, the Civil Rights movement, and the present state of African Americans. This course is cross-listed as ETH044. Pass/No Pass Option. CSUGE: D, F, US-1; IGETC: 4.

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, WWI, 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.

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)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
<th>Acceptable for credit:</th>
<th>Anti-Requisite:</th>
<th>Total Lecture:</th>
<th>Project Requirement</th>
<th>Pass/No Pass Option</th>
<th>CSUGE:</th>
<th>IGETC:</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 001A</td>
<td>HUMAN VALUES IN AND FROM THE ARTS</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 001B</td>
<td>HUMAN VALUES IN AND FROM THE ARTS</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 007</td>
<td>INTERNATIONAL FILMS</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 015</td>
<td>INTRODUCTION TO FILM ANALYSIS</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 016A</td>
<td>HISPANIC ROOTS AND CULTURE</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 018</td>
<td>AFRICAN-AMERICAN CULTURE AND HUMANITIES</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 020</td>
<td>ASIAN ROOTS AND CULTURE</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 022</td>
<td>INTRODUCTION TO ISLAM</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 024</td>
<td>THE ASIAN-AMERICAN EXPERIENCE</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>HUM 030</td>
<td>CULTURAL STUDIES</td>
<td>3.0</td>
<td>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.</td>
<td>University of California, California State University</td>
<td>University of California, California State University</td>
<td>54 hours</td>
<td>Project is required.</td>
<td>CSUGE: C2; IGETC: 3B.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** All courses listed under HUMANITIES (HUM) are 3.0 units. The total lecture hours for each course range from 54 hours to 54 hours, depending on the specific course and any additional requirements such as a field trip or project.
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, structuring learning experience and handling challenging situations. Pass/No Pass Only.

INS 015 ADVANCED TRAINING FOR PEER TUTORS AND MENTORS 1.5 UNITS
Total Lecture: 27 hours
Advisory: 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, cultural awareness, strategies for working with adult students, identifying and using campus services and other resources to assist students, assessing or changing study behaviors, communication strategies, group facilitation strategies, and assisting students with disabilities. 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 tutor 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 001 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 dive 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
Advisory: KIN 015A
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 footwork. 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 fundamentals of basketball. Mastery of these skills enables students to progress to the next level of tennis. 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 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 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 and 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 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 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 019B SOCCER – BEGINNING 1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 019A
Acceptable for credit: California State University, University of California
This course is designed to review the basic rules, skills, and techniques of soccer, as well as develop players’ execution of the fundamental strategies of the game. Drills are included to enhance shooting, passing, heading 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
Advisory: KIN 020A
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 introduces the student to the intermediate skills and strategies of the game of badminton. The main emphasis of this course is to refine the technique 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 teach the fundamentals of 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 is designed to develop skill and knowledge of the game of tennis at an intermediate level. Pass/No Pass Option. CSUGE: E.
COURSES

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 provides the opportunity for further mastery of specific tennis skills and strategies at an advanced level. 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 021F  TENNIS – DOUBLES STRATEGIES AND PLAY  1.5 UNITS
Total Lecture: 9 hours, Total Lab: 54 hours
Advisory: KIN 021C
Acceptable for credit: California State University, University of California
Students are instructed in the basic skills of doubles for the sport of tennis. Rules of play, strategies, and skill development for doubles are emphasized. 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 technique, 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
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.

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 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’ Physical Mind 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 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’ Physical Mind 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 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’ Physical Mind 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 030D  PILATES MATWORK – ADVANCED  1.0 UNITS
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’ Physical Mind Conditioning Method at an advanced level. Prior Pilates practice is strongly recommended. Pass/No Pass Option. CSUGE: E.

KIN 031A  STEP AEROBICS – INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This course is designed to utilize step equipment and coordinated movement as a means for improving cardiovascular fitness. Knowledge of proper step technique, postural control through muscular strengthening, as well as an understanding of ways to improve overall fitness, is also covered in this course. Pass/No Pass Option. CSUGE: E.

KIN 031B  STEP AEROBICS – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 031A
Acceptable for credit: California State University, University of California
This course is designed to utilize step equipment and coordinated movement as a means for improving cardiovascular fitness. Knowledge of proper step technique, postural control through muscular strengthening, as well as an understanding of ways to improve overall fitness, is also covered in this course. 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 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 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 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 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 032D  CORE AND CARDIO FITNESS - ADVANCED 1.0 UNIT
Total Lab: 54 hours
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 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 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 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 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
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
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
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
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 039D  FIRE AGILITY – ADVANCED  2.0 UNITS
Total Lab: 108 hours
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 is designed to enhance the overall fitness level of the Fire Technology students to prepare them to successfully complete Fire Department 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Total Lab</th>
<th>Advisory</th>
<th>Acceptable for Credit</th>
<th>Description</th>
</tr>
</thead>
</table>
KIN 046C  BALLROOM DANCE – INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 046B
Acceptable for credit: California State University, University of California
This intermediate ballroom dance course covers various ballroom dances with an emphasis on technique, styling and performance skills that are specific to each dance. Pass/No Pass Option. CSUGE: E.

KIN 047A  HIP HOP - INTRODUCTION  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.

KIN 047B  HIP HOP – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 047A
Acceptable for credit: California State University, University of California
This course is the study and practice of hip hop at a beginning level. 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.

KIN 047C  HIP HOP – INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 047B
Acceptable for credit: University of California, California State University
This course is the study and practice of hip hop at an intermediate level. Students learn choreography as well as create their own style and routines. Pass/No Pass Option. CSUGE: E.

KIN 047D  HIP HOP – ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 047C
Acceptable for credit: University of California, California State University
This course is the study and practice of hip hop at an advanced level. Students learn choreography as well as create their own style and routines. Pass/No Pass Option. CSUGE: E.

KIN 048A  LATIN DANCE/SALSA – 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 selected Latin and rhythm dances. There is an emphasis on alignment and posture, etiquette, and leading and following. Pass/No Pass Option. CSUGE: E.

KIN 048B  LATIN DANCE/SALSA – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 048A
Acceptable for credit: California State University, University of California
This is a beginning level course designed to practice selected Latin and rhythm dances. There is an emphasis on alignment and posture, etiquette, and leading and following. Pass/No Pass Option. CSUGE: E.

KIN 050A  TAI Chi – 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 health enhancing aspects of Tai Chi. Instruction covers the history and philosophy and emphasizes Tai Chi body movements and forms utilizing energy flow and stress reducing elements that are generated in the process. Pass/No Pass Option. CSUGE: E.

KIN 050B  TAI Chi – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 050A
Acceptable for credit: California State University, University of California
This course reviews the fundamentals and health enhancing aspects of Tai Chi. There is an introduction to Pushing Hands exercises and various Qi Gong exercises are included. Pass/No Pass Option. CSUGE: E.

KIN 050C  TAI Chi - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 050B
Acceptable for credit: University of California, California State University
This course reviews the fundamentals and health enhancing aspects of Tai Chi at an intermediate level including Pushing Hands exercises and various Qi Gong exercises. Pass/No Pass Option. CSUGE: E.

KIN 050D  TAI Chi - ADVANCED  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 050C
Acceptable for credit: University of California, California State University
This course reviews the fundamentals and health enhancing aspects of Tai Chi at an advanced level. An advanced form of Pushing Hands practice and additional Qi Gong exercises are included. Pass/No Pass Option. CSUGE: E.

KIN 051A  AIKIDO – INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 051A
Acceptable for credit: California State University, University of California
This course introduces the student to the philosophy, principles and physical techniques of Aikido. Aikido is a non-violent martial art that emphasizes harmony and natural movements to resolve conflicts. Pass/No Pass Option. CSUGE: E.

KIN 051B  AIKIDO – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 051B
Acceptable for credit: California State University, University of California
This course reviews the philosophy, principles, and physical techniques of Aikido. The course emphasizes harmony and natural movements to resolve conflicts and integrate mind-body awareness. The principles of contraction and expansion and circular movement are explored in more detail. Pass/No Pass Option. CSUGE: E.

KIN 051C  AIKIDO - INTERMEDIATE  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 051C
Acceptable for credit: University of California, California State University
This course reviews the philosophy, principles, and physical techniques of Aikido. The course emphasizes harmony and natural movements to resolve conflicts. Pass/No Pass Option. CSUGE: E.

KIN 053A  KARATE – INTRODUCTION  1.0 UNIT
Total Lab: 54 hours
Acceptable for credit: California State University, University of California
This class introduces students to the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on blocks, strikes, kicking movements, traditional forms from the Taikyoko and Pinan series, and self-defense. Pass/No Pass Option. CSUGE: E.

KIN 053B  KARATE – BEGINNING  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 053A
Acceptable for credit: California State University, University of California
This class reviews the fundamentals of the Okinawan/Japanese martial art of Wado Ki Kai Karate. Emphasis is on refinement of the student's blocks, strikes, kicking movements, the traditional forms from the Taikyoko and Pinan series, and self-defense. Pass/No Pass Option. CSUGE: E.
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  
Advisory: KIN 053B  
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  
Advisory: KIN 061A  
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 061B  
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, 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 061C  
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 061D  
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 for hiking is introduced. Students experience improved fitness levels through hiking. Pass/No Pass Option. CSUGE: E.

KIN 063B  HIKING – BEGINNING  1.0 UNIT  
Total Lab: 54 hours  
Acceptable for credit: California State University, University of California  
This course reviews basic hiking techniques and safety precautions and introduces students to the challenges of moderate level hiking facilities in the local community. Proper warm-up and cool-down specifically related to hiking are covered. Pass/No Pass Option. CSUGE: E.

KIN 063C  WALK/JOG FOR FITNESS – INTRODUCTION  1.0 UNIT  
Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
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 063D  WALKING / JOGGING FOR FITNESS – BEGINNER  1.0 UNIT  
Total Lab: 54 hours  
Acceptable for credit: University of California, California State University  
This course introduces the student to beginning 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 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 070  WEIGHT TRAINING PRACTICUM I  1.0 UNIT
Total Lab: 54 hours
Advisory: KIN 076
Acceptable for credit: California State University
This course is one of the requirements for the fitness specialist certificate program and provides students with an opportunity to serve as an intern in a weight training class presently offered at the college. Each intern serves as an aide to the instructor of the class to acquire the skills and confidence needed to be a personal trainer. Pass/No Pass Option.

KIN 071  SPORTS INJURIES  1.5 UNITS
Total Lecture: 27 hours
Acceptable for credit: University of California, California State University
This course is designed specifically for the fitness specialist or enthusiast who wants a basic understanding of the prevention and care of athletic injuries. Emphasis is on fitness related injuries as well as preventative steps recommended to avoid injuries. Basic awareness of the needs of special populations is also discussed. Pass/No Pass Option.

KIN 072  SPORTS NUTRITION  1.5 UNITS
Total Lecture: 27 hours
Advisory: KIN 077
Acceptable for credit: California State University
This course is design 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 073  FITNESS TESTING  1.5 UNITS
Total Lecture: 9 hours, Total Lab: 54 hours
Advisory: KIN 074
Acceptable for credit: California State University
This course is designed specifically for the fitness specialist or enthusiast who is interested in learning to administer basic fitness tests that can be used to evaluate an individual’s strength, flexibility, cardiovascular endurance, body composition and posture. The standards for evaluating these tests are discussed as well as principles used in designing an exercise prescription. Pass/No Pass Option.

KIN 074  ANATOMY AND KINESIOLOGY  1.5 UNITS
Total Lecture: 27 hours
Acceptable for credit: California State University
This course is designed specifically for the fitness specialist who needs a basic understanding of exercise physiology, anatomy, and kinesiology. The information discussed within the course is relevant for use in the teaching of fitness and aerobic dance classes as well as for the personal trainer. Pass/No Pass Option.

KIN 075  BODY ALIGNMENT AND STRETCHING TECHNIQUES  1.5 UNITS
Total Lecture: 9 hours, Total Lab: 54 hours
Advisory: KIN 074
Acceptable for credit: California State University
This course is designed for the fitness specialist or enthusiast. Emphasis is placed upon identifying efficient body alignment, outlining techniques for achieving correct alignment, and designing programs that enhance correct body alignment. Proper stretching techniques and various stretching styles are also covered. Pass/No Pass Option.

KIN 076  WEIGHT TRAINING PRINCIPLES AND ROUTINES  1.5 UNITS
Total Lecture: 9 hours, Total Lab: 54 hours
Advisory: KIN 074
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 087  INTERCOLLEGIATE SOCCER  3.0 UNITS  
Total Lab: 162 hours  
Acceptable for credit: University of California, California State University  
This course is designed to allow the student the opportunity to further their soccer skills at a competitive, intercollegiate level. This course may be repeated 3 times. 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: KIN 094  
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 intercollegiate baseball competition for men. This course is designed to allow the student the opportunity to further their baseball skills at a competitive, intercollegiate level. Pass/No Pass Option. CSUGE: E.

KIN 091  INTERCOLLEGIATE SOCCER  3.0 UNITS  
Total Lab: 162 hours  
Advisory: KIN 095  
Acceptable for credit: California State University, University of California  
This course is designed to allow the student the opportunity to further their soccer skills at a competitive, intercollegiate level. 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. Pass/No Pass Option. CSUGE: E.
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 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 940  LEARNING STRATEGIES FOR BASIC WRITING SKILLS  3.0 UNITS  
Total Lecture: 54 hours  
This course stresses the practical application of strategies for students who experience difficulties with written language. The course focuses on simple sentence, paragraph, essay development, and grammar using multi-sensory techniques. 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.
Non-degree applicable course.

PASS/NO PASS OPTION, SATISFACTORY PROGRESS.

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 sequence covering mathematical strategies for students with disabilities who have had 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 000CM  INTERMEDIATE ALGEBRA (MAPS)  5.0 UNITS

Total Lecture: 90 hours

Prerequisite: Completion of the Mission College Placement Process Assistance prior to registration.

Corequisite: MAT 00CMX

MAT 000CM is the second course in the MAPS Algebra sequence that will prepare students to meet the math requirement for the associate degree. The MAPS program is designed for the student who has had difficulty in mathematics. Extended classroom hours in this sequence allow students to participate in various conceptual activities to build a stronger foundation in the fundamental concepts. Special attention is paid to presenting the material in various modalities to meet the needs of the students. 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. Concurrent enrollment in MAT 00CMX is mandatory. This course is approved for credit by exam. Pass/No Pass Option.
STEM MATH COURSE PROGRESSION

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 00CMX INTERMEDIATE ALGEBRA WITH MAPS EXTRA

Total Lecture: 54 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration.
Corequisite: MAT 000CM

This lecture course is a corequisite for MAT 000CM. This course provides students with additional lecture time, and consequently additional required homework assignments, in order for them to fully engage and succeed in the enhanced and innovative learning strategies and activities used by the MAPS program. Pass/No Pass Only.

MAT 000D TRIGONOMETRY

Total Lecture: 54 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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, MATH 955. CSUGE: B4.

MAT 000G MATHEMATICS FOR THE LIBERAL ARTS STUDENT

Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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. C-ID # MATH 851, MATH 955. CSUGE: B4; IGETC: 2A.

MAT 001 COLLEGE ALGEBRA

Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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

Total Lecture: 108 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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/B sequence. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 220. CSUGE: B4; IGETC: 2A.

MAT 003A ANALYTIC GEOMETRY AND CALCULUS I

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

Total Lecture: 90 hours
Prerequisite: (MAT 000D and MAT 001) or MAT 002
Acceptable for credit: California State University; University of California

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

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 250 CSUGE: B4; IGETC: 2A.

MAT 004C  LINEAR ALGEBRA  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: MAT 003B
Advisory: MAT 004A
Acceptable for credit: University of California, California State University
The student studies and demonstrates knowledge and understanding of basic linear algebra and its applications. Topics include systems of linear equations and Gaussian elimination, determinants, matrices, vector spaces, transformations, eigenvalues and eigenvectors. Pass/No Pass Option. C-ID # MATH 250. CSUGE: B4; IGETC: 2A.

MAT 005  PROGRAMMING AND PROBLEM-SOLVING IN MATLAB  3.0 UNITS
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 graphing, data import and export, curve fitting, recursion and applications in engineering, physics, and mathematics. Pass/No Pass Option. C-ID # ENGR 220.

MAT 009  INTEGRATED STATISTICS II  5.0 UNITS
Total Lecture: 90 hours
Prerequisite: MAT 009
Acceptable for credit: University of California, California State University
This is the second of two courses in the Statway sequence. Students study and demonstrate concepts and methods of statistics with an emphasis on data analysis. Topics include methods for collecting data, descriptive statistics, correlation and simple linear regression, basic concepts of probability, confidence intervals and hypothesis tests, chi-square tests, and ANOVA. Particular emphasis is placed on applications. Current statistical technology packages are used. This sequence is recommended for students with majors that require no mathematics beyond freshman-level statistics. Successful completion of both Math 909 and Math 009 is required to satisfy CSU and UC transferability. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 010  ELEMENTARY STATISTICS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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 linear regression, probability, probability distributions and assorted hypothesis testing. Particular emphasis is placed on applications. Current statistical computer packages are used. This course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 110. CSUGE: B4; IGETC: 2A.

MAT 010H  ELEMENTARY STATISTICS HONORS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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 assorted hypothesis testing. Particular emphasis is placed on applications and data analysis. Current statistical computer packages are used. Students may not receive credit for both MAT 010 and MAT 010H. Enrollment in the Honors Transfer Project is required. Pass/No Pass Option. C-ID # MATH 110. CSUGE: B4; IGETC: 2A.

MAT 010X  ELEMENTARY STATISTICS WITH ADDITIONAL SUPPORT  6.0 UNITS
Total Lecture: 108 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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 linear regression, probability, probability distributions and assorted 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. Pass/No Pass Option. CSUGE: B4; IGETC: 2A.

MAT 012  CALCULUS FOR BUSINESS  4.0 UNITS
Total Lecture: 72 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 00CMX or High School Algebra II
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. Pass/No Pass Option. C-ID # MATH 140. CSUGE: B4; IGETC: 2A.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAT 019</td>
<td>DISCRETE MATHEMATICS</td>
<td>4.0</td>
<td>The student studies and demonstrates knowledge and understanding of the discrete mathematics appropriate for computer applications. Topics may include graphs, sets, logic, mathematical induction, functions and relations, sequences and series, matrices, combinatorics, Boolean algebra and algebraic structures such as groups, rings and fields. The course is approved for credit by exam. Pass/No Pass Option. C-ID # MATH 160. CSUGE: B4; IGETC: 2A.</td>
</tr>
<tr>
<td>MAT 900DX</td>
<td>MATH SKILLS FOR SUCCESS IN TRIGONOMETRY</td>
<td>2.0</td>
<td>Math Skills for Success in Trigonometry is for students concurrently enrolled in MAT 000D. This course will review algebraic and basic geometric topics that underlie Trigonometry concepts and practice reading skills and other study skills that promote success in MAT 000D. Concurrent enrollment in MAT 000D is required. Pass/No Pass Only. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 901X</td>
<td>MATH SKILLS FOR SUCCESS IN COLLEGE ALGEBRA</td>
<td>2.0</td>
<td>Math Skills for Success in College Algebra is for students concurrently enrolled in MAT 001. In this course students will review algebraic and basic geometric topics that underlie College Algebra concepts and practice reading skills and other study skills that promote success in MAT 001. Concurrent enrollment in MAT 001 is required. Pass/No Pass Only. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 902</td>
<td>PRE-ALGEBRA</td>
<td>4.0</td>
<td>This course is designed for those students who have a solid foundation in arithmetic skills but need to develop those skills further before taking Algebra. Topics include a review and practice in fundamental arithmetic operations involving integers, fractions, decimals and percent, some basic operations involving polynomials, solving and graphing linear equations, and some practical applications. This course is approved for credit by exam. Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 903</td>
<td>ELEMENTARY ALGEBRA</td>
<td>5.0</td>
<td>Course topics include operations with real numbers; properties of real numbers and signed exponents; solving and graphing linear equations; solving linear inequalities; functions; factoring polynomials; solving quadratic equations by factoring; simplifying rational expressions; solving rational equations; applications of linear, quadratic, and rational equations; and working with scientific notation. The course is designed for the student who has had no previous instruction in algebra, or for the student who needs a review of elementary algebra. This course is approved for credit by exam. Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 903M</td>
<td>ELEMENTARY ALGEBRA (MAPS)</td>
<td>5.0</td>
<td>MAT 903M is the first course in the MAPS Algebra II series. It prepares students to meet the math requirement for the associate degree. The MAPS program is designed for the student who has had difficulty in mathematics. Extended classroom hours in this sequence allow students to participate in various conceptual activities to build a stronger foundation in the fundamental concepts. Special attention is taken to present the material in various modalities to meet the needs of the students. Course topics include operations with real numbers; properties of real numbers and signed exponents; solving and graphing linear equations; solving linear inequalities; functions; factoring polynomials; solving quadratic equations by factoring; simplifying rational expressions; solving rational equations; applications of linear, quadratic, and rational equations; and working with scientific notation. Concurrent enrollment in MAT 903MX is mandatory. This course is approved for credit by exam. Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 909</td>
<td>INTEGRATED STATISTICS I</td>
<td>5.0</td>
<td>This is the first of two courses in the Statway sequence. Students study and demonstrate concepts and methods of statistics with an emphasis on data analysis. Topics include methods for collecting data, descriptive statistics, introduction to simple linear regression, and basic concepts of probability. Particular emphasis is placed on applications. Current statistical technology packages are used. This sequence is recommended for students with majors that require no mathematics beyond freshman-level statistics. Successful completion of both MAT 909 and MAT 009 is required to satisfy CSU and UC transferability. Pass/No Pass Only. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 910X</td>
<td>MATH SKILLS FOR SUCCESS IN STATISTICS</td>
<td>2.0</td>
<td>This lecture course is a co-requisite for MAT 903M. This course provides additional lecture time, and consequently additional required homework assignments, in order for them to fully engage and succeed in the enhanced and innovative learning strategies and activities employed by the MAPS program. Pass/No Pass Only. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 910</td>
<td>PRE-ALGEBRA</td>
<td>4.0</td>
<td>This course is designed for those students who have a solid foundation in arithmetic skills but need to develop those skills further before taking Algebra. Topics include a review and practice in fundamental arithmetic operations involving integers, fractions, decimals and percent, some basic operations involving polynomials, solving and graphing linear equations, and some practical applications. This course is approved for credit by exam. Pass/No Pass Option. Non-degree applicable course.</td>
</tr>
<tr>
<td>MAT 910X</td>
<td>MATH SKILLS FOR SUCCESS IN STATISTICS</td>
<td>2.0</td>
<td>This lecture course is a co-requisite for MAT 903M. This course provides additional lecture time, and consequently additional required homework assignments, in order for them to fully engage and succeed in the enhanced and innovative learning strategies and activities employed by the MAPS program. Pass/No Pass Only. Non-degree applicable course.</td>
</tr>
</tbody>
</table>
MAT 912X  MATH SKILLS FOR SUCCESS IN CALCULUS FOR BUSINESS  2.0 UNITS
Total Lecture: 36 hours
Prerequisite: Completion of the Mission College Placement Process prior to registration or MAT 000C or MAT 000CM or MAT 000CMX or High School Algebra II Corequisite: MTT 012
Math Skills for Success in Calculus for Business is for students concurrently enrolled in MAT 012. In this course students will review algebraic and basic geometric topics that underlie Calculus for Business concepts and practice reading skills and other study skills that promote success in MAT 012. Concurrent enrollment in MAT 012 is required. Pass/No Pass Option. Non-degree applicable course.

MAT 970  PROBLEM SOLVING IN MATHEMATICS  1.0 UNIT
Total Lecture: 18 hours
This course introduces the student to various problem solving techniques, and develops mathematical and critical thinking skills. Pass/No Pass Option. Non-degree applicable course.

MECHATRONIC TECHNOLOGY (MTT)

MTT 010  INTRODUCTION TO TECHNOLOGY AND CAREERS  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
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. Pass/No Pass Option.

MTT 012  ELECTRONIC SYSTEMS MEASUREMENT AND TROUBLESHOOTING  2.0 UNITS
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. Pass/No Pass Option.

MTT 020  PROGRAMMABLE LOGIC CONTROLLER (PLC) PROCESS CONTROL SYSTEMS  2.0 UNITS
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). Pass/No Pass Option.

MTT 022  PROGRAMMABLE LOGIC CONTROLLER (PLC) AND ROBOTIC SYSTEM COMPONENTS  2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Advisory: MTT 020
This course explores the integration of sensors, indicators, controllers, and final control elements for Programmable Logic Controller (PLC) and robotic systems. Closed loop control theory, Process/Piping and Instrumentation Diagram (P&ID), loop tuning, and control loop troubleshooting are also covered. Students will also learn process control system design and Proportional-Integral-Derivative (PID) tuning. Pass/No Pass Option.

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 Drive (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 language is 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.
MUS 007 COMMERCIAL MUSIC THEORY II 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MUS 006
Acceptable for credit: California State University, California State University
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, including rock, pop, jazz, music for visual media, music for business and advertising applications. Pass/No Pass Option. C-ID # MUS 140. CSUGE: C1; IGETC: 3A.

MUS 008 COMMERCIAL MUSIC THEORY III 3.0 UNITS
Total Lecture: 54 hours
Prerequisite: MUS 007
Acceptable for credit: California State University, California State University
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.
<table>
<thead>
<tr>
<th>COURSE CODE</th>
<th>COURSE NAME</th>
<th>UNITS</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 031B</td>
<td>INTERMEDIATE PIANO II</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 031C</td>
<td>INTERMEDIATE PIANO III</td>
<td>1.0</td>
<td>This course is a continuation of MUS 031B. 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.</td>
</tr>
<tr>
<td>MUS 032A</td>
<td>BEGINNING VOICE I</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 032B</td>
<td>BEGINNING VOICE II</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 033A</td>
<td>INTERMEDIATE VOICE I</td>
<td>1.0</td>
<td>This is an advanced-intermediate level course in guitar for students who have successfully completed MUS 036C. 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.</td>
</tr>
<tr>
<td>MUS 033B</td>
<td>INTERMEDIATE VOICE II</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 036A</td>
<td>BEGINNING GUITAR I</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 036B</td>
<td>BEGINNING GUITAR II</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 036C</td>
<td>INTERMEDIATE GUITAR I</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 036D</td>
<td>INTERMEDIATE GUITAR II</td>
<td>1.0</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 039A</td>
<td>ADVANCED PIANO MASTERCLASS I</td>
<td>1.0</td>
<td>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.</td>
</tr>
</tbody>
</table>

C-ID # MUS 180.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Units</th>
<th>Description</th>
<th>Prerequisites</th>
<th>Acceptable for credit:</th>
<th>Advisory:</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUS 039B</td>
<td>ADVANCED PIANO MASTERCLASS II</td>
<td>1.0</td>
<td>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. Students participate in public performances. Attendance at all scheduled performances is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 090</td>
<td>University of California, California State University</td>
<td>Students will audition for the instructor to demonstrate their instrumental skill level.</td>
</tr>
<tr>
<td>MUS 039C</td>
<td>ADVANCED PIANO MASTERCLASS III</td>
<td>1.0</td>
<td>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 scheduled performances is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 039B</td>
<td>University of California, California State University</td>
<td>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 is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 039D</td>
<td>ADVANCED PIANO MASTERCLASS IV</td>
<td>1.0</td>
<td>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 is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 039C</td>
<td>University of California, California State University</td>
<td>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 is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 041A</td>
<td>MISSION CHORUS I</td>
<td>1.0</td>
<td>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.</td>
<td>MUS 041B</td>
<td>University of California, California State University</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 041B</td>
<td>MISSION CHORUS II</td>
<td>1.0</td>
<td>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 scheduled performances is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 041A</td>
<td>University of California, California State University</td>
<td>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 scheduled performances is required. New works of orchestral music are performed each semester. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 041C</td>
<td>MISSION CHORUS III</td>
<td>1.0</td>
<td>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, identification of chromatic intervals and dominant chords. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 041D</td>
<td>University of California, California State University</td>
<td>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 is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 041D</td>
<td>MISSION CHORUS IV</td>
<td>1.0</td>
<td>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 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 advanced level choral music. Pass/No Pass Option. C-ID # MUS 180.</td>
<td>MUS 041C</td>
<td>University of California, California State University</td>
<td>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 scheduled performances is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 048A</td>
<td>SYMPHONY ORCHESTRA I</td>
<td>1.0</td>
<td>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.</td>
<td>MUS 048B</td>
<td>University of California, California State University</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 048B</td>
<td>SYMPHONY ORCHESTRA II</td>
<td>1.0</td>
<td>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.</td>
<td>MUS 048A</td>
<td>University of California, California State University</td>
<td>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.</td>
</tr>
<tr>
<td>MUS 048C</td>
<td>SYMPHONY ORCHESTRA III</td>
<td>1.0</td>
<td>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 is required. New works of orchestral music are performed each semester. Students must provide their own instrument. Pass/No Pass Option.</td>
<td>MUS 048D</td>
<td>University of California, California State University</td>
<td>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 is required. New works of orchestral music are performed each semester. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
<tr>
<td>MUS 048D</td>
<td>SYMPHONY ORCHESTRA IV</td>
<td>1.0</td>
<td>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 is required. New works of orchestral music are performed each semester. Pass/No Pass Option.</td>
<td>MUS 048C</td>
<td>University of California, California State University</td>
<td>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 is required. New works of orchestral music are performed each semester. Pass/No Pass Option. C-ID # MUS 180.</td>
</tr>
</tbody>
</table>
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 it applies 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 course 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 prepares 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 BASIC SKILLS (NCB)

Noncredit instruction provides students with access to a variety of free, open-entry/open exit courses to assist them in reaching their personal, academic and professional goals. Noncredit courses do not have credit or unit values associated with them, vary in the number of hours of instruction and do not have Prerequisites or repeatability restrictions.

NCO 901 STRATEGIES TO IMPROVE WRITING NONCREDIT
Total: 54 Hours
Prerequisite: ESL 960GW and ESL 960LS and ESL 960RV
Advisory: ENG 905
This course gives basic skills students practice using various writing techniques that prepares them for transfer-level courses. Essay level strategies are the focus of this class. Non-degree applicable course.

NCO 902 STRATEGIES TO IMPROVE WRITING NONCREDIT
Total: 54 Hours
Prerequisite: ESL 970RW
Advisory: ENG 905 and ESL 970G and ESL 970LS
This course gives basic skills students practice using various writing techniques that prepare them for their transfer-level courses. Essay level strategies are the focus of this class. Non-degree applicable course.

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 1 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.

NONCREDIT ENGLISH AS A SECOND LANGUAGE

PLEASE REFER TO ENGLISH AS A SECOND LANGUAGE FOUND ALPHABETICALLY IN THE CATALOG.
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 to 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.

NCO 3909 THE JOY OF ART NONCREDIT
Total: 36 hours
This course is for the older adult who is interested in working in applying various techniques to the creation of independent art projects. Satisfactory Progress, Pass/No Pass. Non-degree applicable course.
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.

PHYSICS (PHY)

PHY 002A GENERAL PHYSICS - MECHANICS AND THERMODYNAMICS 5.0 UNITS
Total Lecture: 72 hours, Total Lab: 54 hours
Prerequisite: MAT 003B and PHY 004A
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, PHYS 105. 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, 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: University of California, California State University
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. 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. Kirchhoff’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. CSUGE: B1; IGETC: 5A.
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, POLS 120. CSUGE: D8; 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: D8; 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: D8; IGETC: 4H.

POL 003  INTRODUCTION TO POLITICAL THEORY  3.0 UNITS
Total Lecture: 54 hours
Acceptable for credit: University of California, California State University
The course familiarizes students with central debates in political theory and provided an overview of the works of some of theories of politics, from the classical to the modern. It is organized around the examination of several key political concepts, such as liberty, equality, justice, authority, rights, citizenship, and revolution. Pass/No Pass Option. C-ID # POLS 120. CSUGE: C2, D2; IGETC: 3B, 4G.

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 005  POLITICAL SCIENCE RESEARCH METHODOLOGY  3.0 UNITS
Total Lecture: 54 hours
Advisory: POL 001 or a college level course in any political or social science field. Acceptable for credit: University of California, California State University
The purpose of the course is to give Political Science majors the necessary tools to understand and critique the methodology and research designs of the scholars in the fields contributing to the discipline. While there is some discussion of statistics, the emphasis is on the Why of research rather than merely the How. The basics of Measurement -- validity, reliability, instrumentation, and the collection and interpretation of data -- are introduced. Students explore the strengths and weaknesses of the various forms of analyses of the Qualitative and Quantitative methods of research. The ethical issues of political research and the importance of IRB review are discussed. Pass/No Pass Option. C-ID # POLS 160. 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.

PSYCHOLOGY (PSY)

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/rejection, 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. 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: D10, E; IGETC: 4J.

**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.

**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.

**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 # SOCI 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 # SOCI 110. CSUGE: D; IGETC: 4.

**SOC 002** SOCIAL PROBLEMS 3.0 UNITS
Total Lecture: 54 hours
Advisory: SOC 001
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. Pass/No Pass Option. C-ID # SOCI 115. CSUGE: D; IGETC: 4.

**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: (MAT 000C or High School Algebra II) and (PSY 001 or PSY 001H or SOC 001 or SOC 001H)
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. CSUGE: D, E; IGETC: 4.

SOC 047  SOCIOLOGY OF CRIMINOLOGY  3.0 UNITS
Total Lecture: 54 hours
Advisory: SOC 001
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# SOCI 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 U.S. justice system, particularly the structure and function of U.S. 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  5.0 UNITS
(ELEMENTARY LEVEL)
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. Pass/No Pass Option. C-ID # SPAN 100. CSUGE: C2; IGETC: 6A
### Transportation (TRN)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Course Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 101</td>
<td>Foundations of Public Service for Transit Workers</td>
<td>2.0</td>
<td>Introduction 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.</td>
</tr>
<tr>
<td>TRN 102</td>
<td>Public Service and Stress Management for Transit Employees</td>
<td>1.0</td>
<td>Introduction 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.</td>
</tr>
<tr>
<td>TRN 103</td>
<td>Community Health Issues for Public Transit Employees</td>
<td>1.0</td>
<td>Introduction 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.</td>
</tr>
<tr>
<td>TRN 104</td>
<td>Peer Mentoring for Public Transit Workers: One-on-One Skills</td>
<td>1.0</td>
<td>Introduction to the relationship between delivering professional public service and managing stress factors inherent in the transit industry. 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.</td>
</tr>
</tbody>
</table>
TRN 105 GROUP FACILITATION AND TRAINING SKILLS FOR PEER MENTORS 1.0 UNIT
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.

TRN 106 INTERPERSONAL COMMUNICATION FOR TRANSIT WORKERS 1.0 UNIT
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.

TRN 107 LABOR/MANAGEMENT PROBLEM SOLVING IN PUBLIC TRANSIT 1.0 UNIT
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.

TRN 108 PERFORMANCE COACHING FOR PUBLIC TRANSIT LEADERS 1.0 UNIT
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.

TRN 109 TRANSIT BUSINESS TECHNOLOGY AND PRACTICES FOR TRANSIT EMPLOYEES 1.0 UNIT
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 110 TRANSIT OPERATIONS FOR NEW LEADERS 2.0 UNITS
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.

TRN 121 WAY, POWER, & SIGNAL MAINTENANCE CORE TRAINING I 1.0 UNIT
Total Lecture: 9 hours, Total Lab: 27 hours
Students are introduced to the Way, Power, and Signal shop floor and basic safety protocols. This course prepares students for positions in light rail maintenance. This course is approved for credit by exam. Pass/No Pass Option.

TRN 122 WAY, POWER, & SIGNAL MAINTENANCE CORE TRAINING II 1.0 UNIT
Total Lecture: 18 hours
Students are introduced to ladder safety, basic Traffic Control, electrical safety, and lockout/tag out security. This course prepares students for positions in light rail maintenance. This course is approved for credit by exam. Pass/No Pass Option.

TRN 123 WAY, POWER, & SIGNAL MAINTENANCE CORE TRAINING III 1.0 UNIT
Total Lecture: 18 hours
Students are introduced to rail certification (rules and regulations) and roadway worker protection (safety in the railroad environment). This course prepares students for positions in light rail maintenance. 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 rail 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 maintenance, rail joint maintenance, 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.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRN 142</td>
<td>ELECTRICAL SAFETY FOR THE TRADES</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td>PREREQ:</td>
<td>Per California Code of Regulations, this course</td>
<td></td>
</tr>
<tr>
<td></td>
<td>is limited to students admitted to the Overhead</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Line Core apprenticeship program at Santa Clara</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Valley Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers basic principles of electricity</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and the potential dangers it can pose to humans.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Safety topics include electrical hazards, use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of electrical protective devices, and safe work</td>
<td></td>
</tr>
<tr>
<td></td>
<td>practices around electricity. Per California</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code of Regulations, this course is limited to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students admitted to the Overhead Line Core</td>
<td></td>
</tr>
<tr>
<td></td>
<td>apprenticeship program at Santa Clara Valley</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation Authority. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 143</td>
<td>DC THEORY AND POWER COMPONENTS</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 36 hours</td>
<td></td>
</tr>
<tr>
<td>ADVISORY:</td>
<td>MAT 903 or High School Algebra I</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers DC (Direct Current) theory</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and various power components used in overhead</td>
<td></td>
</tr>
<tr>
<td></td>
<td>line work. Per California Code of Regulations,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>this course is limited to students admitted to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Overhead Line Core apprenticeship program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>at Santa Clara Valley Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td>TRN 144</td>
<td>TRACTION POWER SAFETY PRACTICES</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers safe practices for the use</td>
<td></td>
</tr>
<tr>
<td></td>
<td>of traction power systems. Per California</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Code of Regulations, this course is limited to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>students admitted to the Overhead Line Core</td>
<td></td>
</tr>
<tr>
<td></td>
<td>apprenticeship program at Santa Clara Valley</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation Authority. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 151</td>
<td>OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS</td>
<td>2.5</td>
</tr>
<tr>
<td>I</td>
<td>Total Lecture: 36 hours, Total Lab: 27 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers high voltage, NFPA70E, red</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tag power outage procedures, print reading and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>documentation, and hand and power tools. Per</td>
<td></td>
</tr>
<tr>
<td></td>
<td>California Code of Regulations, this course is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>limited to students admitted to the Overhead</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Line Worker apprenticeship program at Santa</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Clara Valley Transportation Authority. Pass/No</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 152</td>
<td>OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS</td>
<td>2.5</td>
</tr>
<tr>
<td>II</td>
<td>Total Lecture: 27 hours, Total Lab: 54 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers traction power tools and test</td>
<td></td>
</tr>
<tr>
<td></td>
<td>equipment, traction power substations, power</td>
<td></td>
</tr>
<tr>
<td></td>
<td>distribution and control, and overhead contact</td>
<td></td>
</tr>
<tr>
<td></td>
<td>systems. Per California Code of Regulations,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>this course is limited to students admitted to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Overhead Line Worker apprenticeship program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>at Santa Clara Valley Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 153</td>
<td>OVERHEAD LINE WORKER APPRENTICESHIP FUNDAMENTALS</td>
<td>2.5</td>
</tr>
<tr>
<td>III</td>
<td>Total Lecture: 36 hours, Total Lab: 27 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers fall protection, rigging and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>hoisting, hi-rail vehicles, bucket truck and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>bucket rescue, grounding, and confined space</td>
<td></td>
</tr>
<tr>
<td></td>
<td>entry. Per California Code of Regulations, this</td>
<td></td>
</tr>
<tr>
<td></td>
<td>course is limited to students admitted to the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overhead Line Worker apprenticeship program at</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Santa Clara Valley Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 154</td>
<td>CATENARY SAFE WORK PRACTICES</td>
<td>5.0</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 72 hours, Total Lab: 54 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers the hazards of working on</td>
<td></td>
</tr>
<tr>
<td></td>
<td>overhead catenary lines, and how to effectively</td>
<td></td>
</tr>
<tr>
<td></td>
<td>protect against them. Per California Code of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regulations, this course is limited to students</td>
<td></td>
</tr>
<tr>
<td></td>
<td>admitted to the Overhead Line Worker</td>
<td></td>
</tr>
<tr>
<td></td>
<td>apprenticeship program at Santa Clara Valley</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Transportation Authority. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 155</td>
<td>MOBILE CRANE - BOOM TRUCK</td>
<td>2.0</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 27 hours, Total Lab: 27 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers safe use of the mobile crane</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(boom truck). Per California Code of Regulations,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>this course is limited to students admitted to</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the Overhead Line Worker apprenticeship program</td>
<td></td>
</tr>
<tr>
<td></td>
<td>at Santa Clara Valley Transportation Authority.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 201</td>
<td>SERVICE MECHANIC: ORIENTATION &amp; SAFETY</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers an orientation to VTA, the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>mechanic helper program, the shop floor,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>familiarization with the fleet, and electrical</td>
<td></td>
</tr>
<tr>
<td></td>
<td>safety. This course is approved for credit by</td>
<td></td>
</tr>
<tr>
<td></td>
<td>exam. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 202</td>
<td>SERVICE MECHANIC: TOOLS &amp; FASTENERS</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course focuses on tools and fasteners:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>correct work methods, care and selection of</td>
<td></td>
</tr>
<tr>
<td></td>
<td>tools, common tools and uses, and common</td>
<td></td>
</tr>
<tr>
<td></td>
<td>fasteners and uses. This course is approved for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>credit by exam. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 203A</td>
<td>SERVICE MECHANIC: ELECTRICAL/ ELECTRONICS 1</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers direct current, circuits,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ohm’s Law, and Watt’s Law. This course is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>approved for credit by exam. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 203B</td>
<td>SERVICE MECHANIC: ELECTRICAL/ ELECTRONICS 2</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Advisory: TRN 203A</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers batteries, starters, and the</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATEC course on wiring, circuits, and schematics.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course is approved for credit by exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 204</td>
<td>SERVICE MECHANIC: AIR BRAKES</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course introduces students to the air</td>
<td></td>
</tr>
<tr>
<td></td>
<td>brake system used on VTA buses. Classroom</td>
<td></td>
</tr>
<tr>
<td></td>
<td>theory on brake systems along Federal Motor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Vehicle Safety Standards (FMVSS) will be</td>
<td></td>
</tr>
<tr>
<td></td>
<td>emphasized. Topics include: air foundation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>brakes, air supply system, air service circuits,</td>
<td></td>
</tr>
<tr>
<td></td>
<td>special circuits, and mechanical components.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course is approved for credit by exam.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 205</td>
<td>SERVICE MECHANIC: TRANSMISSION</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course covers transmission, including</td>
<td></td>
</tr>
<tr>
<td></td>
<td>safety, driveline checks, hydraulics, and other</td>
<td></td>
</tr>
<tr>
<td></td>
<td>related topics. This course is approved for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>credit by exam. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 206</td>
<td>SERVICE MECHANIC: DIESEL ENGINE</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course focuses on diesel engine theory and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>components. This course is approved for</td>
<td></td>
</tr>
<tr>
<td></td>
<td>credit by exam. Pass/No Pass Option.</td>
<td></td>
</tr>
<tr>
<td>TRN 207</td>
<td>SERVICE MECHANIC: HYBRID FAMILIARIZATION</td>
<td>2.5</td>
</tr>
<tr>
<td></td>
<td>Total Lecture: 45 hours</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This course focuses on hybrid engine systems and</td>
<td></td>
</tr>
<tr>
<td></td>
<td>the different ways to work with them vs.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>traditional diesel engines. This course is</td>
<td></td>
</tr>
<tr>
<td></td>
<td>approved for credit by exam. Pass/No Pass Option.</td>
<td></td>
</tr>
</tbody>
</table>
TRN 208  SERVICE MECHANIC: I/O CONTROLS 2.5 UNITS
Total Lecture: 45 hours
This course focuses on Input/Output controls found on hybrid vehicles (onboard computer). This course is approved for credit by exam. Pass/No Pass Option.

TRN 209  SERVICE MECHANIC: PREVENTATIVE MAINTENANCE - PMI 2.5 UNITS
Total Lecture: 45 hours
This course focuses on preventative maintenance practices, such as routine inspections. This course is approved for credit by exam. Pass/No Pass Option.

TRN 210  SERVICE MECHANIC: OVERHAUL & REPAIR ORIENTATION 2.5 UNITS
Total Lecture: 45 hours
This course focuses on an overview of the Overhaul and Repair Department at public transit agencies. This course is approved for credit by exam. Pass/No Pass Option.

TRN 301  THE ART OF TRAINING FOR TRANSIT I 2.0 UNITS
Total Lecture: 18 hours, Total Lab: 54 hours
Prerequisite: TRN 301
This course is part of the Art of Training for Transit series designed for transit trainers to achieve personal mastery in the three keys of teaching artistry: Preparation, Teaching, and Reflection. Students will learn the characteristics of a professional trainer and the fundamentals of instructional design. Students will build their skills through practical labs and written journals throughout the course. This course, as part of the Art of Training for Transit series, is appropriate for both new trainers and experienced trainers, especially those who teach in transit apprenticeships or other formal training programs. 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.

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 technical proficiency with coach equipment, troubleshooting, and vehicle inspection. 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 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 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: ORANGE 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
The Light Rail Infrastructure: Orange Line Familiarization course is required for employees that will operate light rail vehicles beyond in revenue service between the Alum Rock Terminal and Mountain View Terminal. The Orange Line Familiarization focuses on the specific infrastructure found on the orange 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 503D 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 Ironsides 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.

VIE 001 FIRST SEMESTER VIETNAMESE (ELEMENTARY LEVEL) 5.0 UNITS
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: 3B.

VIE 002 SECOND SEMESTER VIETNAMESE (INTERMEDIATE LEVEL) 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.

<table>
<thead>
<tr>
<th>UNITS OF CREDIT</th>
<th>AVERAGE HOURS WORK PER WEEK REQUIRED</th>
<th>TOTAL HOURS</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>5 - 9</td>
<td>75</td>
</tr>
<tr>
<td>2</td>
<td>10 - 14</td>
<td>150</td>
</tr>
<tr>
<td>3</td>
<td>15 - 19</td>
<td>225</td>
</tr>
<tr>
<td>4</td>
<td>20+</td>
<td>300</td>
</tr>
</tbody>
</table>

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 does not apply. Student total of 6 units may be earned in general work experience.

Cooperative Work Experience Education units are repeatable. A student may earn a total of 16 credit per semester.

Students working in non-paid positions need to work 60 hours per unit of credit per semester.

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 (180 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 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
President, Anne Kepner
Vice President, Adrienne Grey
Trustee, Susan Fish
Trustee, Randi Kinman
Trustee, Jack Lucas
Trustee, Robert Owens
Trustee, Karl Watanabe
Student Trustee, Casey Chang

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, Business, Technology and Kinesiology, Jeff Pallin
Dean, Career and Technical Education, Jacqueline Escajeda
Dean, Enrollment and Financial Services, Veronica Martinez
Dean, Health Occupations, Yuko Kawasaki
Dean, Humanities, Social Sciences and Fine Arts, Brian Miller
Dean, Language Arts, Vacant
Dean, Math, Science and Engineering, Clement Lam
Dean, Student Support Services, Richard Alfaro
Executive Director, Athletics, John Vlahos
Director, Child Development Center, Anne Horgan
Director, DSPS and VALOR, Debra Williams
Director, EOPS/CARE/CalWORKs, Diego Espinoza
Director, HSI-STEM Program, Inez Barragan
Director, International Programs, Chigusa Katoku
Director, Marketing, Niall Adler
Director, Math, Engineering, Science, Achievement (MESA), Edrina Rashidi
Director, Outreach and Student Development, Connor Keese
Director, Student Equity and Success, Ken Songco
Director, Student Health Services, Vacant
Director, TRIO Program, Manuel Salazar

Mission College Department Chairs*
Academic Support Center, Chia Green
Accounting, Jennifer Tseng
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 Mortezai
Counseling, Thuy Trang
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, Marsha Oliver
History, RaeAnn Ramsey
Hospitality Management, Daniel Arias
Humanities, RaeAnn Ramsey
Kinesiology, Brenna Wundram
Learning Services, Thuy Trang
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 Staff

ANAYA, SUSANA
Office Coordinator, HSI-STEM

BADAL ABDISHOU, ELEEN
Student Enrollment & Financial Services Advisor, Financial Services

BAUTISTA, JONNA
Duplicating Services Assistant, Office of Administrative Services

BIALOGLOVSKI, BERNADETTE
Office Coordinator, Student Health Services

BIBAT, CHRISTOPHER
Financial Analyst, Office of Administrative Services

BOGATIN-STARR, ELIZABETH
Administrative Assistant, Academic Senate

CARDENAS LANZA, CESAR
Enrollment & Financial Services Advisor, Student Enrollment Services

CHENG, TINA
Administrative Specialist, Academic Services

CHONG, JOUNEY
Program Specialist, International Students

CRIEL, LISA
Senior Child Development Specialist, Child Development Center

DARRELL, TRICIA
Program Specialist, Child Development Center

DASALLA, ANALIZA
Program Specialist, Community Education & Admissions and Records

DE LA CRUZ, KRISTAL
Management Assistant, Office of Administrative Services

DE LOS REYES, MELISSA
Management Analyst, Office of Administrative Services

DO, THANH
Senior Information Technology Analyst, Student Services

FOOT, THUY
Administrative Specialist, Humanities, Social Science and Fine Arts

GAITAN, BEVERLY
Administrative Specialist, Health Occupations

GALANG, ROEHL
Financial Aid Advisor, Financial Services

GERARDO, RAYMOND
Educational Testing Specialist, Placement & Assessment Services

GONZALES, GENINA
Management Assistant, Office of Instruction

HAMPSON, LORI
Administrative Specialist, Career Technical Education

HANSEN, NATALIE
Administrative Assistant, Athletics/Marketing

HARRISON, KENDALL
Office Coordinator, Career Technical Education Program

FEDALIZO, EDWARD
Instructional Technology Analyst (Distance Education)

HOUSE-NELSON, KERRY
Senior Child Development Specialist, Child Development Center

JOHNSGARD, MELISSA
Supervisor, Mental Health Services

KAST, DENISE
Senior Library Media Technician, Library

LAU, MICHAEL
Enrollment & Financial Services Advisor, Student Enrollment Services

LE, DIEMANH
Enrollment & Financial Services Advisor, Admissions and Records

LEE, CHARLENE
Registered Nurse, Student Health Services

LOI, MY
Administrative Specialist, Student Services

LU, XUAN
Program Assistant, Disability Support Programs and Services (DSPS)

MARSHALL, AMANDA
Assistant Director, Extended Opportunity Program and Services (EOPS) and CARE

MARTINEZ, YARELI
Child Development Specialist, Child Development Center

McMAHON, BARBARA
Instructional Technician, Biology, Math, Science and Engineering

MEDRANO, MARY ANN
Instructional Technology Technician, Alt Media, DSPS

MELTON, ZITA
Management Assistant, Office of Student Services

MEYERS, LISA
Senior Child Development Specialist, Child Development Center

MORENO, LUCIA
Student Enrollment & Financial Services Recruitment Supervisor, Financial Aid/Outreach

MOSS, WILL
Instructional Technician, Art

MURILLO, JORGE
Program Analyst, Hispanic-Serving Institutions-Science, Technology, Engineering, or Mathematics (HSI-STEM)

NAGARAJAN, UMA
Instructional Technician, Biology, Math, Science and Engineering

NANGIA, SHUCHI
Senior Child Development Specialist, Child Development Center

NARVAEZ, LUSYNA
Program Specialist, Student Equity and Success

NGUYEN, JESSICA
Enrollment & Financial Services Advisor, Student Enrollment Services

NGUYEN, LAN
Child Development Specialist, Child Development Center

NGUYEN, NGOC LIEN
Enrollment & Financial Services Advisor, Financial Services

NOVA, OLGA
Supervisor, Library Public and Technical Services

PHAM, PHUONG
Senior Child Development Specialist, Child Development Center

PIKE, ANN
Registered Nurse, Student Health Services

RAMIREZ, ELIZABETH
Program Analyst, Outreach

RANCAP, MARIE
Enrollment and Financial Services Advisor, Financial Services

REGUA, NANNETTE
Administrative Specialist, Business, Technology, and Kinesiology

RICE, SANDRA
Program Specialist, Hospitality Management

ROGERS, KENA
Administrative Specialist, Language Arts

SHIVELY, BRIAN
Program Specialist, Office of Administrative Services

SHIVERS, LISA
Nursing Program Technician, Health Occupations

SHOKROLLAH, NAHID
Senior Library Media Technician, Library

SMITH, THIEN
Food Services Technician, Child Development Center

SOLIZ, ANDREW
Program Specialist, Career Service Center

SPENCER, JOHN
Instructional Technology Analyst, Office of Instruction

STEWART, MELISSA
Supervisor, Curriculum & Instructional Systems

SVERDLIN, TAWNY
Webmaster/UX Designer, Marketing Office

THOMPSON, RAIDA
Program Analyst, Asian American Native American Pacific Islander-Serving Institutions (AANAPISI)

TOPETE, VIANEY
Program Specialist, TRO

TRAN, NGUYET
Child Development Center Specialist, Child Development Center

TRAN, KELVIN
Program Specialist, Student Equity and Success

TRINH, NGOC-TU
Office Coordinator, EOPS, CARE and CalWORKs

TROY, MARIANNA
Program Specialist, DSPS

TURNER, SHELBIE
Graphic Designer, Marketing and Communication

VALENCIA (ALVARADO), KARINA
Child Development Specialist, Child Development Center

VAN, LINDA
Program Specialist, Counseling

VASQUEZ, NITHA
Enrollment and Financial Services Advisor, Student Enrollment Services
VAZQUEZ VEGA, EPIGMINO
Senior Student Records Advisor, Student Enrollment Services

VILLANUEVA, JHONALIZA
Enrollment & Financial Services Advisor, Student Enrollment Services

VU, JULIE
Program Specialist, Welcome Center/Admissions and Records

WILLETT, LISA
Enrollment & Financial Services Advisor, Student Enrollment Services

WONG, LIZA
Administrative Specialist, Mathematics, Science and Engineering Division

YADEGARI, JENNIFER
Instructional Technician, Chemistry, Math, Science and Engineering Division

YU, LINPING
Administrative Specialist, Office of Instruction

ZAMZOW, MARK
Program Specialist, Health Occupations

ZENDEJAS, SAUL
Athletic Trainer, Athletics

ZEPEDA, MILANI
Senior Executive Assistant, President’s Office

District Classified Staff at Mission College

AGUIRRE, MAYRA
Custodian, Custodial Department

BATEH, CHRIS
District Warehouse Services Clerk

BUI, KEVIN
Custodian, Custodial Department

CAMPI, JEFF
Senior Maintenance Mechanic, Maintenance Department

CERVANTES, ARTURO
Custodian, Custodial Department

CHIU, MIU PING NG
Custodian, Custodial Department

CRUZ, FIDELINA
Custodian, Custodial Department

DALE, DENE
District Warehouse Services Clerk

GUEST, ROBERT
Information Technology Technician, Educational Technology Services

GUTIERREZ, LUIS
Senior Desktop Support, IS Department

HOLLAND, KEVIN
Auto Mechanic, District Facilities

HUYNH, ROSA
Administrative Specialist, Facilities

KAPOWICH, RYAN
Information Technology Analyst, Educational Technology Services

KERBEY, JAMES
Director, Community Services

LY, PATRICK
Information Technology Analyst, Educational Technology Services

MAGANA, SR., EDWARD
Groundskeeper, Grounds Department

MARTINEZ, DANIEL
Maintenance Mechanic, Maintenance Department

MARTINEZ VEGA, ALBERTO
Electrician, Facilities

NG CHIU, MIU PING
Custodian, Custodial Department

NGUYEN, DAT T.
Senior Information Technology Analyst, Educational Technology Services

NGUYEN, HAI
Supervisor, Custodial Department

PEREZ, AARON
Custodian, Custodial Department

PEREZ, JOSHUA
Custodian, Custodial Department

PHAM, THUY
Parking Services Specialist, District Police

PRICE, STEVEN
District Warehouse Services Clerk

QUAN, ALLAN
Senior Desktop Support, IS Department

RECHENMACHER, NATHAN
Facilities Security Technician, Police District

REYES-BOLINGER, NINI
MC Facilities Project Analyst

ROSAS, IVAN
Custodian, Custodial Department

SALCEDO, PABLO
Custodian, Custodial Department

SALINAS, DANIEL
HVAC Mechanic, Facilities

SALINAS, RICKY
Senior HVAC Mechanic, Facilities

SORIA, RAFAEL
Groundskeeper, Grounds Department

SOTELO, JOSE G.
Custodian, Custodial Department

TIERNAN, BRUCE
Custodian, Custodial Department

TREJO, REYNALDO
Custodian, Custodial Department

URBINA, JORGE L.
Custodian, Custodial Department
MISSION COLLEGE CATALOG 2022-2023

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. Telecommunications Switching, Telecommunications College-Jordan; CISCO Certified Academy Instructor (CCAI).

ABUROUS, DINA 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; M.B.A. California State University, Northridge; B.S. Business Administration, California State University, Northridge.

ADLER, NIALL 2016
Director of Marketing/Public Relations
M.A. in International Communications, Royal Melbourne Institute of Technology; B.A. in Mass Media, minor in Politics, University of San Francisco.

AKERS-MARTIN, AMELIA 1997
Instructor in English as a Second Language
B.A. in English (Teaching English as a Second Language/Applied 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; B.S. in Hospitality 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
Direct, RN Program
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.

BHOZHIZAN, 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.

BRODER, 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
M.A. in Physical Education with emphasis in Sports Psychology, San Jose State University; B.A. in Psychology, University of California, Santa Cruz; A.A. in Natural Science, Napa Community College.

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, POO-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.

CHAVEZ, NOHEMY Z. 2015
Counselor/Fuente Project Co-Coordinator
M.S. in Counseling, Sacramento State University; B.S. in Community & Regional Development, University of California, Davis.

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
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.

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, Career and Technical Education
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.

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, Pfizer 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/TESOL, 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 State 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.

HOUSTON, QIANA 2011
Instructor in Sociology
M.A. in Sociology, San Jose State University; B.A. in Sociology, San Jose 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, Sacramento; B.S. 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.

JOHNSTON, 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
M.A. in English Literature, California State University Fresno; B.A. in English, California State University Fresno; AA from Fresno City College
LEAL, CRISTINA 2021
Instructor in Child Development
Ph.D. in Developmental and Psychological Sciences; Child & Adolescent Development and a minor in Psychology, Stanford; M.A. in Counseling Psychology with emphasis in Latinx Counseling, San Jose State University; M.S. 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

MCGEE, 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, Humanities, Social Sciences and Art
Ph.D. in History, University of Mississippi; M.A. in History, University of Mississippi; B.A. in History, The Pennsylvania State University.

MORGAN, JANICE 2004
Instructor in Kinesiology
M.A. in Kinesiology, San Jose State University; B.A. in Human Performance, San Jose 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.

MORTEZAI, 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, MOY 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, Business, Technology and Kinesiology 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, GAOZONG 2013
Counselor, International Students
M.A. in Education-Counseling and Student Personnel, San Jose State University; B.A. in Psychology, California State University, Fresno.

PEMBROOK, CURTIS 2001
Instructor in Computer Applications and Graphic Design and Multimedia
Ed.D., Fielding Graduate University; M.A. in Instructional Technology, San Jose State University; B.S. in Aeronautics, minor in Business Management, San Jose State University; FAA Certified Flight Instructor and Advanced Ground Instructor.

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

ROSSNER, JULIANE 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.

SCHACHER, 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.

SCHWEPPE, JAMES 2013
Instructor in Chemistry
Ph.D. in Chemistry, Bryn Mawr College; M.A. in Chemistry, Bryn Mawr College; B.S. in Biochemistry, Mariboro 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.

SHEPHERD, ARAM 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.

SONGCO, 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 Hawaii; M.A. in Instructional Technology, San Jose State University; B.S. in Business Administration, University of Nevada, Reno.

SULLIVAN, SARAH 2010
Instructor in Reading
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.

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.

WUNDRAM, BRENN A 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.

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, LANIA 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, E Laine 2004
Librarian
M.L.I.S. in Library and Information Science, San Jose State University; TEF/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.

ZING, 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

AKHOIRISHDA, MOHAMMED Computer Information

ALCAZAR, VIVIANA Spanish

AL-AGTASH, SALEM Computer Science

ALVAREZ, PATRICIA English

AMEEN, UMERA Counseling

ANSARI, UNBAREEN Biological Science

ARDIZZONE, ART Accounting

BABU, PRIYA Mathematics

BADAL, SHAMIRAN Counseling

BALUTA, JOLANTA Health Occupations

BARRON, NICHOLAS Anthropology

BASEL, MARIA Kinesiology

BECKUM, CALVIN Sociology and Psychology

BELLER, JONATHAN Communication Studies

BERTOLA, MARIE French

BRISBANE-RAMIREZ, MOLLY Non-Credit Older Adult

BLAUSTEIN, JOSHUA Chemistry

BOLOURCHIAN, FARZIN Chemistry

BOWLEY, SUSAN Engineering

BRASIL, ROY Sociology

BUGG, JASON Kinesiology

CABRERA, FERNANDO, Spanish

CAFFERATA, COREY Kinesiology - Head Basketball Coach

CAMPBELL, HUSAYN Computer Information

CANOTE, JENNIFER Non-Credit Older Adult

CASSELL, CAROL, Mathematics

CHANG, BING RU Mathematics

CHEN, LILLY English

CHEW, JOHN Fire Technology

CHOUBABKO, ALLA Non-Credit Older Adult

CHOUBABKO, VLADIMIR Non-Credit Older Adult

CHOW, ALBERT Kinesiology, Head Women’s Badminton Coach

CHIN, JAMES Health Occupations

COBB, JEANIE English

COLLINS, RUTHIE Non-Credit Older Adult

CONSTANTIN, JENNIFER Psychology

COSTANZA, JENNIFER English as a Second Language

CONTEN TO, VIRGINIA Reading

CUDAHY, MARY English

DASSALLA, MITCHELL Computer Applications and Non-Credit Older Adults

DAVIS, GEOFFREY Mathematics

DEA-WONG, JULIA Counseling

DELLONA, NINA MARIA English as a Second Language

DEMIRAY, DENIZ Economics

DINH, HUNG Mathematics

DO, KHOLI Biological Sciences

DOOLEY, EDITH Health Occupations

DRAZKIEWICZ, ANETA Biological Science

DRION, YOKA Music

ECABANDE, JUDITH F. Health Occupations

ECTOR, JOHN Music

EL KAISSI, ROUBA Computer Information

ESCOBAR-MARTINEZ, MARIA LUISA Health Occupations

ENSINGER, BETTY Communications

ESPINELI, DINAH Chemistry

EVANS, ANNE Mathematics

FETTGA Ther, BOB Psychology

FICHMANN, JENNY Biological Sciences

FIECHTER, VALERIE English as a Second Language

FIRENZI, GINA Communication Studies

FLORES, CAROL Health Occupations

FLORES, ELIZABETH Counseling

FOLSE, HARMONY Biological Science

FRAN, MICHELLE Reading

FRANCISCO, EMILIO Counseling

FRANKEL, VALENCIA Reading/English

GARCIA, ALMA Counseling

GARD, INA J. English

GATT, LARRY Fire Technology

GEE, JOHN Mathematics

GHEORGHIU, DORIN Computer Information

GIBBS STAYTE, PATRICIA Sociology

GIRARDI, JUDITH Library

GHOFRANJIHA, JAHAN Computer Information

GLADDEN, MARY Non-Credit Older Adult

GOLDEN-ROMER, PATRICIA Hospitality Management

GRAHAM, ALISON Non-Credit Older Adult

GRANT, DAVID Non-Credit Older Adult

GREWAL, AMAN Accounting

GRZYMALA, KEVIN History

GUICH, DANIEL Psychology

HALL, KATHERINE Library

HAMADEH, MOHAMMAD Computer Information

HAMMOND, LAURA Library

HANLE, GREG Economics

HARTKIN, ART Computer Applications

HARNESS, MARY ALLISON Biological Science

HARRIS, ELIZABETH Communication Studies

HAVEN, KATHLEEN English as a Second Language

HAWKINS, MICHELE Music
Emeriti Administration and Faculty
(DATES INDICATE START OF EMPLOYMENT YEAR AND RETIREMENT YEAR)

ALAMEDA, CORA A. 1977-1993
Instructor in Business Office Technology

AMARELL, DIETRICH 1979-1998
Instructor in Hospitality Management

ANNING, PETER 1980-2013
Director, Marketing, Public Relations and Graphic Design Services

BECK, CAROL 1980-2017
Counselor

BEGGS, CATHY 2003-2017
Instructor in Health Occupations

BELL, ELIZABETH 2005-2020
Instructor in Biological Science

BENNITT, RICK 2012-2018
Vice President of Student Services

BICOCCA, DIANNA DEE 1973-2003
Instructor in Health Occupations

BOEGEHOLZ, MANFRED 1968-1994
Instructor in Hospitality Management

BROCKMEIER, CAROL 2002-2020
Instructor in Health Occupations

CHANDLER, ALAN 1990-2014
Instructor in Political Science

CHARLAND, RAY 1999-2009
Counselor

CHANG, YUN-HWA (TERI) 1975-2004
Instructor in Mathematics

CHRISTOPHER, BETTY 1986-2020
Instructor in Accounting

CLAUDIO, CESARE S. 1964-1986
Instructor in Music

COGSWELL, ELIZABETH 2000-2008
Instructor in Health Occupations

CORDERO, DON 1974-2004
Counselor

COSTANZA, JENNIFER 1990-2020
Instructor in ESL

COX, CATHERINE 1999-2015
Librarian

CREED, KATHLEEN 1998-2004
Instructor in Health Occupations

CROSS, SUE 1986-2007
Instructor in English

DAVIS, MOIRA 1992-2014
Instructor in Mathematics

DELONGCHAMP, JIM 1981-2009
Instructor Cultural and Technical Arts, Graphic Arts

DEMARCO, PHILIP 1972-2002
Instructor in Business

DEWIS, ROB 2002-2018
Instructor in Communications

DINGER, STEVE 1978-2008
Instructor in Business

DOOLEY, EDITH 1993-2009
Instructor in Health Occupations

DORIAN (MCKAY), DIANNE 1989-2015
Instructor in Reading

ELLIS, DAVID 2016
Program Manager, Silicon Valley High Tech Apprenticeship

ENSMINGER, BETTY 1979-2012
Instructor in Communication Studies

ESTRADA, ERLINDA 1999-2005
Librarian

EVERETT, THELMA LEE 2005-2017
Instructor in Health Occupations

FISHER, CAROLYN 1977-2004
Instructor in Health Occupations

FLETCHER, MARY 1970-1996
Instructor in Sociology

FLOLO, HELENE 1966-2003
Instructor in Health Occupations

FONG, TAT 2004-2012
Instructor in Economics

FORD, JONEL 1968-1996
Instructor in English

FRANCO, DANIEL 1996-2010
Counselor

GARD, JAY 1977-2003
Instructor in English

GOODY, ROY W 1979-2006
Instructor in Computer Networking Electronic Technology

GRAYSON, BETTY 1975-2004
Instructor in Health Occupations

GREENWOOD, GAIL 1987-2005
Instructor in History

GROGAN, RITA 2008-2015
Director of Student Enrollment and Financial Services

GUICH, DANIEL 1990-2016
Instructor in Psychology

HACKER, JO ANN 1986-2003
Instructor in English as a Second Language

HALE, DONNA 1999-2021
Program Director, CalWORKs & EDD

HALL, MICHAEL, 2001-2015
Program Manager, Environmental Training Center

HANSEN, GERALD 1980-1991
Instructor in Drafting

HARRIS, LYDIA 1976-2000
Instructor in Child Development and Reading

HAWKS, DORIS B. 1967-1979
Instructor in Vocational Nursing

HAYDEN, RICHARD 1964-1991
Instructor in Political Science

HENDERSON, KATHY, 2004-2016
Interim Educational Dean of Instruction, Liberal Studies and Language Arts, Instructor in English as a Second Language

HERNAS, PATRICIA 2005-2020
Librarian

HIROSE, STEVE 1988-2012
Instructor in Foreign Language

HOBS, RICHARD 1985-2017
Instructor in Mathematics

HOM, GLORIA 1971-2003
Instructor in Economics

HOOVER, JUDITH E. 1999-2003
Counselor

HULBERT, ROBIN 2012-2018
Instructor in Biology

HULL, AL 1979-1988
Instructor in Graphic Technology

HUSTON, VIVIAN L. 1966-1979
Counselor

INOUE, BETTY, 2004-2016
Counselor

JACKINS, QUINLYNN C. 1988-2007
Instructor in Mathematics

JACKINS, TIMOTHY 1976-2004
Instructor in Mathematics

JAHAN, MINA 1993-2018
Educational Dean of Instruction, Applied Science and Business and Technology Divisions; Interim Dean of CTE

JIMENEZ, CHRIS 1979-2002
Counselor

JOHNSON, JONI 1987-2004
Counselor

JOHNSON, PENNY 2007-2014
Vice President, Student Support Services

JONES, PRISCILLA 2005-2016
Counseling

KARAS, TIMOTHY 2005-2014
Dean, Language Arts and Liberal Studies

KAWAMOTO, JAMES D. 2001-2019
Instructor in Engineering

KLEPPINGER, ED 1977-2009
Instructor in History, Humanities and Sociology

KNOWLES, MARJORIE 1990-2007
Instructor in English as a Second Language

KURI, CAROLYN 1977-2013
Instructor in English

LAID, BERTHA 1981-1992
Counselor

LAIRD, RUTH M. 2001-2015
Instructor in Anthropology and Sociology

LAMKIN, DIANE 1990-2017
Instructor in Biological Science

LE, SON 1975-2009
Department Chair Instructor in Philosophy

LEFALLE, DEBORAH 1991-2011
Director, Extended Opportunity Programs & Services
LORIE, ILEANA 1988-2002
Instructor in Mathematics

MADALENA, RUTH 1974-1997
Dean Vocational Education and Matriculation

MAGALLON, MANUEL 1971-2003
Instructor in Art

MALCHOW, AARON 2003-2019
Instructor in Reading

MANSKE, STEVE 1990-2013
Instructor in Accounting

MARELICK, LIN 1989-2007
Instructor in Graphic Design

MARTIN, LEANDRA POWELL 2013-2021
Vice President of Instruction

MATARANGAS, DAN 1969-2003
Instructor in English as a Second Language

MCALISTER, ELLEN 1999-2010
Instructor in Disability Instructional Support Center Learning Disabilities Specialist; High Tech Ctr Specialist

MC CLELLAN, JOYCE 1975-2001
Counselor

MCKENNA, MICHAEL 1979-2001
Instructor in Fire Technology

MEYER, MELANIE 2002-2014
Instructor in Business

MICHELOZZI, BETTY N. 1968-1986
Counselor

MILLER, BOB 2001-2017
Counselor

MORROE, CLIFF 1991-2007
Instructor in Design Drafting Technology

MOORE, MARY 1980-2002
Instructor in Excavation Technology

MORALES, TAB 1987-2001
Counselor

MOSBY, JOHN, 2015-2018
Vice President of Student Services

MOSTYN, GREG 1978-2015
Instructor in Accounting

Instructor in Nursing Education

NELSON, JEFFREY, 1988-2017
Instructor in Kinesiology

NGUYEN, PHUONG 1996-2010
Counselor

NGUYEN, THANH, 2001-2017
Instructor in Vietnamese

NGUYEN, THOI 1990-2014
Instructor in Mathematics

O’NEILL, JOHN 2005-2021
Instructor in English as a Second Language

OSTRANDER, HELEN 2001-2012
Coordinator/Instructor, Disability Instructional Support Center (DISC)

PABICH, PHILIP 1987-2006
Dean of Workforce and Continuing Education

PANCELLA, SUSANNA 1997-2009
Instructor in Computer Applications

PAVAO, ROD 1984-2020
Instructor in Fire Protection Technology

PEREZ, MICHAEL, 1990-2015
Athletic Director, Instructor in Kinesiology Baseball Coach

PERLAS, CHAR 2001-2013
Counselor, MESA Program Director

PETTE, DIANE 1987-2003
Counselor

PINTO, JOSEPH 1981-2000
Instructor in Chemistry

POWERS, JOAN T. 1989-2017
Instructor in English as a Second Language

PRESCOTT, RACHEL 1997-2019
Instructor in English as a Second Language

PRZYBYLSKI, RICHARD 1977-2005
Instructor in Health Occupations Counselor

QAZI, CAROL, 1999-2015
Director, International Student Center

RETTERATH, LINDA 1990-2021
Instructor in Mathematics

RHEGERT, EVELYN 1967-2001
Instructor in Health Occupations Counselor

ROBERTS, ANN 1986-2003
Instructor in Reading

ROBLES, HARRIETT 1981-2010
Vice President, President President

SABHHERWAL, SAROJ 1986-2015
Instructor in CSIT

SANCHEZ, REBECA, 1990-2016
Counselor

SANIDAD, DANIEL 2001-2015
Dean of Student Services

SIENNA, PHILLIP, 1979-2015
Instructor in Kinesiology

SMITH, JUDIE 1987-2005
Librarian

SMITH, RJ 1968-1993
Counselor

STEPHENS, HYACINTH 1988-2009
Instructor in Children Development

SZABADOS, ANNA 1991-2010
Instructor in Graphic and Multimedia Design

TANABE, SUMI 1973-2002
Manager, Instruction

TAYLOR, JAMES R. 1967-2001
Instructor in English

TAYLOR, LOUIS JR. 1969-1987
Instructor in Psychology

THICKPENNY, HELAYNA 1990-2019
Instructor in Art History and Humanities

THODE, THOMAS A. 1964-1993
Instructor in Physical Science

TING, KARL, 1992-2016
Instructor in Computer Applications

TODARO, LYNETTE 2002-2020
Instructor in Art

TOPPEL, CAROL 1982-2006
Instructor in Learning Services

TRASK, TOM 1975-2006
Instructor in Biological Science

VAN TASSEL, D., 1986-2016
Instructor in General Business

VERMA, KAMLISH 1987-2011
Instructor in Computer Information Systems

WALTON, IAN G. 1978-2011
Instructor in Mathematics

WEIBERG, CAMILLA 2005-2019
Instructor in Child Development

WHEELER, REBECCA
Kinesiology

WISNER, SALLIE 2000-2004
Computer Lab Specialist/Webmaster

WONG, REYNOLD 1978-2011
Instructor in Computer Networking Electronics Technology

WYLDE, NANETTE 2007-2020
Instructor in Child Development

XIOQUES, PETER 1977-2002
Instructor in Drafting

ZEISLER, SUSAN 2000-2020
Instructor in English
**MISSION COLLEGE CAMPUS MAP**

**Building** | **Grid** | **Room** | **Building** | **Grid** | **Room**
---|---|---|---|---|---
Art Annex | D4 | GC: A106-111 | Police Station | F6 | SEC-101
Admission Office | H4 | SEC-118 | President’s Office | H4 | SEC-341
Assessment Center | H4 | SEC-109 | Duplicating Center | E4 | GC-112
Bookstore | F5 | CC | Saints Cafe | F5 | CC-215
Counseling Center | H4 | SEC-131-133 | Student Leadership | H4 | SEC-139
Financial Aid | H4 | SEC-118 | Transfer Center | H4 | SEC154
Gym | D4 | SEC-106 | Tutoring Center | H4 | SEC-313
Health Center | H4 | Vigo Sports Complex | E3 | VCC
Hospitality Management | E5/6 | SEC & GC | VP Administrative Services | H4 | SEC-331
Library | H4/EF | SEC & GC | VP Office of Instruction | H4 | SEC-331
Music Room | G5/6 | SEC & GC | VP Student Services | F5 | CC-222
Part Time Faculty Center | E4 | GC-114 | Welcome Center | H4 | SEC-101

Note: The map is accurate as of Spring 2022. Map is located on page 260 of the Mission College Catalog 2022-2023.
### INDEX

<table>
<thead>
<tr>
<th>Page</th>
<th>Section</th>
</tr>
</thead>
<tbody>
<tr>
<td>126</td>
<td>Health Occupations (HOC)</td>
</tr>
<tr>
<td>127</td>
<td>High School Credit for College Courses</td>
</tr>
<tr>
<td>127</td>
<td>History (HIS)</td>
</tr>
<tr>
<td>127</td>
<td>History of the College</td>
</tr>
<tr>
<td>128</td>
<td>Holds on Student Records</td>
</tr>
<tr>
<td>128</td>
<td>Honors Graduate</td>
</tr>
<tr>
<td>128</td>
<td>Honors List</td>
</tr>
<tr>
<td>128</td>
<td>Honors Program</td>
</tr>
<tr>
<td>128</td>
<td>Hospitality Management (HMT)</td>
</tr>
<tr>
<td>129</td>
<td>Hotel and Motel Management (HMT)</td>
</tr>
<tr>
<td>130</td>
<td>Humanities (HUM)</td>
</tr>
<tr>
<td>131</td>
<td>IGETC for CSU</td>
</tr>
<tr>
<td>131</td>
<td>IGETC for UC</td>
</tr>
<tr>
<td>132</td>
<td>Independent and Out of State Colleges and Universities</td>
</tr>
<tr>
<td>133</td>
<td>Institutional Foods (INF)</td>
</tr>
<tr>
<td>135</td>
<td>Instructional Material Fee</td>
</tr>
<tr>
<td>136</td>
<td>International Students</td>
</tr>
<tr>
<td>136</td>
<td>Intersetional General Education Transfer Curriculum (IGETC)</td>
</tr>
<tr>
<td>136</td>
<td>Instructional Support (INS)</td>
</tr>
<tr>
<td>137</td>
<td>IT Help Desk Technician (CAP)</td>
</tr>
<tr>
<td>140</td>
<td>Japanese (JPN)</td>
</tr>
<tr>
<td>140</td>
<td>Kinesiology (KIN)</td>
</tr>
<tr>
<td>141</td>
<td>Learning Services (LSR)</td>
</tr>
<tr>
<td>143</td>
<td>Liberal Arts</td>
</tr>
<tr>
<td>143</td>
<td>Liberal Arts: Arts and Humanities</td>
</tr>
<tr>
<td>143</td>
<td>Liberal Arts: Communication in the English Language and Critical Thinking</td>
</tr>
<tr>
<td>143</td>
<td>Liberal Arts: Natural Science and Mathematics</td>
</tr>
<tr>
<td>143</td>
<td>Liberal Arts: Social and Behavioral Sciences</td>
</tr>
<tr>
<td>143</td>
<td>Library</td>
</tr>
<tr>
<td>143</td>
<td>Linguistics (LNG)</td>
</tr>
<tr>
<td>144</td>
<td>Major and Career Pathways</td>
</tr>
<tr>
<td>146</td>
<td>Master Teacher (CHD)</td>
</tr>
<tr>
<td>146</td>
<td>Math Course Sequence</td>
</tr>
<tr>
<td>147</td>
<td>Mathematics (MAT)</td>
</tr>
<tr>
<td>147</td>
<td>Math Engineering Science Achievement (MESA)</td>
</tr>
<tr>
<td>147</td>
<td>Management and Leadership (BUS)</td>
</tr>
<tr>
<td>150</td>
<td>Mechatronic Technology (MTT)</td>
</tr>
<tr>
<td>151</td>
<td>Mental Health Services</td>
</tr>
<tr>
<td>151</td>
<td>Microsoft Office (CAP)</td>
</tr>
<tr>
<td>153</td>
<td>Military Withdrawal</td>
</tr>
<tr>
<td>153</td>
<td>Mission College Personnel</td>
</tr>
<tr>
<td>153</td>
<td>Mission Statement</td>
</tr>
<tr>
<td>153</td>
<td>Mission Dance Company</td>
</tr>
<tr>
<td>153</td>
<td>Minority-serving Institution</td>
</tr>
<tr>
<td>153</td>
<td>Music (MUS)</td>
</tr>
<tr>
<td>153</td>
<td>N</td>
</tr>
<tr>
<td>153</td>
<td>Noncredit</td>
</tr>
<tr>
<td>153</td>
<td>Noncredit Basic Skills (NCB)</td>
</tr>
<tr>
<td>153</td>
<td>Noncredit English as a Second Language</td>
</tr>
<tr>
<td>153</td>
<td>Noncredit Health Occupations (NCH)</td>
</tr>
<tr>
<td>153</td>
<td>Noncredit Older Adult (NCO)</td>
</tr>
<tr>
<td>153</td>
<td>Non-resident Tuition</td>
</tr>
<tr>
<td>153</td>
<td>Nursing Assistant (HOC)</td>
</tr>
<tr>
<td>153</td>
<td>Nutritional Science (NTR)</td>
</tr>
<tr>
<td>153</td>
<td>O</td>
</tr>
<tr>
<td>153</td>
<td>Office Information Systems (CAP)</td>
</tr>
<tr>
<td>153</td>
<td>Older Adult - Noncredit (NCO)</td>
</tr>
<tr>
<td>153</td>
<td>Orientation Services</td>
</tr>
<tr>
<td>153</td>
<td>Overlapping Classes</td>
</tr>
<tr>
<td>153</td>
<td>Overhead Line Worker</td>
</tr>
<tr>
<td>153</td>
<td>Payment Plan</td>
</tr>
<tr>
<td>153</td>
<td>Parking Information</td>
</tr>
<tr>
<td>153</td>
<td>Pharmacy Technician</td>
</tr>
<tr>
<td>153</td>
<td>Psychology (PSY)</td>
</tr>
<tr>
<td>153</td>
<td>Public Transportation Information</td>
</tr>
<tr>
<td>153</td>
<td>Puerto Project</td>
</tr>
<tr>
<td>153</td>
<td>Public Transit Leadership</td>
</tr>
<tr>
<td>153</td>
<td>R</td>
</tr>
<tr>
<td>153</td>
<td>Reading (REA)</td>
</tr>
<tr>
<td>153</td>
<td>Refunds</td>
</tr>
<tr>
<td>153</td>
<td>Registration</td>
</tr>
<tr>
<td>153</td>
<td>Registered Nursing (LVN to RN)</td>
</tr>
<tr>
<td>153</td>
<td>Requirements for Associate Degree for Transfer</td>
</tr>
<tr>
<td>153</td>
<td>Requirements for Transfer Students</td>
</tr>
<tr>
<td>153</td>
<td>Rights and Responsibilities</td>
</tr>
<tr>
<td>153</td>
<td>S</td>
</tr>
<tr>
<td>153</td>
<td>Santa Clara University</td>
</tr>
<tr>
<td>153</td>
<td>Scholarship Program</td>
</tr>
<tr>
<td>153</td>
<td>Service Mechanic Apprenticeship</td>
</tr>
<tr>
<td>153</td>
<td>Second Harvest Food Bank</td>
</tr>
<tr>
<td>153</td>
<td>Social Justice Studies (SJS)</td>
</tr>
<tr>
<td>153</td>
<td>Social Security Numbers</td>
</tr>
<tr>
<td>153</td>
<td>Sociology (SOC)</td>
</tr>
<tr>
<td>153</td>
<td>Spanish (SPA)</td>
</tr>
<tr>
<td>153</td>
<td>STEM Learning Center</td>
</tr>
<tr>
<td>153</td>
<td>Student Activities</td>
</tr>
<tr>
<td>153</td>
<td>Student Health Services</td>
</tr>
<tr>
<td>153</td>
<td>Student Learning Outcomes (SLOs)</td>
</tr>
<tr>
<td>153</td>
<td>Student Participation in Institutional Government</td>
</tr>
<tr>
<td>153</td>
<td>Student Support Programs</td>
</tr>
<tr>
<td>154</td>
<td>Student Production of Goods and Services</td>
</tr>
<tr>
<td>154</td>
<td>Student Rights and Responsibilities</td>
</tr>
<tr>
<td>154</td>
<td>Studio Arts (ART)</td>
</tr>
<tr>
<td>154</td>
<td>Subject to Dismissal</td>
</tr>
<tr>
<td>154</td>
<td>T</td>
</tr>
<tr>
<td>154</td>
<td>Tax Identification Numbers</td>
</tr>
<tr>
<td>154</td>
<td>Three-Dimensional Arts</td>
</tr>
<tr>
<td>154</td>
<td>Title IX: Sexual Harassment and Assault</td>
</tr>
<tr>
<td>154</td>
<td>Transcripts</td>
</tr>
<tr>
<td>154</td>
<td>Transfer Admission</td>
</tr>
<tr>
<td>154</td>
<td>Guarantee/Agreements (TAG/TAA)</td>
</tr>
<tr>
<td>154</td>
<td>Track Worker Apprenticeship</td>
</tr>
<tr>
<td>154</td>
<td>Transfer Center</td>
</tr>
<tr>
<td>154</td>
<td>Transfer Studies - CSU GE-B</td>
</tr>
<tr>
<td>154</td>
<td>Transfer Studies - IGETC</td>
</tr>
<tr>
<td>154</td>
<td>Transportation (TRN)</td>
</tr>
<tr>
<td>154</td>
<td>TRIO &amp; TRIO STEM</td>
</tr>
<tr>
<td>154</td>
<td>Types of Courses</td>
</tr>
<tr>
<td>154</td>
<td>U</td>
</tr>
<tr>
<td>154</td>
<td>Unit Load Limitation</td>
</tr>
<tr>
<td>154</td>
<td>Units of Work and Credit</td>
</tr>
<tr>
<td>154</td>
<td>University of California</td>
</tr>
<tr>
<td>154</td>
<td>University Transfer</td>
</tr>
<tr>
<td>154</td>
<td>Umoja Community</td>
</tr>
<tr>
<td>154</td>
<td>User Experience and Interface Design (GDS)</td>
</tr>
<tr>
<td>155</td>
<td>V</td>
</tr>
<tr>
<td>155</td>
<td>Vargas Gallery</td>
</tr>
<tr>
<td>155</td>
<td>Veterans Programs (VALOR)</td>
</tr>
<tr>
<td>155</td>
<td>Vietnamese (VIE)</td>
</tr>
<tr>
<td>155</td>
<td>Vision Statement</td>
</tr>
<tr>
<td>155</td>
<td>Vocational Nursing (HOC)</td>
</tr>
<tr>
<td>156</td>
<td>W</td>
</tr>
<tr>
<td>156</td>
<td>Web Design (GDS)</td>
</tr>
<tr>
<td>156</td>
<td>Web Developer (GDS)</td>
</tr>
<tr>
<td>156</td>
<td>Welcome Center</td>
</tr>
<tr>
<td>156</td>
<td>Welcome to Mission College</td>
</tr>
<tr>
<td>156</td>
<td>West Valley-Mission Community College District</td>
</tr>
<tr>
<td>156</td>
<td>Withdrawal from Classes</td>
</tr>
<tr>
<td>248</td>
<td>Work Experience (WRK)</td>
</tr>
</tbody>
</table>
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.

Mission College Welcome Center................408.855.5007
Academic Senate Office...............................408.855.5413
Academic Support Center/Tutoring Center.....408.855.5095
Admissions................................................408.855.5000

Administrative Offices:
Community Education.................................408.855.5106
Evening/Weekend Administrator (Cell)........408.590.2657
Marketing, PR and Graphic Design Services.408.855.5127
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
Bookstore...................................................408.855.5080
Business, Technology and Kinesiology
Division Office..........................................408.855.5211
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
Community Ed/Corporate Ed Training............408.855.5106
Counseling..................................................408.855.5030
Disability Support Programs and Services
Center (DSPS)............................................408.855.5085
TTY..........................................................408.727.9243
Duplicating Services.................................408-855-5410/408-855-5198
Education Technology Services (ETS)
Help Desk (Message)....................................408.855.5359
ETS Audio Visual Services...........................408.855.5135
ETS Instructional Classroom
Computer Services......................................408.855.5359
ETS Instructional Media Services...............408.855.5132
Evening/Weekend Administrator (Cell)........408.590.2657
Extended Opportunity Program
& Services (EOPS).......................................408.855.5055
Facilities Rental...........................................408.855.5289
Financial Aid..............................................408.855.5065
Health Occupations Division Office...............408-855-5374
Humanities, Social Sciences and
Art Division Office......................................408-855-5152
Institute for International Studies (IIS)........408.855.5110
Instructional Support Division Office............408-855-5380
KJ’s Café.....................................................408-855-5577
Language Arts and Library Division Office.....408.855.5219
Library Information Desk............................408.855.5151
Library Check Out Desk...............................408.855.5150
Lost and Found (MC Police Office)...............408.855.5435
Marketing, PR and Graphic Design Services..408.855.5127
Math, Science and Engineering
Division Office..........................................408.855.5295
Mathematics Engineering Science
Achievement (MESA).................................408.855.5482
MC2IT.......................................................408.855.5319
Parking Permits (MC Police Office)...............408.855.5435
Police Business Office (MC Police Office)....408.855.5435
Puente Program.........................................408.855-5385
Records Office............................................408.855.5022 or 855.5023
Recruitment and Outreach............................408.855.5072
Research, Planning and Institutional
Effectiveness.............................................408-855-5204
STEM Learning Center................................408.855.5261
Student Health Services.............................408.855.5140
Student Services Division Office.................408.855.5196
Transfer Center............................................408.855.5115
Transcripts...............................................408-855-5011
TRIO Program.............................................408.855.5192
Valor Center/Veterans Services....................408.855-5237
Veteran Certification Services.....................408.855.5005
Welcome Center Office.................................408.855.5083

Safety Escort Service
Monday–Thursday: 8:30am–9:30pm..............408.855.5435
Friday: 8:30am–4:30pm...............................408.855.5435
After hours and weekends.........................408.299.2311
Get the Go Mission App to search, add and pay for your classes