

# ORANGE COAST COLLEGE CATALOG 2019-2020



ORANGE  
COAST  
COLLEGE

Revised  
November 15, 2019

## **Don't worry. You're Ready. You've Got This!**

At Orange Coast College, we know that life will sometimes throw adversity your way. That's why we're committed to giving you the real-world skills you need to succeed, no matter what — it's our personal commitment to you and to each of our 29,000 students.

OCC's expansive 164-acre campus — located in the heart of Orange County — features the latest in modern technology. State-of-the-art facilities include our Math, Business and Computing Center, Fitness Complex, Library, Arts Pavilion, Planetarium, STEM Center, Makerspace and Enrollment Center.

In the next three years, the College will invest more than \$300 million in facilities with progress on a new Student Union, Aquatics Center, new classrooms for Social & Behavioral Sciences, Language Arts and the addition of campus housing.

Our Pirates' Promise program will make it easier for you to concentrate on your classes by paying for your tuition and books. More information and eligibility criteria can be found at [www.orangecoastcollege.edu/piratespromise](http://www.orangecoastcollege.edu/piratespromise).

Students at OCC enjoy big-time amenities in a small-college atmosphere. In addition to free tutoring, counseling, health and wellness services and on-campus public safety, OCC offers a variety of programs to meet the needs of every student, from first-time college students, single parents, former foster youth/wards of the court, veterans, international students and much more. Best of all, you'll find instructors and staff dedicated to helping you every step of the way.

OCC helps more students transfer to the University of California and California State University systems than any other college in Orange County. This fall we are embarking on acceleration of completion in Math and English with a redesign in curriculum support and improved placement into the correct courses. In addition to transfer degrees, the College also offers Associate in Arts and Science degrees, Associate Degree for Transfer (ADT), CSU/GE and IGETC certification, and certificates in a wide variety of career programs. Plus, OCC provides limitless opportunities in student government, student clubs, honors societies and 20 athletics programs.

This catalog will help you get to know OCC and find programs that are just right for you. Visit our website at [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu) for more information or call us at (714) 432-5072 to speak with one of our staff members.



**Orange Coast College**

# CATALOG

**2019-2020**

2701 Fairview Road  
Costa Mesa, CA 92626

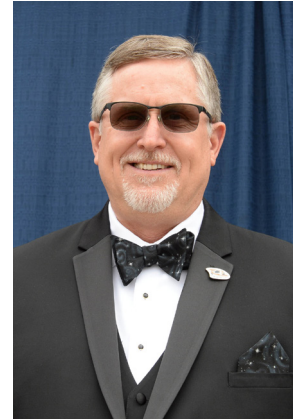
(714) 432-5072

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

## President's Welcome

On behalf of our entire faculty, staff and students, I want to welcome you to Orange Coast College!

I hope you've had a chance to discover some of the outstanding programs and services that distinguish Orange Coast College as one of the nation's best community colleges. At OCC, we share a common vision: to be the standard of excellence in transforming lives through education. It's a bold commitment that we're proud to make – and fulfill – to our students and community.



For more than 70 years, OCC has been a gateway to the highest quality education in California. With more than 100 degrees and 150 certificates in 68 majors, our programs are developed to provide the skills, training and knowledge to help you succeed with your career or transfer path. OCC is one of the state's top combined transfer schools, a regional leader in career training, and a trusted resource in the local community for lifelong learning. Our faculty and staff are dedicated to ensuring that you reach your educational goals.

We understand that each of our nearly 29,000 students are looking to achieve their own educational objective. Some students wish to transfer to a four-year institution, while others want to receive a degree or a certificate and enter the workforce immediately. Yet others are returning to school to enhance their skills and become more marketable in their current or future career. In addition, we have a new section of the catalog focused on noncredit certificates to improve basic skills and give immediate employable skills. Whatever the reason for considering OCC and higher education as a whole, I applaud you for taking the first step toward a brighter future.

The College has garnered a reputation for excellence ranking among the top community colleges in California. As a multicultural and academic multinational institution, OCC is a qualifying Hispanic Serving (HSI) and Asian American Native American and Pacific Islander Serving (AANAPISI) institution and serves nearly 1,200 international students representing more than 70 countries.

The OCC faculty, administration and staff will work tirelessly to not only maintain the highest standards of academic excellence, but to increase the resources for students so that you may continue to succeed.

Thank you for choosing Orange Coast College.

A handwritten signature in blue ink that reads "K. Ballinger". The signature is stylized and fluid.

Kevin Ballinger

Interim President

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## Fall 2019 Calendar

|   |  |
|---|--|
| August 23, 2019 .....                     | Semester Begins  |
| August 23, 2019 .....                     | Mandatory Flex Day for faculty and staff   |
| September 2, 2019 .....                   | HOLIDAY — Labor Day  |
| September 9, 2019 .....                   | Applications accepted for Spring 2019 Semester, including 2019 Winter Intersession |
| October 21, 2019 .....                    | Beginning of second 8-week classes   |
| November 11, 2019 .....                   | HOLIDAY — Veterans' Day  |
| November 28 – December 1, 2019 .....      | HOLIDAY — Thanksgiving   |
| December 14, 2019 .....                   | Last day of Fall Semester  |
| December 19, 2019 – January 1, 2020 ..... | Winter Break   |

## Spring 2020 Calendar

|                           |  |
|---------------------------|--|
| January 2, 2020 .....     | First day of Winter Intersession         |
| January 20, 2020 .....    | HOLIDAY — Martin Luther King Jr. Day     |
| January 24, 2020 .....    | Last day of Winter Intersession          |
| January 27, 2020 .....    | Semester Begins                          |
| February 14, 2020 .....   | HOLIDAY— Lincoln's Day                   |
| February 17, 2020 .....   | HOLIDAY— Washington's Day                |
| February 20, 2020 .....   | Mandatory Flex Day for faculty and staff |
| March 23 – 29, 2020 ..... | Spring Break                             |
| March 30, 2020 .....      | Beginning of Second 8-Week Classes       |
| May 23, 2020 .....        | Last day of Spring Semester              |
| May 25, 2020 .....        | HOLIDAY—Memorial Day                     |

All dates and hours of operation are subject to change without notice.

Deadlines for refunds, fee cancellations, registration and withdrawals are different for each course.

For specific course deadlines, please refer to one of the following:

- Student Class Program/Web Schedule Bill (Available via MyOCC)
- Dates to Remember – Available online
- Academic Calendar – Available online
- [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu) - Click on “Dates to Remember” on the Enrollment Center page
- Contact the Answer Center at (714) 432-5072

If a holiday falls on Friday, then Saturday and Sunday classes will not meet. If a holiday falls on Monday, then Saturday and Sunday classes will meet.

Final examinations are held during regular class meeting times during the last week of the semester.

## General Information

### Vision Statement

To be the standard of excellence in transforming lives through education.

### Mission Statement

Orange Coast College serves the educational needs of our diverse local and global community. The College empowers students to achieve their educational goals by providing high quality and innovative programs and services leading to academic degrees, college transfers, certificates in career and technical education, basic skills, and workforce development to enable lifelong learning. The College promotes student learning and development through fostering a respectful, supportive, participatory, and equitable campus climate of student engagement and academic inquiry.

### Institutional Commitment

Orange Coast College is committed to providing a unique learning community where freedom of thought and personal and intellectual growth is valued by all. As an outcome of their academic study, graduates of Orange Coast College possess proficiency in four core areas: Communication, Thinking Skills, Global Awareness, and Personal Development and Responsibility.

Administrators, faculty and staff are committed to the development of students as individuals and as citizens of the world. We value teaching and learning relationships, support services and co-curricular programs that contribute to meaningful personal growth in our students and to their quest for knowledge.

### About the College

Orange Coast College in Costa Mesa, California, was founded in 1947 on a site granted by the federal government. The campus currently consists of 164 acres used for instructional facilities, athletic fields and parking areas.

The Coast Community College District is comprised of three public community colleges: Orange Coast College, Golden West College and Coastline Community College. Each is a tax-supported community college.

### About this Catalog

This publication must be prepared well in advance of the time period it covers; therefore, changes in some programs, policies and fees may occur. Courses as described are subject to change without notice and some listed courses are not offered each year. In addition, some courses or programs that are offered may have to be canceled because of insufficient enrollment, elimination or reduction in programs or for any other reason considered sufficient by the College president or designee. Any questions about courses or programs listed in this catalog should be directed to the Counseling Office located in Watson Hall.

### Accreditation and Approvals

Orange Coast College is accredited by the Accrediting Commission for Community and Junior Colleges, Western Association of Schools and Colleges, 10 Commercial Blvd., Ste. 204, Novato, CA 94949; (415) 506-0234, for an institutional accrediting body recognized by the Council for Higher Education Accreditation and the U. S. Department of Education. Additional information about accreditation, including the filing of complaints against member institutions, can be found at [www.accjc.org](http://www.accjc.org)

The College and its instructional programs are also approved by the Board of Governors of the California Community Colleges and by the State Department of Education for training veterans.

In addition, Orange Coast College offers programs which have specialty accreditations or external approval by recognized agencies:

- Accreditation Council for Education in Nutrition and Dietetics (ACEND);
- American Culinary Federation Education Foundation Accrediting Commission (ACFEFAC);
- California State Department of Public Health

(CDPH) Dietary Services Supervisor

- California State Department of Public Health – Radiologic Health Branch
- California Certifying Medical Assistants Association (CCBMAA)
- California Department of Consumer Affairs - Dental Board of California (DBC)
- California Department of Consumer Affairs - Speech-Language Pathology and Audiology Board
- Commission on Dental Accreditation (CODA);
- Commission on English Language Program Accreditation (CEA);
- Commission on Accreditation of Allied Health Education Programs (CAAHEP);
- Committee on Accreditation for Neurodiagnostic Technology (CoA-NDT);
- Committee on Accreditation for Polysomnography Technology (CoA-PSG);
- Commission on Accreditation for Respiratory Care (CoA-RC)
- County of Orange Health Care Disaster Management Agency — National Association of Emergency Medical Technicians

- Federal Aviation Administration (FAA) – Maintenance Schools; US Department of Transportation
- Joint Review Committee on Education in Cardiovascular Technology (JRC-CVT);
- Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS);
- Joint Review Committee on Education in Radiologic Technology (JRCERT);

## Career Services

Career Services is a multi-faceted department that focuses on preparing students for careers. It encompasses the Career Library Resource Center, Career Programs, Tech Prep Career Pathways/Articulation, the Internship Academy and the Job Placement Center. Career Services is located on the third floor of Watson Hall. For more information, visit [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices)

### Career Resource Center

The Career Resource Center offers a variety of materials for students to do research on various aspects of occupational or educational goals. Students can access school catalogs, college major directories, college rankings, career information, job outlook and trends, and much more. There also are career assessments available to help students in making the right decision about their future. The Career Resource Center will help students to pave their own path to success. For more information, phone (714) 432-5576 ext. 4 or visit us online at [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices)

### Career Pathways/Articulation

The Career Services Department receives funding from the California Community College's Chancellor's Office through a CTE Transitions Grant and a SB70/SB1133 Career Technical Education Community Collaborative Grant to develop and maintain articulated courses between local high schools and the College; plan sequences of study in career technical education programs that begin in high school, and extend through at least two years of postsecondary education or an apprenticeship program; and develop and operate career pathway day events to showcase the College's career technical education programs to high school students and community members.

This funding is essential in helping to promote a bridge between secondary and postsecondary career technical education programs, providing career pathways, and helping all students make the connection between school and employment.

For more information on our career programs, call (714) 432-5576 ext. 5 or visit us online at [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices).

Gainful employment information for OCC graduates can be found here: <http://www.orangecoastcollege.edu/Gedt/Pages/default.aspx>

### Internship Academy

The Internship Academy at Orange Coast College offers students the opportunity to attend college classes and earn college credit for concurrent learning on the job. The program is designed to meet the demands of the students and employers for internship experience, and is "in compliance" with Title 5 regulations for accredited field experience. Together, the employment experience and educational aspects enable the student to acquire the knowledge, skills and attitudes necessary to enter and progress in a chosen career.

The Internship Academy assists students in making the transition from school to work by providing hands-on, "real world" learning experiences, and practical application of classroom theory.

The Academy delivers career-related field experience to students interested in or planning to enter a specific career related to their education.

The Academy experience is a compilation of career exploration, training-related field experience and clinical fieldwork. For more information, call (714) 432-5576 ext. 2 or visit [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices)

### Job Center

The Job Center provides a connection between employers and Orange Coast College students. The Center assists students in their job search by providing listings from local employers that include temporary or permanent part-time, full-time and internship opportunities. Workshops are provided to improve resume-writing skills and interviewing techniques. Books dealing with job preparation and search skills are available for checkout. Computers are accessible to assist with job searches. Job Center personnel also are available to discuss particular job search needs. For more information, call (714) 432-5576 ext. 1 or visit us online at [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices)

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## College Programs

### Career and Technical Education Programs

Orange Coast College offers more than 150 Career & Technical Education programs. OCC offers a variety of programs combining theory, practical training and experience. A program advisory committee, composed of local employers and workers, helps plan and offers ongoing advice and supervision for career programs. An extensive list of program descriptions is located in the College's catalog under "Degrees and Certificates."

Pick up one of the career program information sheets in the Transfer Center to find what career and certificate programs OCC offers. To learn more about career options, please visit [www.orangecoastcollege.edu/careerservices](http://www.orangecoastcollege.edu/careerservices) or call (714) 432-5575.

### College Transfer Information

Many students choose careers that require four or more years of college. Orange Coast College has a comprehensive transfer program that satisfies lower division requirements for most majors. A student, working with a counselor, may plan a two-year program at Orange Coast College then transfer to a college or university to complete a four-year degree.

Courses numbered A100 or higher are transferable to the California State University system. A list of courses that transfer to the University of California system is available in the Counseling Center and Transfer Center. These courses also are marked "UC" in the Courses section of this catalog. Counselors can help determine which courses transfer to other colleges and universities.

The Transfer Information section of this catalog contains additional information about transfer.

### Counseling and Guidance

The counseling program at Orange Coast College is in place to help students identify and clarify personal, career and educational goals. The intent is to help students choose options that will improve the quality of their lives.

The counseling process encourages the building of a strong self-concept by helping students identify their needs and motivations, and by guiding them in learning and applying effective decision-making skills. Personal, career and academic choices are not viewed as separate and disconnected entities, but as interrelated issues, the combination and interaction of which determine the present and future quality of each individual's life experience.

### Community Education Programs

Orange Coast College's Community Education programs provide a variety of lifestyle, recreation, enrichment and professional development opportunities to our community members. All of OCC's Community Education courses are low-cost, fee-based, not-for-credit and not supported by any state or local taxes; enrollment fees support this programming. For more information about Community Education, please call (714) 432-5155 or visit [www.orangecoastcollege.edu/comm](http://www.orangecoastcollege.edu/comm)

### Developmental Programs

Many special programs are offered to students who are not prepared for the demands of college-level



courses. OCC offers special programs and courses in developmental reading, vocabulary building, spelling, oral communication, basic mathematics and English as a Second Language.

## Consumer Information

Orange Coast College is committed to providing comprehensive Consumer Information to all students and stakeholders. For a complete listing of Consumer Information please visit [http://www.orangecoastcollege.edu/about\\_occ/Pages/Consumer-Information.aspx](http://www.orangecoastcollege.edu/about_occ/Pages/Consumer-Information.aspx)

## Degrees and Certificates

By authorization of the Board of Governors of the California Community Colleges, Orange Coast College confers the Associate in Arts degree on students who complete sixty (60) units with a grade of "C" or better in prescribed courses.

Orange Coast College also grants the degree of Associate in Science only for the majors listed in the Associate in Science Degree requirements section in this catalog.

In Addition, Orange Coast College grants the Associate Degree for Transfer (ADT). It is a joint program between the California Community Colleges and the California State University (CSU) that makes it easier for students to transfer. Students who earn the ADT are guaranteed:

1. Admission to a CSU campus in a similar major to their ADT. However, it does not guarantee admission to a specific campus or major.
2. Ability to finish the bachelor degree with an additional 60 units.

Orange Coast College awards the Certificate of Achievement to students who successfully complete the required courses of a certificate program including a minimum of 18 units. Orange Coast College also grants the Certificate of Specialization (less than 18 units) to students who complete a specially designed or intensive learning activity.

## Noncredit Certificates

The noncredit programs at Orange Coast College provide students access to higher education for skill attainment, college preparation, career enhancement, and personal enrichment. To earn a noncredit award, students must complete the list of required courses identified within the program of their choice. Noncredit courses are offered free of charge, except for instructional materials fees, if applicable, and are repeatable. These courses are identified with course numbers ending in "N," for example, A001N. Students taking only noncredit courses do not earn college credits, and are not eligible for financial aid.

## Career Development and College Preparation (CDCP) Programs

- Certificate of Competency—a certificate in a recognized career field articulated with degree-applicable coursework, completion of an associate degree, or transfer to a baccalaureate institution
- Certificate of Completion—a certificate leading to improved employability or job opportunities

For more information regarding noncredit, please visit [www.orangecoastcollege.edu/academics/adult-education](http://www.orangecoastcollege.edu/academics/adult-education)

## The Orange Coast College Foundation

The Orange Coast College Foundation serves as a community and financial support organization to help Orange Coast College achieve its mission. The goals of the Orange Coast College Foundation include providing financial support for the College, involvement opportunities for board and community members, advocacy to help the College meet its goals, and advisement to the College's administration.

The OCC Foundation accepts donations of cash, securities, real property, insurance and personal property from individuals, businesses and other foundations. The Foundation strengthens the educational objectives of the College by providing funds for faculty development, student scholarships, Library acquisitions, and capital improvements and repairs to the campus of Orange Coast College.

Members of the Orange Coast College Foundation Board of Directors are volunteers. They generally serve three-year renewable terms. Members are appointed from the community and can include alumni, business leaders, community leaders, parents, donors, and members of the College's current and retired faculty and staff who are interested in supporting the missions of the College and the Foundation.

For additional information on the Foundation, please call (714) 432-5126.

## Goals and Objectives

The college Master Plan is available online at: [http://www.orangecoastcollege.edu/about\\_occ/office\\_of\\_the\\_president/College%20Documents/Educational%20Master%20Plan%202016-2021.pdf#search=master%20plan](http://www.orangecoastcollege.edu/about_occ/office_of_the_president/College%20Documents/Educational%20Master%20Plan%202016-2021.pdf#search=master%20plan). Below are the five college goals from the plan.

**Goal 1: Community** – Foster a culture that serves, engages and connects the campus to the local and global community.

- Objective 1: Promote an inclusive college environment and intercultural understanding, to enable a stable society and the ability of graduates and employees to work in a diverse, culturally rich environment.
- Objective 2: Develop and encourage faculty, staff, management and student engagement in global and international experiences, and facilitate a means to bring those experiences back to campus.
- Objective 3: Develop, expand and institutionalize community and industry connections

**Goal 2: Learning** – Ensure students receive a quality education to become self-directed and successful lifelong learners.

- Objective 1: Increase completion rates for a wide range of students from a wide-range of backgrounds while preserving access and enhancing quality.
- Objective 2: Implement a comprehensive approach for the development of integrated academic and support services to holistically address the needs of students.
- Objective 3: Strengthen the scheduling processes for program/discipline pathways and learning practices to increase student goal completion.
- Objective 4: Foster adaptable, innovative learning environments.

**Goal 3: Access** – Create equitable access through effective and innovative pathways and programs that result in increased student success.

- Objective 1: Adapt basic skills instruction and support processes to increase skill development, and accelerate college level preparedness.
- Objective 2: Assist students by creating a coordinated K-12, OCC and four-year academic seamless pathway to degree and job attainment.
- Objective 3: Increase completion rates for students from diverse social and academic backgrounds and eliminate academic achievement gaps.

**Goal 4: Stewardship** – Sustain, improve and create programs, physical and human resources, and infrastructure through processes that ensure accountability, continuous improvement, and long-term viability.

- Objective 1: Model and embed environmental sustainability practices within College instruction and programs.

- Objective 2: Develop and maximize financial resources to benefit OCC students and programs.
- Objective 3: Cultivate human potential to advance our mission and enhance the quality of the work and personal lives of our employees.
- Objective 4: Promote an open environment with rigor, transparency, continuous improvement, and recognition of collaboration and individual achievement.
- Objective 5: Enhance services and instruction through the use of self-directed, intuitive on-line technology.

### **Goal 5: Student and Employee Engagement –**

Promote active and collaborative participation leading to meaningful connections among people, places and ideas within the College.

- Objective 1: Create structured opportunities for student engagement within curriculum, co-curricular activities and service learning opportunities.
- Objective 2: Develop programs to promote faculty and student interaction, along with team and community building that advances the mission of the College.
- Objective 3: Support the development of students and employees as individuals, and as community members.

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## **Guided Pathways**

The Guided Pathways initiative will make students' pathways to success easier to navigate. The College attempts via this effort to provide solutions to barriers that students face in their journeys to complete their educational goals. The Guided Pathways framework for student success at OCC will:

- Assist students in identifying the path to attaining their educational goals.
- Provide all students with a set of clear course-taking patterns that promote better enrollment decisions and prepare students for future success.
- Integrate support services in ways that make it easier for students to get the help they need during every step of their community college experience.
- Assess student learning to assure students are leaving the college with the skills, knowledge, and dispositions required to be successful in their chosen fields.

For more information, please visit the Guided Pathways website at: <http://www.orangecoastcollege.edu/about-occ/guided-pathways/Pages/gp-events.aspx>

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## **Institutional Student Learning Outcomes (SLOs) (ISLOs)**

**Communication** – Students will communicate effectively, which includes:

1. Reading: Students will be able to comprehend and interpret various types of written information in prose and in documentation.
2. Writing: Students will demonstrate the ability to communicate thoughts, ideas and information in writing.
3. Listening: Students will be able to receive, attend to, interpret and respond appropriately to verbal and/or nonverbal messages and cues.
4. Speaking: Students will be able to organize ideas and communicate verbal or non-verbal messages and cues appropriate to the audience and the situation.
5. Non-verbal: Students will be able to interpret and communicate nonverbal messages and cues.

**Thinking Skills** – Students will think critically, which includes:

1. Critical, creative and analytical thinking: Students will be able to reach decisions, solve problems, and make judgments and evaluations using critical, creative and analytical skills.
2. Quantitative reasoning: Students will develop and demonstrate problem-solving skills by using critical thinking and logical reasoning.
3. Information competency: Students will demonstrate abilities to determine the extent of information needed; obtain data from various sources; evaluate the information and its sources critically; cite their sources correctly to avoid plagiarism; and understand the ethical and legal issues surrounding the use of information.
4. Technological competency: Students will demonstrate a firm grounding in the foundational concepts of computing in information technology; apply these concepts through the use of contemporary hardware, software and network infrastructure; and access, interpret, and apply information that facilitates learning and critical inquiry.

**Social and Global Awareness** – Students will demonstrate a measurable understanding of the world, which includes:

Science and society: Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions.

5. The arts and society: Students will develop skill sets associated with the arts by analyzing aesthetic qualities, evaluating and devising rational arguments, identifying cultural and historical influences, and engaging in artistic expression and experiences.
6. Social diversity: Students will describe how knowledge from different cultural and moral perspectives would affect their interpretations of prominent problems in politics, society, the arts and /or global relations.
7. Civics: Students will use theoretical and methodological principles of the social and behavioral sciences to explain and evaluate the human experience; describe institutional, group, and individual processes across social and global contexts or historical periods; and communicate the concepts, theories, and methods used to understand social, political, economic institutions and individual behavior.

**Personal Development and Responsibility** – Students will demonstrate personal development and responsibility, which includes

1. Self-management: Students will be able to accurately assess their own knowledge, skills and abilities; motivate self and set realistic goals; accept that taking feedback well is important to success; respond appropriately to challenging situations.
2. Social and emotional wellness: Students will engage in self-evaluation in regard to social and emotional wellbeing, and will demonstrate an awareness of the skills and behaviors necessary to develop plans for behavior change for the achievement of satisfactory relationships on an individual, community and societal level.
3. Physical wellness: Students will manage personal health and physical fitness by actively applying appropriate principles for the development and implementation of a plan of health and fitness-enhancing behaviors.
4. Workplace/professional skills: Students will be dependable, reliable and accountable; meet deadlines and complete tasks; maintain a professional attitude; and work as a productive member of a team.
5. Ethics: Students will demonstrate individual moral responsibilities toward themselves and others.

## Memberships

Orange Coast College maintains membership with the following organizations:

- Academic Senate for California Community Colleges
- Accrediting Commission for Community and Junior Colleges
- American Association for State and Local History
- American Association of Community Colleges
- American College Dance Festival Association (ACDFA)
- American College Health Association (ACHA)
- Association of Community and Continuing Education Membership
- Association of Core Texts and Courses
- California Association of Community College Registrars & Admissions Officers (CACCRAO)
- California Community Colleges Chief Instructional Officers (CCCCIO)
- California Community College Student Services Association
- California Community College Student Financial Aid Administrators Association
- Community College Public Relations Organization (CCPRO)
- California Council of Cultural Centers in Higher Education (CaCCCHE)
- Honors Transfer Council of California
- Institute of International Education (IIE) Learning Resources Network
- NAFSA: Association of International Educators
- National Association of Colleges and Employers (NACE)
- National Association of Student Financial Aid Administrators (NASFAA)
- National Collegiate Honors Council
- National Council for Marketing and Public Relations (NCMPR)
- South Coast Higher Education Council (SCHEC)
- Trash for Teaching (T4T)
- Western Association of College Admission Counseling (WACAC)
- Western Regional Honors Council

## Admissions and Registration

We want to make enrolling at Orange Coast College as convenient and easy as possible. It begins when the student completes and files an application form online at [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu)

Students that are new to Orange Coast College complete an online orientation.

New students complete the Assessment process in order to receive placement into English and Math courses. This process may include, submission of a transcript (to determine Math and English course placement), self reporting of high school GPA (if no transcripts are available) or placement through a guided self-placement. For more information, please visit the OCC website at [www.orangecoastcollege.edu/student\\_services/AssessmentCenter/](http://www.orangecoastcollege.edu/student_services/AssessmentCenter/).

In addition, new students may schedule an appointment to meet with a counselor to create a Student Education Plan (SEP) and verify their program of study (major). These activities are followed by the actual registration process: signing up for classes and paying fees online using MyOCC. If a choice of a major is any one of the many allied health career programs, students must participate in a special admission process, in addition to the activities described above. Additional information may be found in this section.

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### Admissions Eligibility

Admission to OCC is granted to those applicants who meet one of the following requirements:

- High school graduation
- Certificate of Proficiency or a G.E.D. from the State of California
- Attainment of 18 years of age and who, in the judgment of College officials, are capable of profiting from instruction at the College
- Enrollment in the 9<sup>th</sup> through 12<sup>th</sup> grade, and recommendation for advanced academic or vocational college-level study

Students enrolled as 9<sup>th</sup> through 12<sup>th</sup> grade students may enroll for courses at Orange Coast College under provisions of the Education Code, sections 76001 or 76001.5, and in accordance with the District's policy and the following guidelines:

- Students must be enrolled as 9<sup>th</sup> through 12<sup>th</sup> grade students at their schools
- The course is an advanced academic or vocational experience for the student and not available at their regular school
- Students must have letters of permission, Early Start Petition (ESP form), signed by the parent and principal or designee of their school, recommending the specific course or courses. Students must meet any and all prerequisite and co-requisite course requirements. Visit the OCC website for more information.

International students who are, or intend to be, under F-1 visa status should contact the Global Engagement Center directly for entrance requirements (please see pages 9-10.)

### Application

An application for admission is required for all students. Application forms may be accessed through the OCC website at [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu) International students should contact the Global Engagement Center regarding admission to the College at (714) 432-5940, [occinternational@cccd.edu](mailto:occinternational@cccd.edu), or at [www.orangecoastcollege.edu/international](http://www.orangecoastcollege.edu/international).

### Acceptance of Transfer Credit/ Transcripts from Other Colleges

Students who have completed coursework, especially English and/or mathematics, at another regionally accredited college or university should submit their transcripts for evaluation to the Enrollment Services Office, located on the first floor of Watson Hall. Official College transcripts from accredited institutions are required in order for the student to receive credit toward the associate degree, certificates of achievement, transfer certification, all awards/credit, and advisement. For the purposes of this catalog, "accredited institutions" means those institutions accredited by one of the six U.S. regional accrediting associations. The six regional associations are:

- New England Association of Schools and Colleges
- Middle States Association of Colleges and Secondary Schools, Commissions on Institutions of Higher Education

- North Central Association of Colleges and Schools, Commission on Colleges and Universities
- Northwest Association of Secondary and Higher Schools, Commission on Higher Schools
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges, Accrediting Commission for Senior Colleges and Universities and Accrediting Commission for Junior Colleges

OCC reserves the right to evaluate work completed at other colleges in accordance with campus policies.

Official student transcripts of record from other institutions become the property of OCC. Students with transcripts from countries outside the United States must first submit their transcripts to an evaluation service. Please contact the Counseling Office, located on the third floor of Watson Hall, for information regarding these services.

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### Admission to School of Allied Health Professions

Admission into Allied Health Professions programs is limited for several reasons:

- Training in any health care program needs to meet an identified community need.
- Available clinical sites for hands-on experience is limited.
- Educators must meet stringent qualifications.

- Availability of specialized equipment in highly technical laboratories is limited.

### **Allied Health General Program Requirements**

The following programs require Allied Health A010 as a prerequisite:

- Cardiovascular Technology, Electrocardiology, and Echocardiology
- Dental Assisting – Registered
- Diagnostic Medical Sonography
- Medical Assisting
- Neurodiagnostic Technology
- Nutrition and Dietetic Technician
- Polysomnographic Technology
- Radiologic Technology
- Respiratory Care
- Speech Language Pathology Assistant

Allied Health A010 is optional for the following program

- Emergency Medical Services

### **Admission**

Taking Allied Health A010 is the optimal method to determine career choice and is required to apply to a specific program. Students should take Allied Health A010 as early as possible and should take this course prior to completing other General Education or prerequisite classes. Admission criteria is based on a first-come, first-served basis and the priority criteria for acceptance is listed below in order of ranking:

- The dates of successful completion of specific program prerequisites and applicable General Education requirements.
- The date of application to the program through Allied Health A010.

More specific information concerning the admission procedure can be found on the Allied Health website at [http://www.orangecoastcollege.edu/academics/divisions/consumer\\_health/allied\\_health/Pages/default.aspx](http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/Pages/default.aspx)

### **General**

- Students should have adequate financial support so as not to jeopardize their academic achievement and clinical experiences by extensive outside employment.
- Many programs have external licensing/certification examination with specific requirements for employment.
- Many programs require completion of the General Education requirements for the Associate in Science degree before admission.

See College catalog for specific General Education requirements for the Associate in Science degree.

### **Course Recency for Programs that Require the Following Prerequisites:**

**To keep abreast of the industry standards, all students admitted to any of the Allied Health programs must adhere to the current catalog program requirements for the year they are admitted to a program.**

**Allied Health A111 – Medical Terminology:** must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.

**Biology A221 – Anatomy-Physiology:** must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.

**Chemistry A110 – Introduction to Chemistry:** must be successfully completed with a grade of “C” or better within a three-year period of the application date to the Respiratory Care program.

**Diagnostic Medical Sonography A110 – Introduction to Sonography** must be successfully completed with a grade of “C” or better within a three-year period of the application date for the specific program.

**Radiologic Technology A100 – Radiation and Imaging Physics:** must be successfully completed with a grade of “C” or better within a three-year period of the application date to the specific program.

**Prerequisite courses listed above that have exceeded the three or five year limit must be re-taken.**

If the course is greater than three years old (or five years old for Math) and the student has been working in a field that requires application of this course material, the student may ask for a waiver of the recency requirement. This waiver will require a letter from the employer indicating the need and utilization of the course material. Final waiver determination is by the program director.

### **Clinical**

- Admission into the clinical phase of a program requires that students be in good physical and mental health. A physical examination is required that includes blood testing, TB testing, and vaccinations.
- A criminal background check and drug screen are required. Students must pass this test to be admitted to the program. A valid Social Security number is needed for this screening process.

- Students must adhere to a specific dress code and wear picture identification badges.
- Students must have reliable transportation to off-campus clinical sites.

More specific information concerning the admission procedure can be found on the Allied Health website at [www.orangecoastcollege.edu/academics/divisions/consumer\\_health/allied\\_health/Pages/default.aspx](http://www.orangecoastcollege.edu/academics/divisions/consumer_health/allied_health/Pages/default.aspx)

### **Termination of Allied Health Program and Procedure for Readmission**

Any break in enrollment due to any of the items listed below will cause a termination in the program.

1. Voluntary withdrawal due to extenuating circumstances, defined as personal/family health issues, personal/family financial issues, or family-related issues preventing the student from continuing (NOTE: Grades are not considered as extenuating circumstances) or
2. Non-passing grades (D or F) in Didactic Courses or
3. Non-passing grades (D or F) in Clinical and/or Laboratory Experiences or
4. Non-passing grades in Clinical and/or Laboratory Experiences for unsafe practices or substandard professional performance.

A student who terminates as indicated above in items numbered one to three, and who subsequently desires readmission to the program, will need to follow the Procedures for Readmission as specified on the Allied Health website. NOTE: For item four above, the student will be unable to continue in their chosen program and will be unable to reapply to the School of Allied Health Professions for any program.

### **Priority Registration Policy**

Enrollment priority is the process used to determine the order in which students will have the opportunity to register for classes. Recognizing that each college serves a unique student population that may have differing needs, the development of specific registration priorities for some student groups will be done at the college level in accordance with District procedures.

The Coast Community College District is committed to the philosophy that all students should have fair and equitable access to courses and programs within the resources of each college and in accordance with State Education Code, Title 5 provisions, and guidelines adopted by the Board of Governors. Further, the District believes that students should be able to progress toward their stated educational objective in a timely manner.

The primary mission of the District colleges is to provide degree, certificate, and transfer programs.

Therefore, priority is extended to students who have completed the requirements of SB1456 as defined by the Student Success Program. These include 1) completion of an orientation program 2) placement into English and Math courses via the assessment process 3) selection of a college program of study (major) 4) establishing a Student Education Plan (SEP) with an appropriate counselor and 5) demonstrate satisfactory academic progress toward their declared educational objectives (major). Registration priority will be according to the framework established on Administrative Procedure (AP 5055).

Board Policies and Administrative Procedures are available on the Board Policy section of the Coast Community College District (CCCD) website at [www.cccd.edu](http://www.cccd.edu)

## Loss of Priority Registration

Students are assigned registration appointments in accordance with the Coast Community College District (CCCD) Board Policy 5055 and Administrative Procedure 5055. Students will lose priority registration due to unit cap limitations and/or not meeting academic progress standards (completion of more than 67% of courses attempted and maintaining a cumulative 2.0 GPA). Students will also lose eligibility for the California College Promise Grant (formerly BOGFW) due to not meeting academic standards. Students may submit an appeal form for consideration of reinstatement of priority registration and/or California College Promise Grant eligibility. The form is available on the OCC website at [www.orangecoastcollege.edu/enrollment/Pages/New-Registration-Priority-Information.aspx](http://www.orangecoastcollege.edu/enrollment/Pages/New-Registration-Priority-Information.aspx)

## Residence Requirements

### California Residence

The initial residency classification will be made at the time the student applies for admission. Students may file residency questionnaire forms through the third week of the semester to request a review of their residency status. Final residency determination is made by Enrollment Services.

Verification of residence status may be required. Generally California residence is established by one of the following:

1. If the applicant is under the age of 18, his or her parents must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester.
2. If the applicant is 18 but not yet 19 years of age, the applicant and the applicant's parents must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester.

3. If the applicant is 19 years of age or older, the applicant must have had legal residence within the State of California for 12 consecutive months preceding the day before the first day of the semester. If the applicant's parents or legal guardians reside out-of-state, the student must be financially independent. (See Non-California Residents #2).
4. A non-immigrant holding a status that does not preclude the student from establishing residency in California must have legal residence in California for 12 consecutive months preceding the day before the first day of the semester, and a restrictive immigration status dated at least one year and one day prior to the semester start date.

Persons generally ineligible to establish California residency include: students under age 18, students dependent on out-of-state parents/guardians, students with certain non-immigrant status, etc. For further information regarding eligibility to establish residency, contact a Residency Specialist at the Enrollment Center on first floor of Watson Hall or via email at [occredidency@occ.cccd.edu](mailto:occredidency@occ.cccd.edu)

### Non-California Residents

Students who do not meet the California residence requirements as of the day immediately preceding the first day of the semester or summer session are required to pay the non-resident tuition fees and capital outlay fees. This includes:

1. Minors (under 18 years of age and not married) will be required to pay the non-resident tuition fee if their parents or legal guardians reside outside the state even though such minors may have lived in the State of California for one year or more.
2. Students who are financially dependent on their parents or legal guardians will be required to pay non-resident tuition and capital outlay fees if their parents or legal guardians reside outside the state, even though such students may have lived in the State of California for one year or more.
3. Students holding non-immigrant status that precludes them from establishing residency in California may be restricted in their enrollment and will have to pay non-resident tuition and capital outlay fees.

Exemptions authorized by the State of California:

- Active military personnel are exempt from non-resident tuition fees provided they are in California for a purpose other than attending a state-supported institution of higher learning. Beginning Summer 2017, active duty military students and their dependents who are only enrolled in fully online classes at any of the

Coast Community College District sites are exempt from the capital outlay fee.

## Expansion of Resident Classification for Purposes of Determining Tuition and Fees

Education Code section 68074 provides that specified dependents of members of the Armed Forces of the United States who are stationed in California on active duty are entitled to "resident classification only for the purpose of determining the amount of tuition and fees." In Assembly Bill 172 (2017), the Legislature extends this resident classification to specified dependents of transferred or retired members, provided the dependent was admitted to a public postsecondary institution prior to the transfer or retirement. (Ed. Code, § 68074, subd. (b).)

- Dependents of military personnel stationed on active duty in California are classified as a resident.
- Veteran military personnel that were stationed in California for more than one year prior to separation qualify for the non-resident college fee waiver for one year within two years commencing immediately after discharge.
- Veteran students receiving Montgomery G.I. Bill (Chapter 30) or Post 9/11 (Chapter 33) educational assistance and enroll within three years of discharge after serving 90 days or more on active duty; or anyone using transferred entitlement within three years of the transferor's discharge after serving 90 days or more on active duty; or surviving spouses or children under the Marine Gunnery Sergeant John Fry Scholarship who enroll within three years of an active service member's death in the line of duty after serving 90 days or more; or individuals who remain continuously enrolled after initially meeting the requirements and continue to use Chapter 30 or 33 benefits shall receive California residency for tuition purposes as required by the Federal Veterans Access, Choice and Accountability Act (VACA).

AB 540 Exemption Eligibility Requirements:

Under Senate Bill 68 and AB 540, a student is exempt from paying nonresident tuition at the Californian Community Colleges if the student meets all three of the required criteria.

1. The student must have:
  - attended a combination of California high school, adult school, and California Community College\* for the equivalent of three years or more, or

- attained credits earned in California from a California high school or California adult school\* equivalent to three or more years of full-time high school course work and attended a combination of elementary, middle and/or high schools in California for a total of three or more years,<sup>3</sup> and
2. The student must have:
    - graduated from a California high school or attained the equivalent prior to the start of the term (for example, passing the GED or California High School Proficiency exam), or
    - completed an associate degree from a California Community College, or
    - completed the minimum requirements at a California Community College for transfer to the California State University or the University of California, and
  3. The student must file an affidavit with the college stating that if the student is a non-citizen without current or valid immigration status, the student has filed an application to legalize immigration status, or will file an application as soon as the student is eligible to do so.

\* One year equivalent at a California Community College is either a minimum of 24 units of credit or 36 quarter units. Only 2 years for full time attendance in credit courses at the California Community College will count towards the 3 or more years of attendance. Full-time attendance at a California Adult School is a minimum of 420 hours of attendance for each school year.

Students under certain visa classification may not be eligible for this exemption. Additional criteria is available on the California Nonresident Tuition Exemption Request. Please contact the Residency Specialist for more information at [occresidency@occ.cccd.edu](mailto:occresidency@occ.cccd.edu).

### ***Nonresident Tuition Exemptions for Refugees, Special Immigrant Visa holders, and Others***

In 2017, the California Legislature also enacted Assembly Bill 343, which establishes a new exemption from nonresident tuition for refugees with special immigrant visas (SIVs). Please contact the Residency Specialist at [occresidency@occ.cccd.edu](mailto:occresidency@occ.cccd.edu) for more information.

California Education Code section 68075.6 further specifies exemptions to nonresident tuition, effective January 1, 2018. In addition, under California Education Code section 68122, T and U visa holders are also exempt from nonresident tuition by extension

of Assembly Bill 343. Assembly Bill 343 also states that the exemption for a student is only available for the maximum time it would take for the student to establish residency.

### ***Incorrect Classification***

A student incorrectly classified as a California Resident is subject to reclassification as a nonresident and payment of nonresident fees. If incorrect classification results from false or misleading statements, the student will be responsible for any fees associated with the incorrect classification.

For evaluation of residency status, students must complete the Statement of Residence form and submit appropriate documentation as proof of California Residence (Sections 54012 and 54024 of AP 5015 Residence Classification) through the third week of the semester.

### ***Reclassification***

Reclassification to resident status must be requested by the student. The appropriate Statement of Residence form along with the required proofs that establish both physical presence (minimum requirement of 12 consecutive months prior to the residency determination date) and intent to make California their permanent home must be submitted to the Enrollment Center prior to the term in which the student wishes to establish residency. Although a minimum of two proofs are required for residency reclassification consideration, the burden of proof remains with the requestor. Therefore, the Enrollment Center reserves the right to request additional documentation in its efforts to determine California Residency for tuition purposes. For additional information, contact a Residency Specialist at the Enrollment Center on the first floor of Watson Hall or via email at [occresidency@occ.cccd.edu](mailto:occresidency@occ.cccd.edu).

### ***International Students***

Orange Coast College is authorized by the U.S. Department of Homeland Security (DHS) to admit international students under F-1 visa status.

At OCC, we believe that our international students provide ethnic and cultural diversity to the campus and help increase the awareness and understanding of students from other countries and cultures. Conversely, we provide an opportunity for international students to study in the United States and learn about our culture.

Interested international students can request an application for admission by emailing the Global Engagement Center at [occinternational@cccd.edu](mailto:occinternational@cccd.edu). An application packet can also be downloaded by visiting the Global Engagement Center website at [www.orangecoastcollege.edu/international](http://www.orangecoastcollege.edu/international)

Our admission process allows for acceptance to OCC during the fall, spring, and summer semester.

Applicants must submit all required documents prior to the application deadline for the semester in which they wish to attend. Approximate semesters start dates are late August for fall, late January for spring, and early June for summer semesters.

The following are admission requirements for international students who are, or intend to be under F-1 visa status:

- Completed and signed international student application.
- Application fee in the amount of \$55 USD.
- Passport-size photograph.
- Academic records: All evidence of academic records equivalent to high school graduation or higher, demonstrating successful academic achievement. In addition, international students who are in the U.S. under F-1 status must submit all of their academic records from the institutions they have attended in the U.S.
- English requirement: A minimum score of 500 (paper-based) or 61 (internet-based) on the Test of English as a Foreign Language (TOEFL), or a minimum score of 5.5 on the IELTS, or the EIKEN STEP Pre-First Grade level, or a minimum score of 5 on iTEP Test. Applicants in the U.S. also can use the appropriate level in one of the English language programs with which OCC has agreement to satisfy this requirement. Applicants can contact the Global Engagement Center for a complete list of these schools.
- Confidential financial support documentation: Sponsor's information and verification of support, as well as an original bank statement verifying sufficient amount is required. Additional documentation may be required upon reviewing applicant's file. Financial forms can be obtained from the Global Engagement Center or downloaded from the Global Engagement Center website at [www.orangecoastcollege.edu/international](http://www.orangecoastcollege.edu/international)
- Immigration-related documents: Applicants in the U.S. must submit copies of all immigration-related documents along with their application.

International students must enroll in and complete a minimum of 12 units each semester with a minimum 2.0 grade point average (GPA) in order to maintain their valid F-1 status. In addition, all international students must maintain continuous medical coverage that is provided through the Global Engagement Center throughout their studies at OCC. All international students pay non-resident tuition fees in addition to all other applicable fees during their entire attendance at OCC.

DHS prohibits international students from unauthorized employment. International students must obtain approval from the DHS and the Global Engagement Center before they engage in any on- or off-campus employment.

For further information or specifics regarding admission and submission of documents, please refer to the International Student application packet or contact the Global Engagement Center by telephone at (714) 432-5940 or via email at [occinternational@ccd.edu](mailto:occinternational@ccd.edu), or visit the Global Engagement Center.

## Students with Visas

Students with certain types of visas who are eligible for admission may enroll (limitations of units and/or restrictions may apply) provided they have a valid status that does not expire before the end of the term for which they are enrolling. Students with a non-immigrant visa classification must insure that enrollment in College does not interfere with their primary intent of non-immigrant status.

A student who is precluded from establishing domicile in the United States shall not be classified as a resident unless and until he or she has been granted a change in status by the Department of Homeland Security (DHS) to a classification which permits establishing domicile and has met other residency requirements.

Students with B1 or B2 visa status are not eligible to take courses. They must contact the Global Engagement Center to inquire about changing their visa status.

IEC@OCC is not-for-credit intensive English program primarily for international students who do not meet the English proficiency level. For more information, please visit the website at [www.rec-occ.edu](http://www.rec-occ.edu) or call 714-432-5940.

## Assessment Requirements

Assessment is a process through which the College collects information about students to facilitate their success by ensuring their appropriate placement into English, ESL, and/or math courses.

With the passing of Assembly Bill 705, which requires that community colleges maximize the probability that a student will enter and complete “transfer-level” coursework in English and math within a one-year timeframe, the assessment process at OCC is changed to follow that guideline. Effective Fall 2019 semester, students (both new and continuing) will have access to enroll in first-level transfer English and mathematics courses regardless of prior placement or enrollment in below “transfer-level” courses or ESL. In addition to a “transfer-level” placement, students will receive a recommendation on the level of support needed to succeed in the course. Support recommendations are based on high school English and math courses completed, the grades in those courses, and the cumulative, unweighted high school GPA. Students will not need to take an English and/or math placement test.

OCC will continue to offer ESL courses to allow students to practice and improve speaking, listening, reading, writing, and grammar skills. If you are an ESL student, you may benefit from additional training prior to enrolling in transfer level English courses. ESL students who seek to enroll in ESL instruction will still receive access to first-level transfer courses.

In case the students do not have high school transcripts, they may self report their GPA and or receive placement via a Guided Self-Placement tool.

Students may also receive placement above first-level English and math transfer courses via the following alternative methods:

- Successful completion of courses – students who have successfully completed an English or math course from an accredited college or university that is considered equivalent at OCC.
- AP scores – students who received a score of “3” or above on AP Calculus and/or AP English Literature or AP English Language and Composition.

Students who possess an associate degree may be exempt from the assessment process. Students must provide official transcripts in order to verify satisfactory completion of college-level English and math coursework in order to be exempt. Students who possess a bachelor’s, master’s, or doctoral degree can be exempt from the assessment process. Students must provide official transcripts verifying the degree earned.

Students may challenge their placement results if they believe their placement is inaccurate. Challenge forms must be submitted prior to enrolling in the course. Forms are located in the division offices of Mathematics and Sciences and Literature and Languages, respectively.

Students are encouraged to visit the Assessment Center’s website at <http://www.orangecoastcollege.edu/assessmentcenter>, call (714) 432-5789 or stop by the Assessment Center, located on the first floor of Watson Hall, for more information about the assessment process. International students should contact the Global Engagement Center at (714) 432-5940 or [occinternational@ccd.edu](mailto:occinternational@ccd.edu) for testing requirements.

## Course Accessibility

The policy of the Coast Community College District is that, unless specifically exempted by regulation, every course section, or class, reported for state aid, wherever offered and maintained by the District, shall be fully open to enrollment and participation by any person who has been admitted to the college(s) and who meets such prerequisites as may be established pursuant to regulations contained in Title 5 of the California Code of Regulations, Division 6, Chapter 6, sub-chapter 1, Article 2.5, commencing with Section 55003.

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## Course Prerequisite, Co-requisite, and Advisory on Recommended Preparation

A “prerequisite” is a course a student is required to complete with a “C” or better, or a skill a student is required to have before enrolling in another course.

A “co-requisite” is a course a student is required to take at the same time he or she is enrolled in another course. All prerequisites and co-requisites are designed to ensure students have the skills or information they need to succeed in a course. These requirements are established because it has been determined that without meeting them, a student is not likely to receive a passing grade in the course. A prerequisite or co-requisite also may be necessary to protect a student’s health and safety, or the health and safety of others. Additionally, courses taken without prior completion of the prerequisite may be denied credit upon transfer to a CSU or UC per articulation agreements, either at time of admission or upon petition for graduation.

An “Advisory on Recommended Preparation” (listed as “Advisory”) is a course or skill a student should have before enrolling in another course. Such recommendations are offered by the faculty who teach these courses, and it should be followed for student success. However, unlike a prerequisite or co-requisite, an “Advisory” is not required.

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## Prerequisites and Co-requisites Clearance Process

OCC enforces prerequisites and corequisites at the time of registration. It is the student’s responsibility to determine if a course they wish to take has a prerequisite prior to their assigned registration appointment. Students can determine if a course has a prerequisite by visiting the online class schedule and selecting the CRN number of the course.

Students may be cleared in the registration system for enforced prerequisites and corequisites in the following ways:

- Successfully completing the prerequisite/co-requisite at OCC.
- Placing into the course via the assessment process.
- AP Scores of a score of 3 or higher in AP Calculus AB, AP Calculus BC, AP English Literature and Composition, AP English Language and Composition exam, AP Psychology.
- Successfully completing the equivalent prerequisite/corequisite with a “C” or better at another regionally accredited college/ university and submitting transcripts to verify successful completion.



To initiate the clearance process, students must submit the Clearance Request Form, available on the Registration Information page, and upload the appropriate documentation (official or unofficial transcripts and/or test scores). Students may submit unofficial transcripts for prerequisite and corequisite clearance only, but must submit official transcripts to receive course credit/units. In order to avoid registration difficulty, students must submit the form in a timely manner prior to their registration date.

If a prerequisite/co-requisite course equivalency is denied, students have the right to challenge a course prerequisite or co-requisite in accordance with Title 5, Section 55201. Students who wish to challenge a prerequisite based on previous experience or knowledge must visit the respective division office to obtain and complete a Challenge Form. The initial burden falls upon the student to show that grounds exist for the challenge. A grade lower than a "C" in a prerequisite course may NOT be challenged through this process. Grades of "C-" do not meet the "C" grade or better requirement as defined for this purpose. Decisions on challenges of prerequisite/co-requisite course listings will be made by a committee of two College instructional staff members, at least one of whom will be a faculty member knowledgeable about the discipline, but not the faculty member assigned to teach the course section for which the challenge is being made. All decisions are final.

## Fees and Expenses

California legislation requires the College to charge student enrollment fees. Student fees are:

- Enrollment fee of \$46 per unit for students meeting California residency requirements;
- \$30 parking permit, \$15 for summer sessions;
- \$21 health service fee, \$16 for summer sessions;
- \$21 College Services Charge\* for fall, \$24 for spring, and \$15 for summer sessions;
- Material fees as listed in the current class schedule.

\*The College Service Charge provides services and benefits, which include OCC Bookstore buyback, Robert B. Moore Theater discounts, free tutoring, interest-free emergency loans, student activities, and legal advice. Students may present their request to waive the College Service Charge to the ASOCC Office no later than the refund deadline. Please contact the ASOCC Office at (714) 432-5730 for more information.

Students who do not meet California residency requirements are required to pay a non-resident fee of \$265 per unit and a Capital Outlay fee of \$11 per unit in addition to the Resident fee of \$46 per unit, for a grand total of \$322 per unit.

**All fees quoted are at time of publication and are subject to change without notice. The state legislature may increase enrollment fees at any time including current and future terms.**

Student Health Center services include no-cost visits with doctors, registered nurses, and the mental health team, in addition to other services at reduced rates.

The student health service fee is a state mandated fee unless students present a waiver prior to registration. Those eligible for a waiver are:

- Students who depend exclusively upon prayer for healing in accordance with the teachings of a bona fide religious sect, denomination or organization.
- Students enrolled in courses of two weeks or less duration.
- Students enrolled only in non-credit courses.
- Students enrolled only in study abroad programs.
- High school students enrolled in dual enrollment and Career Access Pathway (CCAP) agreements.
- Students enrolled in an approved apprenticeship training program.
- Students who are incarcerated.

A registered student may purchase a parking permit for \$30 each semester and \$15 for the summer session. The permit is valid at Orange Coast College, Golden West College and Coastline Community College. Alternatives to the parking permit are metered parking, which costs \$0.50 per hour, and temporary parking permits available at the ticket dispensers.

Parking spaces are available on a first-come, first-served basis. The Coast Community College District and Orange Coast College accept no liability for vandalism, theft or accidents; students use the parking facilities at their own risk.

For more information, complete parking rules and regulations are available at the campus safety office in Parking Lot C (714) 432-5017.

Student Photo ID Cards are required for use in the Bookstore, Library and for other transactions with the College. This card may be used in succeeding semesters when the student is enrolled. Students will be required to replace any lost, stolen or unusable card.

In accordance with regulations of the Board of Governors of the California Community Colleges, Title 5, California Administrative Code, Section 59400 et seq., the Coast Community College District shall provide free of charge to students all instructional materials, except for the following materials which the student may purchase from the District at cost or may be provided through the student's own means.

- **Optional Instructional Materials:** Materials used to enhance the student's learning experience in the classroom, but that are not essential to the completion of course objectives.
- **Required Instructional Materials:** Materials required to complete the objectives of the course and that are tangible property of continuing value outside the classroom which the student will retain.

The College shall have the discretion to either charge or not charge a fee for instructional materials of the types indicated above. Such fees will cover actual District costs.

## Refund Policy

In Accordance with California State Regulations and Coast District Policy, registration fees will be refunded according to the following:

### ***Enrollment Fees, Non-Resident Fees, Material Fees***

100% refund of fees paid at registration for each class dropped by the refund deadline. No refund will be made after the refund deadline (refer to the Student Class Program/Web Schedule Bill on the Student Tab of the MyOCC portal page, or see Dates to Remember). There are no exceptions.

### ***Health Fee, College Service Charge***

100% of the fees paid at registration will be refunded if the student totally withdraws from all classes by the refund deadline for each class. No refund will be made after the refund deadline.

### ***Parking Permit***

Students must return the parking permit (if purchased) in-person or by mail. The parking permit must be postmarked or returned to the Enrollment Center (Registration Office) on or before the earliest refund deadline on the student's official Student Class Program (Web Schedule Bill), which is available via the Student tab on the MyOCC portal.

### ***Refund Processing***

Refunds will automatically be processed weekly beginning the first week of registration of the semester in which the fees were paid and each week thereafter, until the end of the term. Official withdrawals made in accordance with the refund policy and by the withdrawal deadline will generate a credit balance on the student's account.

In order to be eligible for a refund, students must officially withdraw from classes by the refund deadline (refer to the Student Class Program/Web Schedule Bill on the Student tab of the MyOCC portal page or see Dates to Remember). It is the student's responsibility

to officially withdraw from classes and to verify all withdrawals by printing their Student Class Program/ Web Schedule Bill for confirmation. An instructor may drop students for non-attendance. Instructors are not responsible for dropping students prior to refund deadlines. Students who are officially enrolled in a class after the refund deadline will not be eligible for a refund. There are no exceptions.

## ***Online Credit Card Payment Refunds***

Registration fee payments made by credit card through MyOCC will be refunded to the same credit card used for payment. Allow 6-10 business days for the refund to post. If the credit card used to pay fees is no longer valid, it is the student's responsibility to notify the Enrollment Center once the credit has been posted to the student's account and prior to the refund being processed. The refund will be converted to a check refund upon proper notification.

## ***On Campus Payment Refunds***

Fee payments paid on campus — by cash, check, money order or credit card — will be refunded through BankMobile as either a check, mailed to the mailing address the Enrollment Center has on file, direct deposit to an existing bank account; or to a BankMobile account, depending on the refund choice made by the student. It is the responsibility of the student to make sure their BankMobile Vibe account is activated, and updated, and to maintain correct and up-to-date address information. Addresses can be updated on MyOCC, under the Student tab, and then click on Banner Self Service.

All requests for review of account summary must be made within a one-year grace period from the semester in which the fees were assessed. Such petitions are subject to review and all decisions are final. There is no additional appeal process.

## ***Important***

Payments made using multiple payment methods (online credit card payments and cash, check or money order) during the current registration period will be refunded to the credit card used for online payments.

## Student Services and Co-Curricular Programs

The primary mission of all educational institutions is learning. Orange Coast College recognizes that there are many activities and programs outside of the classroom that enhance the learning process. Consequently, numerous student services have been established to help students move toward the attainment of their goals.

Students at OCC come from a diversity of backgrounds, ages, and lifestyles. The personal circumstances of many students often include financial, physical and/or learning constraints that make attending college difficult. The variety and comprehensive nature of student services at OCC is intended to support a multitude of concerns for a large student population. All students are encouraged to explore the services available at OCC by visiting the College's website which provides valuable information.

### Adapted Kinesiology Program

Adapted Kinesiology classes are designed for students with physical disabilities who can benefit from personalized exercise programs. A variety of courses are offered for improvement in strength, balance, flexibility and cardiovascular endurance, in addition to courses in individual sports such as bowling and aquatics. Students must register through the Disabled Student Programs and Services and complete a necessary medical verification form prior to participation. For more information, call (714) 432-5528 or email [bhernandez7@occ.cccd.edu](mailto:bhernandez7@occ.cccd.edu).

### OCC Alumni and Friends Association

The reputation of every distinguished college grows as a result of the benefits it bestows on its students, faculty and staff. The Orange Coast College Alumni & Friends Association enables our College to not only maintain its distinctive standing among community colleges but also to strengthen that standing by preserving close ties with all former OCC students.

Any student who has taken one or more classes at Orange Coast College is considered an alumnus. Voluntary membership in the Alumni & Friends Association is available for an annual fee of \$20, or \$25 for couples. Lifetime membership is available for \$150, or \$200 for couples.

Orange Coast College Alumni & Friends Association is a membership-based organization that relies on its members to support its programs and activities. Membership in the Alumni & Friends Association entitles you to a membership card, Library privileges, Job Placement Center resources, an alumni decal, discount tickets to campus performing arts events, invitations to alumni events, and opportunities to meet former classmates.

For more information, call (714) 432-5707 or email [eparker@occ.cccd.edu](mailto:eparker@occ.cccd.edu)

### Assessment Center

The Assessment Center, located on the first floor in Watson Hall, supports students through the enrollment process (from application to registration). Students can visit the Center to receive support with the application, completing the online orientation, and registering for courses. In addition, the Center assists with clearance of course prerequisites and challenges. The Center administers placement tests in English as a Second Language (ESL), Chemistry A180, and Spanish. For more information about the Assessment Center, please visit the website at [www.orangecoastcollege.edu/assessmentcenter](http://www.orangecoastcollege.edu/assessmentcenter) or contact the Center at (714) 432-5789 or via email at [occassessment@occ.cccd.edu](mailto:occassessment@occ.cccd.edu).

### Associated Students

The Associated Students of Orange Coast College (ASOCC) are responsible for student government and participation in College planning, policy-making and governance. They manage a large Student life program that includes a wide variety of clubs, social activities and informal learning experiences. They also oversee a substantial budget to assist students enrolled with a variety of different programs.

Within the ASOCC, students may choose a variety of leadership experiences such as serving on participatory governance committees, serving as a club member or officer, participating in programs and activities, and working on fiscal-related issues.

We invite students to participate in various programs and become involved as a student leader. For more information, please stop by the ASOCC office located in the Student Center.

For more information about ASOCC, please call (714) 432-5730.

### Athletics

With several decades of winning tradition, Orange Coast College has been regarded as having one of the top athletic departments among all two-year colleges in the state. This standard has produced one of the

highest totals of team and individual state and national championships throughout all California community colleges.

The Pirates field 12 men's athletic teams and 13 women's teams. Men's sports include baseball, basketball, crew, cross country, football, golf, soccer, swimming and diving, tennis track and field, volleyball and water polo. Women's sports include basketball, crew, cross country, golf, sand volleyball, soccer, softball, swimming and diving, tennis, track and field, volleyball and water polo. Cheerleading is a co-ed sport.

### Intercollegiate Athletics

Orange Coast College participates as a member of the Orange Empire Conference for most of its sports sponsored by the California Community College Athletic Association (CCCAA). The Orange Empire Conference includes the following colleges: Orange Coast, Cypress, Santa Ana, Riverside, Saddleback, Fullerton, Golden West, Irvine Valley and Santiago Canyon.

For football, OCC is a member of the Southern California Football Association, National Southern Division, which includes the following colleges: Orange Coast, Palomar, Santa Ana, Saddleback, Long Beach, Fullerton and Grossmont.

### Non-Conference Athletics

The men's and women's crew compete in individual sports associations.

Orange Coast College is the only community college in California to offer competitive rowing. OCC Crew is a member of the Western Intercollegiate Rowing Association and the American Collegiate Rowing Association. Other colleges competing in these associations include: CSU Long Beach, Loyola Marymount, CSU Sacramento, St. Mary's College, CSU San Diego, Santa Clara University, UC Irvine, UC Davis, UC San Diego, UC Santa Barbara, Stanford University, UC Berkeley, University of Washington, Oregon State University, UCLA, USC and Washington State University.

## Bookstore

The OCC Bookstore provides all required textbooks and supplies for students and faculty and also offers general interest books, magazines, greeting cards, gifts, Pirate clothing and general merchandise to accommodate the needs of the campus community.

### Bookstore Hours

Contact the bookstore at (714) 432-5896 or by fax at (714) 432-5928 or visit [www.orangecoast.bncollege.com](http://www.orangecoast.bncollege.com)

### Online Ordering

Textbooks and merchandise are available for online order, pick-up or delivery. You may visit the website 24/7 at [www.orangecoast.bncollege.com](http://www.orangecoast.bncollege.com)

Software titles are available at [www.thinkedu.com](http://www.thinkedu.com) and are educationally discounted up to 85%.

### Returns

**Textbooks:** A full refund will be given in the original form of payment if textbooks are returned during the first week of classes with original receipt. With proof of a schedule change and original receipt, a full refund will be given in original form of payment during the first 30 days of classes. Textbooks must be returned in original condition. Unwrapped loose leaf books and activated eBooks are non-returnable.

**General Reading Books, Software, Audio, Video, and Small Electronics:** A full refund will be given in your original form of payment if merchandise is returned within 14 days and with original receipt. Opened software and small electronics may not be returned. They can be exchanged for the same item if defective.

**All Other Merchandise:** A full refund will be given in your original form of payment with original receipt.

For additional details visit the bookstore or [www.orangecoast.bncollege.com](http://www.orangecoast.bncollege.com)

### Buyback of Textbooks

Students should bring their textbooks back to the bookstore at the end of the semester to receive up to 50% cash back. Finals week is the best time to get the most cash back, so sell early!

Books must include all original material and a Student ID or identification may be required at the time of buyback.

### Textbook Rentals

Renting is easy and cost effective. A majority of textbooks are available to rent. All book returns are subject to specific guidelines. Students must adhere to all book return policies. When shopping for textbooks in-store, the course information tag displays a "Rental" option as well as New and Used options.

Students also may shop online for rentals at [www.orangecoast.bncollege.com](http://www.orangecoast.bncollege.com).

Students must be 18 years of age or older and provide a telephone number, government issued ID, email address and a personal credit card at the time of purchase. All accepted forms of payment may be used to pay for textbook rentals.

Students may register their email address to receive reminder notices when their rental due date approaches.

For more details visit: [www.orangecoast.bncollege.com](http://www.orangecoast.bncollege.com)

### Forms of Payment

The OCC Bookstore accepts Barnes & Noble gift cards, VISA, MASTERCARD, AMERICAN EXPRESS, and DISCOVER cards. The account/card holder must be present at time of purchase.

## The Children's Center

The Harry and Grace Steele Children's Center is a unique and comprehensive child development program that offers child care for student parents enrolled at OCC, faculty, staff and the community.

The California Department of Education (CDE), the Associated Students of Orange Coast College and parent fees fund the Children's Center. The Children's Center serves children ages 6 months to 5 years throughout the year.

Student parents must pay the college service charge before registering their children. Subsidized child care services are available for student parents who qualify under the CDE-Child Development Division qualifications. A 10 percent discount on child care fees is offered to student parents that do not qualify for subsidized care. Full-cost openings also are available for faculty, staff, and the community.

Check the OCC website for hours of operation. The Children's Center is located on Merrimac Way, on the west side of Parking Lot D.

For more information call the Children's Center at (714) 432-5569.

## CalWORKs

In cooperation with the Orange County Department of Social Services, the California Work Opportunities and Responsibilities to Kids (CalWORKs) program provides specialized services to families who are applying for or are current TANF (Temporary Aid to Needy Families) recipients. Additional services for qualified students may include: child care grants, personal counseling, academic advisement, advocacy, transportation assistance, subsidized work-study, community referrals and job placement guidance.

The CalWORKs program is located on the fourth floor of Watson Hall, Room 460. For more information please call (714) 432-5636.

## Cooperative Agencies Resources for Education (CARE)

CARE is an additional support program for EOPS students who meet the following qualifications:

- Be 18 years of age or older
- Be a single parent and head of household of a child or children under 14 years of age
- Receive TANF/CalWORKs monetary benefits

Services for CARE students include supportive counseling, textbook/supplies, transportation assistance and a meal program.

The CARE office is located on the fourth floor of Watson Hall, Room 456. For more information please call (714) 432-5173 or visit [www.orangecoastcollege.edu/student\\_services/eops](http://www.orangecoastcollege.edu/student_services/eops)

## Counseling Services

Counseling appointments serve the needs of students seeking academic and/or career counseling. Appointments may be made in person at the Counseling Counter on the third floor of Watson Hall; by telephone at (714) 432-5078, or by visiting our website at [www.orangecoastcollege.edu/student\\_services/counseling/Pages/Make\\_Appointment.aspx](http://www.orangecoastcollege.edu/student_services/counseling/Pages/Make_Appointment.aspx). For further counseling information call (714) 432-5078.

### Resource Desk

A resource desk is located in the Counseling Center on the third floor of Watson Hall and is staffed by a credentialed counselor during most day and evening hours. The resource counselor cannot respond to questions that require a student's records, but is otherwise available to provide information and assistance. You may come in person to the resource desk, or call (714) 432-5699.

### Transfer Center

The Transfer Center provides comprehensive services and resources to assist students in preparation to transfer to four year universities. It includes access to transfer counseling, transfer related workshops, application assistance, campus tours and individual appointment with admission representative from various four year universities. The Transfer Center also hosts transfer fairs throughout the year. "Transfer Day" is the largest fair held in the fall semester with representatives on campus from more than 80 four year universities from both California and out-of-state universities! The Transfer Center is located on the second floor of Watson Hall, Room 215. For more information, call (714) 432-5894.

## **Workshops**

Workshops, offered on an ongoing basis, focus on topics of interest to both new and returning students. Workshop schedules are available in the Counseling Center.

## **Instruction**

The Counseling Division provides instruction in career and personal development, offering a variety of credit courses that support the developmental needs of both new and returning students. Counseling courses are offered both day and evening, and are articulated for transfer the same as courses offered in other divisions. Courses are listed under "Counseling" in this catalog and the class schedule.

## **Outreach**

The Outreach Office provides a variety of liaison activities with high schools, middle schools and elementary schools. The activities with our school partners include providing OCC campus tours, participating in classroom presentations, information tables, college nights and meetings with counseling and college personnel. The Outreach Office also coordinates events at OCC's campus to educate the K-12 grade population of the various programs and services available at OCC. The office works closely with potential students, parents/guardians/supporters of potential students and K-12 grade personnel by providing accurate information about the college campus. The Outreach Office and outreach counselors work closely with various campus departments such as Student Success and Support Program, Financial Aid, and the Enrollment Center to ensure that potential students are receiving the campus support that they need. The Outreach Office is located on the fourth floor of Watson Hall, Room 459. For more information, please contact the office at (714) 432-5197, [occoutreach@occ.cccd.edu](mailto:occoutreach@occ.cccd.edu), or visit [www.orangecoastcollege.edu/prospective\\_student/outreach/Pages/default.aspx](http://www.orangecoastcollege.edu/prospective_student/outreach/Pages/default.aspx).

## **Cumulative Records**

A students' cumulative academic records are developed and maintained electronically within the counseling division. Counselors refer to these records in preparation for and during student appointments. Students, through a counselor, also may access their own cumulative academic records.

## **Petition Processing**

A petition is a request for special action and is processed through the Counseling Center. Petitions for Credit by Examination, Waiver of Requirements, Excessive Units and Academic Renewal are available in the Counseling Center.

## **Disabled Students Programs and Services (DSPS)**

The Orange Coast College (OCC) Disabled Student Programs and Services (DSPS) ensures qualified students with disabilities are provided equal access and participation to Orange Coast College. The OCC DSPS department serves students with documented and/or observable permanent and temporary disabilities. Once a student has applied to DSPS and submitted appropriate medical documentation, the next step is to request to meet with a DSPS Counselor. During the Intake Appointment, the student and Counselor engage in an interactive process, which involves a discussion of learning barriers due to disability, and recommended academic modifications. In addition, the student and Counselor will develop an Educational Plan, which is a document that helps map out recommended courses, as well as an Academic Accommodation Plan, to achieve set academic goals. Students are responsible for reading and understanding their rights and responsibilities, as relate to their accommodations. DSPS offers support services such as alternate testing accommodations, note taking, interpreting, captioning, and alternate media for students with the approved accommodation. Check the OCC Disabled Student Programs and Services (DSPS) website at [http://www.orangecoastcollege.edu/student\\_services/special\\_services/Pages/DisabledStudentsProgramsServices.aspx](http://www.orangecoastcollege.edu/student_services/special_services/Pages/DisabledStudentsProgramsServices.aspx) for more information.

You can reach the DSPS Office at (714) 432-5807 or via email at [OCCDisabledStudents@occ.cccd.edu](mailto:OCCDisabledStudents@occ.cccd.edu).

## **High Tech Center (HTC)**

The High Tech Center is an assistive computer technology lab where students with disabilities can work independently. The lab features individual and accessible computer workstations in a student-friendly environment. In addition to assistive technology, the High Tech Center also provides access to standard software such as Microsoft Office, Adobe Creative Suite and internet access. Orange Coast College students who are registered with Disabled Student Program and Services and have a verified disability are eligible to use the High Tech Center.

## **DSPS Learning Center**

The DSPS Learning Center provides developmental (basic skills) instruction in reading, writing, spelling, and arithmetic for students with learning and other disabilities. DSPS Instructional Associates evaluate the learning difficulties of each student and develop individualized programs which include a number of teaching techniques and materials. A student may earn 1 to 3 units of credit each semester by enrolling in LRNG A001.

## **Extended Opportunity Programs and Services (EOPS)**

EOPS is a state-funded comprehensive support system that assists low-income students with barriers to their education. Support services include academic and personalized counseling, career and transfer planning, textbook services, bilingual services, cultural events and priority registration.

To determine eligibility, students should visit the EOPS office located on the fourth floor of Watson Hall, Room 443. For more information, call (714) 432-5817 or visit [www.orangecoastcollege.edu/student\\_services/eops](http://www.orangecoastcollege.edu/student_services/eops)

## **Financial Aid**

Orange Coast College participates in multiple federal and state financial aid programs. Students apply by completing the Free Application for Federal Student Aid (FAFSA) online at [www.fafsa.gov](http://www.fafsa.gov). This application is available on October 1 of each year for the following academic year; students should apply as early as possible.

The Orange Coast College Federal School Code is 001250.

Please visit the financial aid website at [www.orangecoastcollege.edu/student\\_services/financial\\_aid/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/financial_aid/Pages/default.aspx) to learn more about resources available to help with your cost of education including tuition, fees, books, supplies and transportation. Students are welcome to visit the Financial Aid Office with their financial aid inquiries.

The Financial Aid Office is located on the fourth floor of Watson Hall. Students also can contact the financial aid office via email at [occfinaid@occ.cccd.edu](mailto:occfinaid@occ.cccd.edu)

## **Expected Family Contribution (EFC)**

**Parents' Contribution** – The primary responsibility for assisting students with the cost of a post-secondary education lies with the student and oftentimes their family. The expected contribution is determined by a federal need analysis process using the family's financial information provided on the FAFSA.

**Student's Contribution** – All students are expected to contribute toward their own educational expenses. A student's income and assets also will be assessed through federal methodology based on data submitted on the FAFSA.

## **Federal Financial Aid Programs**

Below are some legislative changes effective July 1, 2012, for Federal Student Financial Aid Recipients

- Students without a high school diploma or its equivalent are ineligible for funds. If the student passed an ATB test prior to July 1, 2012, and began an eligible program, the student is still eligible for federal student financial aid funds.
- There is a six-year maximum for the Pell Grant (full-time equivalent semesters) from the date that the student began receiving Pell Grant funds.
- First-time borrowers may not receive subsidized loans for more than 150 percent of the length of program of study. For example, if you are enrolled in a two-year associate degree program, the maximum period for which you can receive Direct Subsidized Loans is three years (150 percent of two years = three years). The Department of Education may stop paying your interest subsidy if you exceed that limit.

### ***Federal Grants (money awarded that does not need to be repaid)***

The **Federal Pell Grant** is available to undergraduate students. Award amount is based on the student's Expected Family Contribution (EFC) (determined by FAFSA) and is prorated according to the number of units in which students are enrolled.

The **Federal Supplemental Educational Opportunity Program (FSEOG)** is for students with exceptional financial need.

The **Federal Work Study Program** provides jobs for a limited number of students with financial need, allowing them to earn money to help pay for educational expenses.

### ***Federal Loans (money which must be repaid)***

The William D. Ford Federal Direct Loan (Direct Loan) Program is the largest federal student loan program. Under this program, the U.S. Department of Education is the lender. The interest rate is variable (adjusted annually on July 1) and will not exceed 8.25 percent.

**Direct Subsidized Loans** are loans made to eligible students who demonstrate financial need to help cover the costs of education.

**Direct Unsubsidized Loans** are made to eligible students, but in this case the student does not have to demonstrate financial need to be eligible for the loan.

**Direct PLUS Loans** are loans made to parents of dependent student to help pay for education expenses not covered by other financial aid.

## **State Financial Aid Programs**

### **Cal Grant**

The California Student Aid Commission awards Cal Grants. Students must be legal residents of California and have financial need. To apply, students complete a Free Application for Federal Student Aid (FAFSA) at <http://www.fafsa.gov>, and submit a grade point average (GPA) Verification form by March 2 and September 2.

**Cal Grant B** – Assists very low income, first-year students with living expenses, books, supplies, transportation and other non-tuition costs. (Renewals also may cover tuition/fee costs).

**Cal Grant C** – Assists low- and middle-income vocational students with tuition and training costs. Recipients must be in a program of study that is four months to two years in duration, at a vocational school, community college or independent college.

For more information, visit the California Student Aid commission website at [www.csac.ca.gov](http://www.csac.ca.gov).

### **California College Promise Grant**

The California College Promise Grant (formerly BOGFW) waives students' course enrollment fees if they are California Residents and meet the eligibility requirements. If a student is eligible for the California College Promise Grant, he or she is still responsible for the student health fee, College service charge, material fees, parking permit and any other fees associated with courses.

Note: Starting with the Fall 2016 semester, students will lose their California College Promise Grant eligibility after two consecutive primary semesters (fall and spring semesters) of not meeting academic progress or progress standards. Academic requirements for California College Promise Grant are a cumulative GPA of at least 2.0 and a cumulative satisfactory completion of more than 50 percent of cumulative attempted units (in two consecutive semesters). Students who lose their California College Promise Grant may appeal to reinstate their California College Promise Grant eligibility. Students may submit the appeal form — which is available on the Enrollment Services website — directly to Enrollment Services on the first floor of Watson Hall.

### **Chafee Grant**

This grant is only available to foster youth. Students who are eligible for a Chafee Grant also should contact the EOPS office to learn more about qualifying for the Guardian Scholars Program.

## **California DREAM Act**

The California Dream Act of 2011 is the result of two bills: Assembly Bill 130 (AB 130) and Assembly Bill 131 (AB 131). Together, these bills allow students who meet certain provisions of AB 540 law to apply for and receive private scholarships funneled through public universities (AB 130), state-administered financial aid such as the Cal Grant programs, university grants, and community college fee waivers (AB 131). The application is available at <https://dream.csac.ca.gov>. You must be eligible for AB540 status for your Dream Act application to be processed.

### **Pirates' Promise Program**

The Pirates' Promise Program provides qualifying first-year students free tuition who do not qualify for other forms of financial aid. For more information about the Pirates' Promise Program, refer to page 22.

### **Student Success Completion Grant**

The Student Success Completion Grant (SSCG) is a financial aid program for Cal Grant B and C recipients attending a California Community college full-time (12 units or more). In addition to the Cal Grant B or C award paid at community colleges, the SSCG pays full-time Cal grant B or C recipients a maximum of \$1,298 annually at \$649 per semester for eligible students who enroll and attend 12 through 14.99 units per term and a maximum of \$4,000 annually at \$2,000 per semester for eligible students who enroll and attend 15 units or more per term. Must meet Federal Satisfactory Academic Progress (SAP) standards and have unmet need to receive SSCG.

### **Satisfactory Academic Progress (SAP) Standards for Financial Aid Recipients**

SAP standards apply to all federal and state aid applicants whether or not they have previously received student financial aid.

Students receiving financial aid must meet Satisfactory Academic Progress (SAP) toward an eligible educational goal. Failure to maintain these standards will result in loss of eligibility for financial assistance. These standards apply to students receiving assistance from those financial aid programs administered by the Orange Coast College Financial Aid Office and is separate from the College's academic progress policies. All students must meet the SAP policy to be eligible to receive financial aid.

The Financial Aid Office reviews SAP at the end of each semester. SAP includes measures of cumulative GPA, pace or progress of unit completion, and a maximum number of attempted units allowed.

The Satisfactory Academic Progress (SAP) Standards is published on the Coast Community College website at [www.cccd.edu](http://www.cccd.edu) (click on Students, then Financial Aid).

## **Return of Title IV Funds**

Recipients of federal aid programs (Title IV grants or Direct Loans) who withdraw completely from the College before completing at least 60 percent of their enrollment period may be required to repay all or part of aid received. The Financial Aid Office will officially notify the student regarding the amount owed and repayment deadline.

## **Guardian Scholars**

Orange Coast College's Guardian Scholars Program is committed to supporting ambitious college-bound students who are current or former foster youth/wards of the court. The program's mission is to provide a comprehensive program that contributes to the quality and depth of the student's college experience. It serves as a resource for young adults by assisting in their development and equipping them with skills necessary to transfer to a four-year university or the vocation of their choice. Guardian Scholars aims to be a "One Stop Shop" that provides caring and personalized assistance with educational goals and practical day-to-day needs to ensure that full advantage is taken of college life, both inside and outside the classroom. Services include academic advising, financial aid, and referrals to community resources. The Guardian Scholars Office is located on the fourth floor of Watson Hall. For more information please call (714) 432-6877, email [guardianscholars@occ.cccd.edu](mailto:guardianscholars@occ.cccd.edu) or visit <http://tinyurl.com/occguardianscholars>.

## **Garrison Honors Center**

The Garrison Honors Center (GHC) is home to the OCC Honors Program and sixteen academic honor societies. Located at the geographical center of the campus near the new Planetarium and the Global Engagement Center, GHC study and meeting facilities are available for use by students enrolled in any of the honors organizations at OCC, as well as their guests.

The GHC hosts two major Honors Open House events each year: the first before the start of the fall semester and a second before the start of the spring semester. All current and prospective OCC students are welcome to attend. Student leaders from many of the honors organizations will describe the activities and opportunities available through their societies, answer questions, and to provide applications.

## **Honors Program**

The OCC Honors Program provides an enriched collegiate experience for intellectually curious and highly motivated students. The Program celebrates the collaborative effort of students and instructors in reciprocal teaching-learning environments that promote student initiative, knowledge, curiosity about the world of ideas, and concern for current social issues.

### **Honors Courses**

OCC Honors courses may be taken by OCC students who wish to engage in a more rigorous learning experience, whether or not they are enrolled in the Honors Program itself. The courses are challenging and demand a significant commitment of time for study and engagement. Honors instructors enhance the basic curriculum requirements of their classes by offering more opportunities for intensive study than are possible in most non-Honors sections. Freedom of inquiry and student discovery are stressed. The generally smaller Honors sections are intended to foster discussion, mastery of content, critical thinking, and analysis. Guest speakers, field trips and comprehensive research, including the presentation of results, further enhance many Honors sections.

### **Writing Skills and Honors Courses**

While there are no prerequisites for Honors sections other than those that apply to non-Honors sections of the same courses, many Honors courses include scholarly reading and writing assignments, including research and essay-style exams. Strong college-level writing skills are critical to student success. Prior completion of, or concurrent enrollment in, English 100 or higher is strongly recommended.

### **Multiple Paths within Honors**

Students enroll in the Honors Program for a variety of reasons and not all students are expected (or required) to pursue the same path or take advantage of the same benefits. In fact, certain benefits may not be available to all Honors students, depending on choice of major or target transfer school. Students are further advised that involvement in Honors Program on- and off-campus events, projects, academic conferences, creative works competitions and social gatherings are recommended. These activities provide a variety of personal development opportunities and may improve the likelihood of selection for transfer admission and scholarship awards.

### **Benefits of Enrollment**

For all students enrolled:

- Close interaction with enthusiastic learners and passionate instructors

- Flexible, rigorous coursework emphasizing research, critical thinking and writing skills
- Added preparation for upper division coursework
- Opportunities to develop leadership and organizational skills through the Honors Student Council (HSC)
- Access to specialized Honors Counseling
- UCLA and UCI Library privileges
- Special activities, including guest speakers, seminars, field study, and social events
- Opportunities to present research and creative works at prestigious academic conferences
- Added preparation for upper division coursework
- Notation of each Honors course on transcripts
- Access to specialized Honors Counseling

### **Benefits of Certification**

For students who choose to complete Honors Program certification requirements:

- Earn priority consideration for transfer admission to a number of respected four-year institutions, including UCLA and UCI
- Receive a notation on official OCC transcripts of Honors Program completion
- Earn the privilege of wearing the program's distinctive sage and silver Honors regalia and receiving recognition in the graduation program

### **Honors Program Enrollment Procedures**

Students may apply to the OCC Honors Program year-round, if they believe they have met all of the enrollment criteria.

Successful applicants will:

- Be in good standing with the OCC Dean of Students Office and adhere to the Coast Community College District Student Code of Conduct and Disciplinary Procedures (Refer to the OCC Catalog for detailed information.)
- Be currently enrolled in OCC classes
- Complete an Honors Orientation prior to submitting an application (Visit the Honors Program website to make a reservation for an orientation session.)
- Meet the English composition requirement in one of the following ways:
  - Receive an exemption from English 100 with an AP exam score of 3 or higher; or
  - Complete at least one qualifying English composition course with a grade of A or B: English 100, 101, 101H, 102, 102H, or 109.

## **Submit an application to the Honors Program**

Students who graduated from high school less than one year prior to submitting an Honors Program application AND who have completed fewer than 12 units of letter-graded college coursework MUST:

- Have a minimum final cumulative high school GPA of 3.25 for grades 9-12; AND
- Have a minimum cumulative GPA of 3.25 in all college coursework completed

All students who have completed 12 or more units of letter-graded college coursework MUST:

- Have a minimum cumulative GPA of 3.25 in all college coursework completed

Note: Applicants are required to submit transcripts from all colleges attended. Grades of D, F, or NP earned within the Coast Community College District at any time, or at another college during the two years prior to entering any of the CCCD colleges, must be “excluded” through course repetition or academic renewal. Incomplete grades of ID, IF, or INP must be resolved with a final grade for course completion. The total combined cumulative GPA will be calculated on GPA units and GPA points earned at all institutions attended.

## **Continuing Enrollment**

After enrolling in the Honors Program, students will receive continuing benefits provided that they:

- Remain in good standing with the OCC Dean of Students Office and adhere to the Coast Community College District Student Code of Conduct and Disciplinary Procedures (Refer to the OCC Catalog for detailed information.)
- Remain enrolled in OCC classes or file a notification for a “Leave of Absence” with the Honors Office for up to one year
- Meet with an Honors Counselor at least once each academic year (preferably each semester before registering for the next semester’s classes)
- Complete at least one Honors course within one year of initial enrollment
- Maintain a minimum cumulative GPA of 3.25 in all transferable coursework and avoid grades below C (Grades of D, F, NP, ID, IF, or INP must be resolved the following semester through course repetition or successful completion. If eligible for Academic Renewal, a written notification must be filed with the Honors Office.)

## **Completion Requirements**

Special recognition is awarded to transferring or graduating students enrolled in the Honors Program who meet the following requirements:

- Complete a minimum of 15 units of Honors coursework, distributed over at least three different subjects, with a letter grade of C or higher earned in each
- Earn a minimum cumulative GPA of 3.50 in all transferable coursework, including courses taken at other institutions
- Earn a grade of A or B in at least one qualifying English composition course (English 100, 101, 101H, 102, 102H, 109) or receive an exemption from English 100 with an AP score of 3 or higher
- Obtain an exclusion for all grades of D, F, or NP through course repetition or academic renewal prior to the start of the final semester, and earn a passing grade in all previous “Incomplete” courses.

## **Certification Requirements**

Eligibility for Honors transfer priority requires that students meet applicable university transfer requirements AND Honors Program certification criteria: general education breadth, selective-major prerequisites, and completion of at least 12 units of Honors coursework before the start of the student’s final semester at OCC. (Up to three of the required 15 total Honors units may be in progress at the time certification is requested.)

Up to one-half of UC-transferable Honors units earned at another college may be accepted toward Honors Program completion at OCC. (Submit official transcripts to the Honors Office for a determination.)

## **Exceptions to Policies**

Exceptions to policies for enrollment, completion or certification may be requested through the appeals process. For further information, contact the Honors Office.

## **Academic Honor Societies**

After completing 12 units of letter-graded coursework at OCC, current students who attained minimum cumulative GPAs of 3.0 or higher are invited to explore their honor society eligibility. Membership is not automatic but is available to students who meet the minimum academic requirements and who wish to apply. Be sure to submit applications and fee payments by established deadlines. Permanent memberships will be notated on official transcripts. Associate degree and certificate candidates may be recognized by their colorful displays of honors regalia (cords, stoles, medallions or tassels) worn with OCC’s navy cap and

gown at the spring commencement ceremonies.

OCC has established chapters of the following honor societies:

- Alpha Beta Gamma – International Business Honor Society
- Alpha Gamma Sigma – California Scholastic Honor Society
- Alpha Mu Gamma – Foreign Language Honor Society
- Eta Eta Omicron – OCC Marine Science Honor Society
- Mu Alpha Theta – National Mathematics Honor Society
- Mu Delta Rho – OCC Pre-Health Professions Honor Society
- National Technical Honor Society – STEM and CTE
- Omega Psi Sigma – OCC Pre-Law and Political Science Honor Society
- Phi Alpha Mu – OCC Social and Behavioral Sciences Honor Society
- Phi Theta Kappa – International Honor Society of the Two-Year College
- Pi Rho Sigma – OCC Music Honor Society
- Pi Tau Epsilon – OCC Film and Visual Arts Honor Society
- Psi Beta – National Psychology Honor Society
- SALUTE – Veterans’ Honor Society
- Sigma Chi Eta – National Communications Honor Society
- Sigma Kappa Delta – National English Honor Society

To learn more about Honors at OCC, visit the Garrison Honors Center or contact us by phone/email: 714-432-5601, [garrisonhonorscenter@occ.cccd.edu](mailto:garrisonhonorscenter@occ.cccd.edu).

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## **Housing**

The Global Engagement Center is responsible for housing information for the campus. A current listing of housing options can be found on the Global Engagement Center website at [www.orangecoastcollege.edu/global](http://www.orangecoastcollege.edu/global)

The Homestay Program is another housing option for international students. The Global Engagement Center can provide information on Homestay Programs. Through these programs, students are put in contact with interested host families in the area. The goal of the program is to provide both guest and host with the opportunity to learn about each other’s country and culture, see one’s own country in a new light, and make new friends. For further information, please contact the Global Engagement Center at (714) 432-5940.



## Library Services

Containing more than 100,000 books, periodicals, and video visual materials, the Orange Coast College Library supports and enriches the quality of the College's educational program. Check the Library website for hours of operation. The Library is closed during all school holidays. Remote access to the Library's online catalog and full-text databases is available through the Library website at [www.orangecoastcollege.edu/library](http://www.orangecoastcollege.edu/library)

An OCC student ID card or a Library card is required to check out Library materials. Circulating books may be checked out for a three-week period and renewed once if not on hold. Fines are \$0.25 per day per book up to a maximum of \$10. Reserve material will be found at the circulation desk and may be checked out for a limited time, usually two hours. In addition, the Library has established a textbook collection for the students, funded by the OCC Foundation, with a generous bequest from former OCC faculty member Shirley Brooke. Students may use a textbook in this reserve collection for two hours in the Library. Fines vary depending on whether the material is a reserve item, a circulating book, or a media item. Library materials may be returned in the book bin in Parking Lot E or at the front of the Library. Materials not found in the Library may, in some cases, be requested by students from libraries in the Cal-West Consortium and by faculty from libraries throughout the United States. Inquire at the reference desk for more information.

The media/computer lab department provides instructional videos, Coastline College telecourses, language resources, and a computer lab with access to the Internet and software for word processing, and other programs. Media reserves may be viewed in the Library or checked out overnight.

Reference librarians are available to teach and guide students in using the numerous print and online resources provided by the Library. The Library offers a transferable two-unit class (LIB A100, Library and Information Competency) designed to develop research skills.

## Lost and Found

Lost and Found is located in the ASOCC Office in the Student Center. Check the OCC website for hours of operation; hours are subject to change. The ASOCC Office can be reached by calling (714) 432-5730.

## OCC Cares & Food Pantry

OCC Cares is a collaborative effort on our campus to support the learning environment for students with additional resources as needed. Through OCC Cares students can access campus basic needs like transportation support, shower access, and assistance from community partners. For a complete list of services visit OCC Cares at [www.orangecoastcollege.edu/student\\_services/student-equity/occ-cares/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/default.aspx).

[edu/student\\_services/student-equity/occ-cares/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/default.aspx).

The Pirates' Cove Food Pantry & Resources Hub is one of the services offered through OCC cares and is designed to meet the immediate needs of OCC students facing food insecurity and lacking resources to fulfill essential needs. Students can access nonperishable and fresh food, and work with specialists to submit CalFresh applications and housing referrals. Pirates' Cove is located in Journalism 108 and can be reached at (714) 432-6892, [piratescove@occ.cccd.edu](mailto:piratescove@occ.cccd.edu), and [www.orangecoastcollege.edu/student\\_services/student-equity/occ-cares/Pages/pirates-cove.aspx](http://www.orangecoastcollege.edu/student_services/student-equity/occ-cares/Pages/pirates-cove.aspx).

## Pirates' Promise Program

Orange Coast College is committed to the success of its students and wants to help them accelerate their education in order to start their career or transfer sooner. The Pirates' Promise Program provides eligible students free tuition (and on some cases textbook support) for first-year students. Pirates' Promise is perfect for students who do not qualify for other forms of federal or state financial aid, but must still submit a FAFSA or CA Dream Act application.

Additional eligibility criteria include California residency and 12 or 15 unit enrollment at OCC (dependent upon high school of graduation). Applications are available until capacity is reached at [www.orangecoastcollege.edu/piratespromise](http://www.orangecoastcollege.edu/piratespromise). For question please call (714) 432-6847, visit Watson Hall 205, or email [freetuition@occ.cccd.edu](mailto:freetuition@occ.cccd.edu).

## Recycling Center

The Associated Students of Orange Coast College sponsors an on-campus Recycling Center located on Adams Avenue, between Harbor Boulevard and Fairview Road. The center accepts donated materials such as scrap metal, cardboard, newspaper, magazines, office paper, glass, aluminum and plastic beverage containers. The Center also accepts electronic waste.

The center will pay the current market price for "CA Redemptive Value" containers of glass, plastic and aluminum; check the OCC website for hours of operation. Profits from the Recycling Center go to scholarships for OCC students.

## Reserve Officers Training Corps

Orange Coast College students can participate in the Army and Air Force Reserve Officers Training Corps.

Army ROTC classes are conducted two hours each week at UCLA and CSULB. Two- and four-year programs lead to a commission as a second lieutenant in the Army or in the National Guard. Participants must be physically qualified full-time students at the

undergraduate or graduate level. During their last two years, students receive a monthly tax-free stipend throughout the regular school year. Students with ROTC scholarships receive full tuition, and have their required fees and books paid for. Veterans ordinarily qualify for advanced placement. For more Army ROTC information, call California State University, Long Beach, or University of California, Los Angeles or California State University, Fullerton.

Through arrangements with Loyola Marymount University (LMU) in west Los Angeles, students may participate in the Air Force Reserve Officer Training Corps (AFROTC) program. AFROTC offers a variety of two-, three- and four-year scholarships, many of which pay the full cost of tuition, books, and fees. Successful completion of as little as four semesters of AFROTC academic classes and leadership laboratories can lead to a commission as a second lieutenant in the United States Air Force.

Classes consist of one hour of academics and two hours of laboratory for freshmen and sophomores, and three hours of academics and two hours of laboratory for juniors and seniors. The academic hours earned can normally be counted as elective credit toward graduation. All AFROTC classes and laboratories are held on Fridays to better accommodate students commuting from other colleges and universities. Currently, LMU does not charge for the courses and offers cross-town students free parking while attending AFROTC activities. Additionally, AFROTC cadets under scholarship, and all juniors and seniors receive a monthly tax-free stipend.

For more information, contact the Loyola Marymount University Department of Aerospace Studies (AFROTC) at (310) 338-2770.

## Scholarships

Students who complete OCC scholarship applications will be considered for a wide variety of scholarships awarded through the generosity of the citizens and civic groups in the Coast Community College District.

Application requirements vary, depending on the scholarship programs for which the student applies. For further information, visit the Scholarship Office in the Administration Building, visit [www.orangecoastcollege.edu/scholarshipoffice](http://www.orangecoastcollege.edu/scholarshipoffice), or call (714) 432-5645.

## Student Health Center

The Orange Coast College Student Health Center serves currently enrolled OCC students, health insurance is not required. The Student Health Center is financed by the health fee that all students pay each semester; it receives no other college or state funding. Students must be enrolled in the current semester and be attending classes in order to use the Student Health Center.

The Student Health Center is located off Fairview Road and Pirate Way, between the Peterson Gymnasium and Watson Hall. Check the OCC website for hours of operation. Summer and winter session hours will be announced and posted prior to the beginning of those sessions.

Students may schedule appointments to be seen at the Health Center by calling (714) 432-5808. Every effort will be made to care for emergencies and mental health crises promptly. The many services the Student Health Center offers include medical and mental health appointments, as well as disease prevention and family planning services. The Student Health Center does not provide primary care services for ongoing medical problems, such as chronic illnesses or long-term mental health treatment.

If a student is injured on campus or in the course of a College-sponsored activity, the Student Health Center staff will assist the student to access the Coast Community College accident insurance policy.

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## Student Center Lounge

The Student Center Lounge serves as a study area as well as a place to relax, and often serves as the location for speakers, workshops and other special events. Check the OCC website for hours of operation. For information call (714) 432-5730.

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## Student Equity Program

At OCC, Student Equity is designed as a guarantee of fair treatment, access, opportunity, and advancement for all students, while working to identify and address barriers that stand in the way of student success. The Student Equity Program was created to address gaps in achievement for students with the greatest needs. Through this program the College ensures that students are supported with the resources and services needed to achieve their educational outcomes, including peer mentoring, transportation support, textbooks, materials, and equipment necessary for success. For more information contact (714) 432-6847 or apply at [www.orangecoastcollege.edu/student\\_services/student-equity/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/student-equity/Pages/default.aspx).

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## Student Success Center

The Student Success Center offers free tutoring to OCC students in most subject areas and consists of the Math Center, Writing/Reading Center, General Tutoring area and the Peer Assisted Study Sessions program. Services include scheduled appointments, drop-in tutoring, study groups, workshops and PASS program. All tutors are recommended by OCC instructors and required to complete a training course.

For more information, call (714) 432-5559 or visit our website at [www.orangecoastcollege.edu/student\\_services/student\\_success\\_center](http://www.orangecoastcollege.edu/student_services/student_success_center). The Student Success Center is located in C&L 103.

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## Student Success and Support Program

The Student Success and Support Program intends to help students achieve their educational goals through core matriculation services as well as support services that are necessary to assist students in meeting their personal, academic and career objectives. All students, unless exempt, are required to participate in orientation, complete the assessment process, and create a Student Educational Plan (SEP) with a counselor. Students, who complete orientation, assessment, and an SEP, will receive priority registration. The College also provides follow-up services to evaluate the academic progress of students and to provide additional resources as necessary.

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## Study Abroad Program

The Orange Coast College Study Abroad program offers a variety of short-term programs. For information on upcoming programs, visit [www.orangecoastcollege.edu/studyabroad](http://www.orangecoastcollege.edu/studyabroad)

The Global Engagement Center also provides additional information on study abroad opportunities. For more information, please visit the Global Engagement Center. It is students' responsibility to verify that the courses taken abroad are transferable.

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## UMOJA

Umoja is a student success program open to all students and is specifically designed to increase the retention and success rates of African-American students. The Umoja Program is a Learning Community that offers student success, English, Math, and History classes which strives to educate the whole student informed by an ethic of love and its vital power. Academic success is also achieved through educational counseling, workshops, cultural events, mentoring, and personal development. The learning experience within Umoja will deliberately and intentionally provide each individual the opportunity to add their voice and their story to the collective voices and stories of the African Diaspora. For further information visit [http://www.orangecoastcollege.edu/student\\_services/counseling/Pages/umoja.aspx](http://www.orangecoastcollege.edu/student_services/counseling/Pages/umoja.aspx)

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## California Department of Rehabilitation (DOR)

The California Department of Rehabilitation (DOR) is an employment and independent living resource for people with disabilities. Students with visible and/or non-visible disabilities may qualify for services. Services may include vocational counseling and guidance, training and job placement, and reimbursements for vocational-related expenses. Students may also qualify for assistance with medical and living expenses, as well as transportation support.

For more information contact (916) 324-1313, (800) 952-5544 (Voice), (844) 729-2800 (TDD/TTY), or visit [www.rehab.cahwnet.gov](http://www.rehab.cahwnet.gov).

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## Veterans Resource Center

Orange Coast College is grateful for the sacrifices made by members of the United States armed services and their families. We realize that veteran students bring a wealth of experience to the campus environment, and we welcome their contributions as part of our campus community. The Veterans Resource Center (VRC), provides information on campus-based and external resources available to all veterans, including health services, career links, and direct access to the OCC Student Veterans Association.

The VRC Office is staffed with personnel who can assist student veterans with referrals to various services and programs on campus and access to: computer stations, peer support, and tutoring. Referrals are also available for basic needs. Interested students should visit the Veterans Resource Center, located in the Student Center, or visit the website at [www.orangecoastcollege.edu/student\\_services/Veterans/Pages/Veterans'-Resource-Center.aspx](http://www.orangecoastcollege.edu/student_services/Veterans/Pages/Veterans'-Resource-Center.aspx).

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## Veterans Services Office

Orange Coast College is approved for training veterans under all applicable laws. The College helps veterans by cooperating with the Veterans Administration and the California State Department of Veterans Affairs. OCC establishes policies and programs for educating veterans and active-duty military personnel. Veterans Services, located in the Enrollment Center, provides support services for Veterans, including the administration of GI Bill® Education Benefits and referrals to a variety of College-wide student services and activities.

GI Bill® is a registered trademark of the U.S. Department of Veterans Affairs (VA). More information about education benefits offered by VA is available at the official U.S. government Web site at <http://www.benefits.va.gov/gibill>.

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## Using GI Bill Education Benefits

In order to utilize VA education benefits, students must:

- Attend an OCC Benefits Briefing. For a current Briefing schedule, please contact Veterans Services or visit [http://www.orangecoastcollege.edu/student\\_services/Veterans/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/Veterans/Pages/default.aspx).
- Submit official transcripts from all colleges previously attended outside of the Coast Community College district. Transcripts must be received within four weeks of attending a Benefits Briefing. Failure to meet this requirement may cause an interruption in benefits.

- Obtain a Student Education plan from OCC's veteran counselor. For appointments, contact Veterans Services. Classes will only be eligible for certification if they are applicable toward an approved program of study.
- Submit a Web Schedule Bill or Online Certification Request immediately after registering for classes to avoid a delay in benefits and/or being dropped for non-payment. After initial certification is complete, veterans and dependents are required to report any changes in enrollment to Veterans Services at the time they are made.

### **CalVet Fee Waiver**

Dependent students who have been approved for the CalVet Fee Waiver should submit their Authorization Letter to the Financial Aid Office. This waiver covers the cost of tuition only. Students are responsible for paying any remaining fees to avoid being dropped for non-payment. For more information about this program, please contact Veterans Services.

### **Military Credit**

Orange Coast College reserves the right to evaluate and grant credit based on the academic policies established at OCC. The college recognizes and grants academic credit to veterans who have completed a minimum of one year of active honorable service in the armed forces unless it has been awarded by another school. This credit includes three (3) units for AA Degree Area E-Self Development on the OCC General Education pattern, or Area E-Self Development on the California State University General Education pattern (CSU GE Breadth). A maximum of 15 units from eligible military service and training may also apply. Please refer to the Military Study Programs for additional information.

### **Military Withdrawal**

Under Title 5, Section 55024, members of the service called to active duty during a semester in which they are enrolled, may petition to withdraw under special circumstances. The withdrawal will be posted as "MW" - Military Withdrawal on the student's transcript and will be non-punitive, which means that it will not count in the students grade point average nor will it count towards academic or progress probation/disqualification. Students with orders to report during a semester in which they are enrolled should contact Veterans Services on the first floor of Watson Hall for the appropriate petition form.

### **Registration Priority For Veterans**

All students are subject to the provisions under SBI1456. Under the provisions of California Education Code Section 66025.8, OCC will grant priority registration to eligible members or former members of the Armed Forces of the United States. For eligibility information, please visit [http://www.orangecoastcollege.edu/student\\_services/Veterans/Pages/default.aspx](http://www.orangecoastcollege.edu/student_services/Veterans/Pages/default.aspx).

### **Tuition Assistance**

Active military interested in using Tuition Assistance should consult with their Education Officer to obtain authorization. Please also contact Veterans Services for further information about how these benefits are processed at OCC.

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### **Vocational Rehabilitation Services**

Students who have physical, emotional, or other disabilities may be eligible for State Department of Rehabilitation services if their disabilities affect their vocations. These services include vocational counseling and guidance, reimbursed training and job placement. Under certain circumstances, students also may qualify for assistance with medical needs, living expenses and transportation.

Interested students should visit or write the State Department of Rehabilitation Office, 222 S Harbor Blvd., Ste 300, Anaheim, California 92805. For more information contact (714) 991-0800 or visit <https://www.anaheim.net/4944/Department-of-Rehabilitation>

## Policies and Regulations

In accordance with requirements of DVB Circular 20-76-84, Appendix P, this is to certify this school catalog is true and correct in policy at the time of printing.

### Academic Freedom

In accordance with District Board Policy 4030, Orange Coast College recognizes that the search for truth and free expression of ideas are essential to a democratic society, and affirms the following as principles of academic freedom:

- (a) Academic Freedom is essentially the right of faculty to express or discuss in their classrooms and throughout the District challenging ideas and topics related to courses they teach and their own academic, professional expertise. The primary responsibility is to achieve the objectives of the course outline of record. This does not preclude Faculty Members from using their professional judgment in discussing other topics with their students when aimed at enhancing student learning. The expression of this right is guided by a deep conviction of the worth and dignity of students and the advancement of their knowledge.
- (b) Academic Freedom includes the right of faculty to create and to use instructional materials that may be thought-provoking or controversial and are relevant to the courses they teach to enhance student learning. These rights notwithstanding, Academic Freedom is to be practiced within the parameters of commonly recognized standards of teaching, professional conduct, and applicable policies and laws.
- (c) Faculty Members recognize the special responsibilities placed upon them. These responsibilities include the obligation to exercise critical self-discipline and sound judgment in using, extending, and transmitting knowledge. In the conduct of their teaching and professional lives, faculty members demonstrate intellectual honesty and devotion to continual improvement of scholarly competence.

With the shared understanding of the rights and responsibilities, Academic Freedom will be promoted and protected.

A Faculty Member's exercising of his/her right of academic freedom as delineated below shall not be subject to any adverse action affecting the Faculty Member's employment status with the District:

- (a) For the development and publication of instructional materials, as well as the interpretation of course content and adoption of innovative instructional methods compatible with the course outline of record and standards

accepted within the academic community;

- (b) For exercising freedom to examine or endorse unpopular or controversial ideas within their fields of professional expertise as appropriate to course content, discussions with students, or academic research or publication. In so doing, the Faculty Member shall attempt to be accurate, fair, objective, and show respect for diverse opinions;
- (c) For using or recommending, within the parameters of (a) above, instructional materials which may challenge prevailing social attitudes, or contain unpopular or controversial ideas;
- (d) For presenting all points of view in teaching and discussing controversial ideas or content in their courses and for including library materials of broad and diverse interest, information and enlightenment without prejudice in regards to the race/ethnicity, gender, sexual orientation, nationality, social, political or religious views of the authors;
- (e) For expressing in an appropriate forum the Faculty Member's viewpoint on matters of College and District policy.
- (f) In collegial life, for example, for participation in the governance of their colleges, and engaging in the collegial expression of opinions in their department, college, and/or District meetings.

Political activities on college campuses shall be governed by District policies and procedures which shall be in accordance with the requirements of applicable Federal and State law.

The District shall respect the Faculty Member's right in public life to exercise freedom of speech, freedom of association, freedom of union activity, and freedom to express expert opinions in a public forum provided it is clear that the Faculty Member is not speaking or acting on behalf of the District.

### Academic Honesty

Orange Coast College has the responsibility to ensure that grades assigned are indicative of the knowledge and skill level of each student. Acts of academic dishonesty make it impossible to fulfill this responsibility. Faculty have a responsibility to ensure that academic honesty is maintained in their classroom. Students share that responsibility and are expected to refrain from all acts of academic dishonesty. Procedures for dealing with any violation of academic honesty will be followed. Additionally, the Student Code of Conduct and Board Policy 5500 and Administrative Procedure 5500 shall

be applied to incidents of academic dishonesty.

### Academic Honors

#### *President's List*

Students are eligible for the President's List after completing a semester of at least 12 units in courses awarding letter grades and a GPA of 4.0. To request a letter recognizing this achievement or obtain additional information, please contact the Office of the President in the Administration Building. Your official transcript will show that you are on the President's List.

#### *Dean's List*

Students are eligible to be included on the Dean's List after completing a semester of at least 12 units in courses awarding letter grades and in which a GPA of 3.50 to 3.99 is earned. To request a letter recognizing this achievement or obtain additional information, please contact the Office of Instruction in the Administration Building. Your official transcript will show that you are on the Dean's List.

#### *Honors List*

Students are eligible to be included on the Honors List after completing a semester of 6.0 to 11.9 units in courses awarding letter grades and in which a GPA of 3.75 to 4.0 is earned. To request a letter recognizing this achievement or obtain additional information, please contact the Office of Instruction in the Administration Building. Your official transcript will show that you are on the Honors List.

### Academic Renewal Policy and Procedures

The Academic Renewal Policy (BP4240) for the Coast Community College District is issued pursuant to Title 5 Section 55046 of the California Administrative Code of Regulations. The purpose of this policy is to disregard past substandard academic performance of students when such work is not reflective of their current demonstrated ability. It is based on the recognition that due to unusual circumstances, or circumstances beyond the students' control, the past substandard work will negatively affect their academic standing and unnecessarily prolong the rate at which they complete their current objectives. For information on how to petition for academic renewal, please consult with a counselor. The Academic Renewal Procedure, AP4240, can be found at: [https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Academic\\_Affairs/AP\\_4240\\_Academic\\_Renewal.pdf](https://www.cccd.edu/boardoftrustees/BoardPolicies/Documents/Academic_Affairs/AP_4240_Academic_Renewal.pdf).

## Attendance

In accordance with District Administrative Procedure 5070, OCC's attendance policy is as follows.

Students are expected to attend class regularly. Failure to attend may be taken into consideration by instructors when assigning grades. Students who miss the first class meeting, are absent for two contiguous class meetings, or have too many absences MAY be dropped by the instructor at any time during the semester until the final deadline for withdrawal. Instructors may have more restrictive requirements for attendance and these requirements shall be stated in the class syllabus. Students who miss class due to verifiable extenuating circumstances beyond the control of the student, (i.e. accident, illness, death in the immediate family, etc.) should inform their Instructors prior to missing class meetings. A student who has been absent due to verifiable extenuating circumstances should report to the instructor immediately on the day of his/her return. No absence excuses a student from making up the work missed. Students should realize that absences may adversely affect their grades.

Please Note: It is the responsibility of the student to withdraw in order to meet all fee/refund deadlines and it is also the responsibility of the student to withdraw by state mandated deadlines to avoid grade penalties.

## Absences

Instructors may allow absences for reasons of illness, emergencies or College-sponsored activities including field trips, athletic events, speech tournaments, or other co-curricular activities. Those student activities should be scheduled to minimize absences from regularly scheduled classes. Prior to the activity, instructors are responsible for submitting Co-Curricular Participation Lists to their academic division office. All others are responsible for submitting lists to the Dean of Student Services. Students, also, should inform instructors of upcoming co-curricular activities and ask for ways of making up the absences.

## Absence/Make-up Activities

Instructors may require make-up activities equivalent to the lessons missed through absence. What constitutes an excused absence and any required make-up activities, should be stated clearly, preferably in writing, by the instructor at the start of the course.

It is recommended that a student not be absent more than the number of course units in order to maintain a passing course grade/credit. That is, one hour of absence for each unit of class. State law requires an accurate attendance record in order for the College to receive funding.

## Student Responsibility

It is the student's responsibility to be aware of and adhere to State-mandated drop deadlines and deadlines to request a pass/no pass grading option. In addition, students should be aware of and adhere to the deadlines for fee-payments and fee refunds. Students should verify all transactions of adds or drops by printing their Student Class Program/Web Schedule Bill for confirmation of actions taken. Finally, it is the student's responsibility to be aware of and adhere to the Student Code of Conduct and all other student policies. Students who wish to submit either of the following petitions: Petition for Review of Account Status or Petition for Change of Grade from "F" to "W," must submit the appropriate petition no later than the end of the subsequent semester in which the course in question was taken. (Ex: student received an "F" in ENGL A100 for Spring, 2017, the Petition for Change of Grade from "F" to "W" must be submitted prior to end of the Fall 2017 term.) Petitions submitted after the stated deadlines will not be accepted or reviewed. Students should check their MyOCC page — particularly their Student Class Program/ Web Schedule Bill — and their CCCD issued email account often for important updates and information. The CCCD email account is the official communication method that instructors and staff use to send students important information.

## Working Students

Working students should remember that taking 15 units of college coursework requires about the same amount of time as working 40 hours a week; therefore, full-time students should work no more than 20 hours a week. Students may contact the Financial Aid Office or call (714) 432-5508 to determine their eligibility for financial assistance. No student should expect any instructor to lower course standards to accommodate them for not doing required coursework due to work employment.

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## Alcohol and Drug Abuse Notice

It is the intention of the Coast Community College District to provide an environment that maximizes academic achievement and personal growth. The District recognizes that alcohol and other drug abuse pose a significant threat to the health, safety and well-being of users and the people around them. Substance abuse also interferes with academic, co-curricular and extra-curricular interests, and can lead to health, personal, social, economic and legal problems.

## Policy

OCC is committed to a drug-free campus so that students and staff can work in a drug-free environment.

In addition to our commitment to providing a drug-free environment, education, and help to students, there are state laws and the CCCD Student Code of Conduct which specifically prohibit the use and possession, distribution or sale of drugs or alcohol on College property or at any College-sponsored activity or event. These rules also describe the penalties and disciplinary actions which may come into play when violations occur for those who abuse or don't take positive steps to get help.

Information on the laws and Student Code of Conduct is available at the Dean of Students Office.

The District policy is that all use of alcohol and other drugs is prohibited on District property and at any College-sponsored activity regardless of its location. Furthermore, the use of tobacco is prohibited in all District buildings and vehicles, and in designated outdoor areas.

## Referrals

The Student Health Center provides information and referrals to community resources, support groups and social services. Visit the Student Health Center website on the OCC home page.

Students can meet with a mental health counselor or registered nurse at the Student Health Center if they have questions or concerns. In addition, a number of OCC staff members are available to refer students to the help they need.

## Information

OCC offers several classes that focus on alcohol and drugs.

- Health Education A100 — Personal Health
- Health Education A122 — Drugs, Health, & Society
- Health Education A160 — Peer Health Education, Level 1
- Health Education A271 — Drugs and Sports

## Self-Help Resources

A wide variety of self-help groups meet on campus, or in the community. All of them are open to students if they wish to take advantage of the services. Visit the Student Health Center for current referrals.

Confidential professional counseling for all active employees and family members is available. Employees can contact the Employee Assistance Program 24-hour helpline at (800) 635-3616.

## Alternate Methods of Study and Course Credit

Orange Coast College recognizes work taken at other accredited colleges. Additional college credit is awarded in the following areas:

### Credit by Examination

Credit by Examination may be offered on a limited basis at the discretion of the respective instructional division. Students who have completed a minimum of 12 units at OCC, with a cumulative grade point average of at least 2.4 (C+) may inquire in the respective division office regarding eligible courses. If the course is eligible, students may petition through the division office and seek approval. Since Credit by Examination may not transfer to other institutions, students are strongly encouraged to make an appointment with a counselor. The final approval is determined by the respective division office.

1. Contact the respective division office to determine course eligibility for Credit by Examination.
2. If eligible, obtain and complete the petition from the respective division office and attach an official or unofficial OCC transcript showing successful completion of a minimum of 12 units at OCC prior to petition, AND a cumulative grade point average (GPA) of 2.4 or higher. There are no exceptions to this requirement.
3. If the petition is approved by the dean and the instructor, take the petition to Enrollment Services in Watson Hall to file your petition for credit and make payment no later than the third week of the semester.
4. Meet with the instructor at the agreed upon time and place, and take the examination. Exam grades are final and will be posted to the transcript. Failure to successfully complete the examination will result in an unsatisfactory grade.

Students should not enroll in the course to be taken as Credit by Examination. The course credit is clearly identified on the student's transcript and designated as "Credit by Examination." Transfer ability of Credit by Examination is subject to review by other colleges and universities, and may not transfer. Units earned by examination are excluded from enrollment verifications, Financial Aid eligibility and OCC residence requirements for associate degrees.

### Advanced Placement (AP)

Orange Coast College grants academic credit towards an Associate Degree for successful completion of examinations of the Advanced Placement Program of the College Entrance Examination Board.

Course credit or General Education area credits granted

for Advanced Placement Examinations can be used to meet OCC general education requirements for an A.A. and/or A.S. degree under General Education Options 1, 2, or 3.

Course credit earned through Advanced Placement Examination can be used to certify general education requirements for transfer to UC under Option 3 (Intersegmental General Education Transfer Curriculum). AP credit can be used to certify general education for transfer to CSU under Option 2 (CSU General Education Breadth) or Option 3 (IGETC). Students certified using Option 3 can satisfy only one course requirement per exam on the IGETC.

Posting of Advanced Placement credit on the OCC transcript does not guarantee transfer to other colleges. The respective college or university determines eligibility for AP units, according to its policies. AP scores must be submitted for evaluation to the college or university where the student requests credit. Students planning to transfer should consult the catalog of the transfer institution to determine how AP credit is granted at that school.

Students may request AP credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

For more information, including score requirements for each exam, refer to the AP Chart on pages 28-29 of this catalog.

### College Level Examination Program (CLEP)

Orange Coast College grants a maximum of 24 units for any combination of CLEP general exams and subject exams, using as minimum standards a score at or above 500 on the general exams and 50 on the subject exams, and 50 for all CLEP computer-based exams. CLEP scores count toward graduation requirements at OCC under General Education Option 1 or Option 2, and AS GE. CLEP credit may be used to certify general education requirements for transfer to the CSU only. The University of California does not grant credit for CLEP exams. CLEP scores must be submitted for evaluation directly to the college or university where the student requests credit. CLEP policies for each private or out-of-state four-year college may be found in their catalogs.

Students may request CLEP credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

For more information, including score requirements for each exam, refer to the CLEP Chart on page 30 of this catalog.

### International Baccalaureate (IB)

Students can earn OCC credit for International Baccalaureate examinations with a minimum score of 5. Exam results can be used to satisfy CSU General Education-Breadth and IGETC requirements but may require a score of 4 in some of the areas.

Students may request IB credit through Enrollment Services on the first floor of Watson Hall. Submission of official exam results is required prior to any evaluation and posting of credit.

For more information, including score requirements for each exam, refer to the IB Chart on page 31 of this catalog.

### Learning Contract for Independent Study

This is an alternative method of college study. If the instructor and the division dean approve, a student may take any course in the Orange Coast College catalog on a contract basis. The number of units received and the prescribed hours of study follow the approved catalog description. Two kinds of independent study exist at OCC:

#### Contracted Studies

A student who, for one reason or another, cannot attend a class or classes (excluding class or time conflicts) may negotiate an Independent Study Contract by following these procedures:

1. Request a Learning Contract from the respective division office.
2. Request the permission of the instructor and ask the instructor to specify in detail in the context of the contract the way the student will master the study area and the criteria for evaluation.
3. Ask the instructor and division dean to approve the contract.
4. Take the contract personally to Enrollment Services in Watson Hall. If the contract is approved, the Enrollment Center will officially enroll the student in the course and notify the student.
5. After the student completes the coursework, the instructor will certify the earned grade. Enrollment Services will then record the grade on the student's transcript.

#### Directed Studies

A student may take advanced coursework in a field of study after having completed the introductory courses. Most departments offer a set of directed study courses numbered A291-A295. In unusual cases, students may petition to enroll in directed studies without completing the pertinent beginning courses. Directed

Studies students must ask the instructor to fill out a Learning Contract for Independent Study and have it approved by the Division Dean. Follow the procedures given under Contracted Studies.

| Course No. | Units | Clock Hours per Semester |
|------------|-------|--------------------------|
| A291       | 1     | 54                       |
| A292       | 2     | 108                      |
| A293       | 3     | 162                      |
| A294       | 4     | 216                      |
| A295       | 5     | 270                      |

A maximum credit of 3 units per term— 6 units total— in otherwise transferable subject areas is allowed. Letter grades are assigned for Directed Studies (grade only). Transfer credit for courses of this kind is contingent upon a review of the course outline by a University of California or California State University campus.

Not all courses are eligible for Contracted Studies or Directed Studies options. Students must first meet with the appropriate instructor and division dean to determine if a Learning Contract for Independent Study is a viable option.

### **Licensure Credit**

#### **Radiologic Technologist**

Forty-five units may be awarded for holders of valid Certified Radiologic Technologist State License (or equivalent agency). Students must show the original license to Enrollment Services in order to be eligible for this credit. Credits are posted to transcripts upon completion of 12 units of credit at Orange Coast College.

#### **Other Licensure Credit**

Other licenses issued by the State of California will be considered through the Academic Petition Council procedures as appropriate.

#### **Military Study Programs**

OCC recognizes and grants academic credit to veterans for eligible military service and training credit completed in the armed forces for a maximum of 15 units. To be eligible for academic credit, Veterans must have had at least one year of active duty service. OCC reserves the right to evaluate and grant credit based on the academic policies established by the College. Veterans may apply for evaluation of this credit by presenting official military service and training records — including a copy of discharge papers indicating honorable discharge — to Veteran's Services in the Enrollment Center on the first floor of Watson Hall. Awarded credit will be applied once the student has completed 12 units at OCC. Credit earned for military training may count toward satisfying requirements for

the Associate Degrees; military credit awarded may not transfer to other colleges. Veterans are advised to check with the college they plan to transfer to for information regarding awarding military credit. Under no circumstances will OCC graduate a student who has not completed 12 units of OCC coursework.

#### **Technical Advanced Placement Process (TAP for ROP/High School Students)**

Students who complete approved articulated courses in high school, or with an ROP program with a "B" grade or better, may be eligible for TAP credit at the college. Students must provide the appropriate TAP Petition Form and Official High School Transcripts to the Counseling Office at OCC for processing. Additional information is available on the OCC website at [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu)

#### **Upper Division Credit**

Request for transfer of upper division courses and credits will be evaluated on a case by case basis. Upper-division units may be considered for application towards a Certificate, local/non-transfer Associate Degree, Associate Degree for Transfer (ADT), CSU/GE and IGETC certification. The units will count toward the 60 units required for the associate degrees and meet the transfer requirements. If you are using upper-division courses to fulfill a lower-division IGETC or CSU/GE course or Associate Degree for Transfer major requirement, remember that you are required to have a certain number of upper-division courses at the transfer institution. Contact the receiving institution to see how upper-division course credit will be awarded towards the baccalaureate degree. See the [IGETC Standards](#) or the [CSU policy](#) for details.

## ADVANCED PLACEMENT CREDIT (AP)

Students can earn AP credit with a minimum score of 3 unless otherwise indicated.

The AP Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information provided, make sure to use the following links to verify information.

AP Courses and Exams College Board — <https://apcentral.collegeboard.org>

CSU Systemwide Credit for External Examinations Policy — <http://www2.calstate.edu/AcadAff/codedMemos/AA-2019-03.pdf>

2019 IGETC Standards, Policies, and Procedures — [http://icas-ca.org/Websites/icasca/images/IGETC\\_STANDARD%20FINAL\\_VERSION\\_1.9.pdf](http://icas-ca.org/Websites/icasca/images/IGETC_STANDARD%20FINAL_VERSION_1.9.pdf)

| AP Examination                         | OCC AA / AS (Subject Credit and / or GE), Units & Area         | CSU GE Area for Certification                   | Total CSU Semester Transfer Units | IGETC Area for Certification          | Total UC Semester Transfer Units                    |
|--|--|---|-----------------------------------|---------------------------------------|---|
| Art History                            | Art A100 & A101 / 6 units / Area C                             | C1 or C2, 3 semester units                      | 6                                 | 3A or 3B, 3 semester units            | 5.3   |
| Biology                                | Biol A100 / 4 units / Area B                                   | B2 & B3, 4 semester units                       | 6                                 | 5B with Lab, 4 semester units         | 5.3   |
| Calculus AB                            | Math A180 / 4 units / Area A2                                  | B4, 3 semester units                            | 3                                 | 2A, 3 semester units                  | 2.7*  |
| Calculus BC *                          | Math A180 / 4 units / Area A2                                  | B4, 3 semester units                            | 6                                 | 2A, 3 semester units                  | 5.3*  |
| AP Calculus Exam Limitations *         | *score 5 for A180 + A185 / 8 units max                         |   | * Max 1 exam toward transfer      |                                       | *5.3 semester units for both                        |
| Chemistry                              | Chem A110 / 5 units / Area B                                   | B1 & B3, 4 semester units                       | 6                                 | 5A with Lab, 4 semester units         | 5.3   |
| Chinese Language & Culture             | N/A / 5 units / Area C   | C2, 3 semester units                            | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| Computer Science: A                    | N/A / N/A / N/A  | N/A   | 3*                                | N/A                                   | 1.3*  |
| Computer Science : AB                  | N/A / N/A / N/A  | N/A   | 6*                                | N/A                                   | 2.7*  |
| Computer Science Principles            | N/A / N/A / N/A  | B4, 3 semester units                            | 6                                 | N/A                                   | 5.3   |
| AP CS Exam Limitations*                |  |   | * Max 1 exam toward transfer      |                                       | 2.7 semester units for both; AB always supersedes A |
| English Language & Composition         | Engl A100 / 3 units / Area A1                                  | A2, 3 semester units                            | 6                                 | 1A, 3 semester Units                  | 5.3*  |
| English Literature & Composition       | Engl A100 / 6 units / Area A1 & C1 (AA) / C2 (AS)              | A2 & C2, 6 semester units                       | 6                                 | 1A or 3B *, 3 semester units          | 5.3*  |
| AP English Exam Limitations*           |  |   |                                   |                                       | *Max. 8 quart./5.3 semester units for both          |
| Environmental Science                  | N/A / 4 units / Area B   | B1 & B3*, 4 semester units                      | 4                                 | 5A with Lab, 3 semester units         | 2.7   |
| AP ES Limitations*                     |  | *If taken prior to Fall 2009 B1 & B3 or B2 & B3 |                                   |                                       |   |
| European History                       | Hist A180 & A185 / 6 units / Area C1 or D2 (AA) / C2 or D (AS) | C2 or D6, 3 semester units                      | 6                                 | 3B or 4F, 3 semester units            | 5.3   |
| French Language & Culture              | Fren A185 / 5 units / Area C1 (AA) / C2 (AS)                   | C2, 3 semester units                            | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| French Literature & Culture            | N/A / 3 units / Area C1 (AA) / C2 (AS)                         | C2*, 3 semester units                           | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| AP French Literature Exam Limitations* |  | *If taken prior to Fall 2009                    |                                   |                                       |   |
| German Language                        | German A185 / 5 units / Area C1 (AA) / C2 (AS)                 | C2, 3 semester units                            | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| Government & Politics: Comparative     | PSCI A185 / 3 units / Area D1 (AA) / D (AS)                    | D8, 3 semester units                            | 3                                 | 4H, 3 semester units                  | 2.7   |
| Government & Politics: United States   | 3 units / Area D1 (AA) / D (AS)                                | D8 + US-2*, 3 semester units                    | 3                                 | 4H, 3 semester units                  | 2.7   |
| AP Government Exam Limitations*        | *Doesn't fulfill CA Govt. requirement                          | *Doesn't fulfill CA Govt. requirement           |                                   | *Doesn't fulfill CA Govt. requirement |   |
| Human Geography                        | N/A / 3 units / Area D1 (AA) / D (AS)                          | D5, 3 semester units                            | 3                                 | 4E, 3 semester units                  | 2.7   |
| Italian Language and Culture           | N/A / 5 units / Area C1 (AA) / C2 (AS)                         | C2, 3 semester units                            | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| Japanese Language and Culture          | N/A / 5 units / Area C1 (AA) / C2 (AS)                         | C2, 3 semester units                            | 6                                 | 3B & 6A, 3 semester units             | 5.3   |
| Latin Literature                       | N/A / 3 units / Area C1 (AA) / C2 (AS)                         | C2*, 3 semester units                           | 6                                 | 3B & 6A, 3 semester units             | 2.7   |
| AP Latin Literature Exam Limitations*  |  | *If taken prior to Fall 2009                    |                                   |                                       |   |
| Latin: Vergil                          | N/A / 3 units / Area C1 (AA) / C2 (AS)                         | C2*, 3 semester units                           | 3*                                | 3B & 6A, 3 semester Units             | 2.7   |
| AP Latin: Vergil Exam Limitations*     |  | *If taken prior to Fall 2012                    |                                   |                                       |   |



| AP Examination                          | OCC AA / AS (Subject Credit and / or GE), Units & Area   | CSU GE Area for Certification                    | Total CSU Semester Transfer Units | IGETC Area for Certification  | Total UC Semester Transfer Units                 |
|---|--|--|-----------------------------------|-------------------------------|--|
| Latin                                   | N/A / 3 units / Area C1 (AA) / C2 (AS)                   | C2*, 3 semester units                            | 6                                 | 3B & 6A, 3 semester Units     | 2.7  |
| Macro Economics                         | Econ A175 / 3 units / Area D2 (AA) / D (AS)              | D2, 3 semester units                             | 3                                 | 4B, 3 semester units          | 2.7  |
| Micro Economics                         | Econ A170 / 3 units / Area D2 (AA) / D (AS)              | D2, 3 semester units                             | 3                                 | 4B, 3 semester units          | 2.7  |
| Music Theory                            | Mus A115 / 3 units / Area C1                             | C1*, 3 semester units                            | 6                                 | N/A                           | 5.3  |
| AP Music Theory Exam Limitations*       |  | *If taken prior to Fall 2009                     |                                   |                               |  |
| Physics 1                               | Phys A120 / 4 units / Area B                             | B1 & B3, 4 semester units                        | 4                                 | 5A with Lab, 3 semester units | 2.7  |
| Physics 2                               | Phys A125 / 4 units / Area B                             | B1 & B3, 4 semester units                        | 4                                 | 5A with Lab, 3 semester units | 2.7  |
| Physics B                               | Phys A110 & A111 / 4 units / Area B                      | B1 & B3*, 4 semester units prior to Fall 2013    | 6                                 | 5A with Lab, 4 semester units | 5.3 *  |
| Physics C: Mechanics                    | Phys A120 / 4 units / Area B                             | B1 & B3*, 4 semester units                       | 4                                 | 5A with Lab, 3 semester units | 2.7 *  |
| Physics C: Electricity and Magnetism    | Phys A125 / 4 units / Area B                             | B1 & B3*, 4 semester units                       | 4                                 | 5A with Lab, 3 semester units | 2.7 *  |
| AP Physics Exam Limitations*            |  | *Max. 4 semester units for GE and 6 for transfer |                                   |                               | 5.3 semester units for all 3                     |
| Psychology                              | Psyc A100 / 3 units / Area D3 (AA) / D (AS)              | D9, 3 semester units                             | 3                                 | 4I, 3 semester units          | 2.7  |
| Spanish Language & Culture              | Span A185 / 5 units / Area C1 (AA) / C2 (AS)             | C2, 3* semester units                            | 6                                 | 3B & 6A, 3 semester units     | 5.3  |
| AP Spanish Language Exam Limitations*   |  | *6 semester units if taken prior to Spring 2014  |                                   |                               |  |
| Spanish Literature & Culture            | N/A / 3 units / Area C1 (AA) / C2 (AS)                   | C2, 3* semester units                            | 6                                 | 3B & 6A, 3 semester units     | 5.3  |
| AP Spanish Literature Exam Limitations* |  | *6 semester units if taken prior to Spring 2013  |                                   |                               |  |
| Statistics                              | Math A160 / 3 units / Area A2                            | B4, 3 semester units                             | 3                                 | 2A, 3 semester units          | 2.7  |
| Studio Art: 2D Design                   | Art A110 / 3 units / Area C1                             | N/A  | 3                                 | N/A                           | 5.3 *  |
| Studio Art: 3D Design                   | N/A / N/A / N/A  | N/A  | N/A                               | N/A                           | 5.3 *  |
| Studio Art: Drawing                     | N/A / N/A / N/A  | N/A  | N/A                               | N/A                           | 5.3 *  |
| AP Studio Art Exam Limitations*         |  |  |                                   |                               | *Only 5.3 UC semester units max. for all 3 exams |
| United States History                   | Hist A170 & A175 / 6 units / Area D1 (AA) / C2 or D (AS) | C2 or D6, 3 semester units                       | 6                                 | 3B or 4F, 3 semester units    | 5.3  |
| World History: Modern                   | Hist A61 & A162 / 6 units / Area D1 (AA) / C2 or D (AS)  | C2 or D6, 3 semester units                       | 3                                 | 3B or 4F, 3 semester units    | 5.3  |

**Many colleges or universities may apply AP test credit toward satisfaction of subject or specific requirements (e.g., major). AP policies vary by institution. Students should see a counselor to discuss how AP is applied based on the transfer institution's application of AP major credit.**

UC AP major credit information can be found at <http://admission.universityofcalifornia.edu/counselors/exam-credit/ap-credits/index.html>

**OCC Associate Degrees** – Students should be aware that AP test credit is evaluated by corresponding it to an equivalent OCC course (e.g. History A170). A student who receives AP Credit and then takes the equivalent OCC course will have the unit credit for such duplication deducted prior to being awarded the A.A. or A.S. degree. Credit by Advanced Placement exam is noted and listed first on a student's transcript, with units assigned and no grade.

Course credit and units granted to the OCC Associate Degree may differ from course credit and units granted by a transfer institution. For more information, please see a counselor.

**CSU GE** – The Advanced Placement examinations may be incorporated into the certification of California State University General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

**IGETC** – AP Exams must be used in an area indicated regardless of where the certifying California Community College's discipline is located. Many colleges or universities may apply AP credit toward satisfaction of subject or specific requirements (e.g. major). AP policies vary by institution. For policy information regarding individual institutions, visit [apstudent.collegeboard.org/creditandplacement](http://apstudent.collegeboard.org/creditandplacement)

## COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

The CLEP Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information provided, make sure to use the following link to verify information: [www.calstate.edu/AcadAff/codedMemos/asa-2019-03\\_attachment\\_2.xls](http://www.calstate.edu/AcadAff/codedMemos/asa-2019-03_attachment_2.xls)

Course credit and units granted at Orange Coast College may differ from course credit and units granted by a transfer institution.

| CLEP EXAM                           | OCC Passing Score | OCC AA/AS GE Area | OCC Units Towards AA/AS GE | CSU Passing Score | CSU Minimum Units Earned Toward Transfer | Units Towards CSU GE Breadth | American Institutions and/or GE Breadth Area |
|-------------------------------------|-------------------|-------------------|----------------------------|-------------------|--|------------------------------|--|
| AMERICAN GOVERNMENT                 | 50                | D1/D              | 3                          | 50                | 3  | 3                            | D8   |
| AMERICAN LITERATURE                 | 50                | C1/C2             | 3                          | 50                | 3  | 3                            | C2   |
| ANALYZING & INTERPRETING LITERATURE | 50                | C1/C2             | 3                          | 50                | 3  | 3                            | C2   |
| BIOLOGY                             | 50                | B                 | 3                          | 50                | 3  | 3                            | B2   |
| CALCULUS                            | 50                | A2                | 3                          | 50                | 3  | 3                            | B4   |
| CHEMISTRY                           | 50                | B                 | 3                          | 50                | 3  | 3                            | B1   |
| COLLEGE ALGEBRA                     | 50                | A2                | 3                          | 50                | 3  | 3                            | B4   |
| COLLEGE ALGEBRA-TRIG                | 50                | A2                | 3                          | 50                | 3  | 3                            | B4   |
| COLLEGE MATHEMATICS                 | 50                | N/A               | 0                          | 50                | 0  | 0                            | N/A  |
| ENGLISH COMP (NO ESSAY)             | 50                | N/A               | 0                          | 50                | 0  | 0                            | N/A  |
| ENGLISH COMP (WITH ESSAY)           | 50                | N/A               | 0                          | 50                | 0  | 0                            | N/A  |
| ENGLISH LITERATURE                  | 50                | N/A               | 3                          | 50                | 3  | 3                            | (Fall 2011)**                                |
| FINANCIAL ACCOUNTING                | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| FRENCH LEVEL I*                     | 50                | N/A               | 0                          | 50                | 6  | 0                            | N/A  |
| FRENCH LEVEL II*                    | 59                | C1/C2             | 3                          | 59                | 12                                       | 3                            | C2 (Fall 2015)**                             |
| FRENCH LEVEL II*                    | 59                | C1/C2             | 3                          | 59                | 9  | 3                            | C2   |
| FRESHMAN COLLEGE COMP               | 50                | N/A               | 0                          | 50                | 0  | 0                            | N/A  |
| GERMAN LEVEL I*                     | 50                | N/A               | 0                          | 50                | 6  | 0                            | N/A  |
| GERMAN LEVEL II*                    | 60                | C1/C2             | 3                          | 60                | 12                                       | 3                            | C2 (Fall 2015)**                             |
| GERMAN LEVEL II*                    | 60                | C1/C2             | 3                          | 60                | 9  | 3                            | C2   |
| HISTORY, US I                       | 50                | D1/D              | 3                          | 50                | 3  | 3                            | D6+US-1                                      |
| HISTORY, US II                      | 50                | D1/D              | 3                          | 50                | 3  | 3                            | D6+US-1                                      |
| HUMAN GROWTH AND DEV                | 50                | D                 | 3                          | 50                | 3  | 3                            | E  |
| HUMANITIES                          | 50                | C1/C2             | 3                          | 50                | 3  | 3                            | C2   |
| INFO SYSTEMS & COMPUTER APPS        | 50                | N/A               | 3                          | 50                | 3  | 0                            | N/A  |
| INTRO TO EDUCATIONAL PSYCHOLOGY     | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| INTRO TO BUSINESS LAW               | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| INTRO TO PSYCHOLOGY                 | 50                | D3/D              | 3                          | 50                | 3  | 3                            | D9   |
| INTRO TO SOCIOLOGY                  | 50                | D2/D              | 3                          | 50                | 3  | 3                            | D0   |
| NATURAL SCIENCES                    | 50                | B1                | 3                          | 50                | 3  | 3                            | B1 or B2                                     |
| PRE-CALCULUS                        | 50                | A2                | 3                          | 50                | 3  | 3                            | B4   |
| PRINCIPLES OF ACCOUNTING            | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| PRINCIPLES OF MACROECONOMICS        | 50                | D2/D              | 3                          | 50                | 3  | 3                            | D2   |
| PRINCIPLES OF MANAGEMENT            | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| PRINCIPLES OF MARKETING             | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| PRINCIPLES OF MICROECONOMICS        | 50                | D2/D              | 3                          | 50                | 3  | 3                            | D2   |
| SOCIAL SCIENCES AND HISTORY         | 50                | N/A               | 0                          | 50                | 3  | 0                            | N/A  |
| SPANISH LEVEL I*                    | 50                | N/A               | 0                          | 50                | 6  | 0                            | N/A  |
| SPANISH LEVEL II*                   | 63                | C1/C2             | 3                          | 63                | 12                                       | 3                            | C2 (Fall 2015)**                             |
| SPANISH LEVEL II*                   | 63                | C1/C2             | 3                          | 63                | 9  | 3                            | C2   |
| TRIGONOMETRY                        | 50                | A2                | 3                          | 50                | 3  | 3                            | B4 (Fall 2006)**                             |
| WESTERN CIVILIZATION I              | 50                | D2/D              | 3                          | 50                | 3  | 3                            | C2 or D6                                     |
| WESTERN CIVILIZATION II             | 50                | D2/D              | 3                          | 50                | 3  | 3                            | D6   |

\*If a student passes more than one CLEP test in the same language other than English (e.g., two exams in French), then only one examination may be applied to the baccalaureate. For each test in a language other than English, a passing score of 50 is considered "Level I" and earns six units of baccalaureate credit; the higher score listed for each test is considered "Level II" and earns additional units of credit and placement in Area C2 of General Education Breadth, as noted.

\*\*Students seeking certification in GE Breadth prior to transfer must have passed the test before this date.

## INTERNATIONAL BACCALAUREATE (IB)

Students can earn OCC credit for International Baccalaureate examinations with a minimum score of 5, except where noted. Exam results can be used to satisfy CSU General Education Breadth and IGETC requirements but may require a score of 4 in some of the areas.

The IB Chart is based on the most current information available. Although every attempt has been made to ensure the accuracy of the information provided, make sure to use the following link to verify information: [www.calstate.edu/AcadAff/codedMemos/asa-2019-03\\_attachment\\_3.xlsx](http://www.calstate.edu/AcadAff/codedMemos/asa-2019-03_attachment_3.xlsx)

| EXAM   | OCC AA/AS GE Area     | CSU GE Area         | CSU Minimum Units Earned Toward Transfer | IGETC Area                      | UC Semester Units Earned Toward Transfer |
|--|-----------------------|---------------------|--|---------------------------------|--|
| BIOLOGY HL                                       | B<br>3 units          | B2<br>3 units       | 6  | 5B<br>(without lab)<br>3 units  | 5.3                                      |
| CHEMISTRY HL                                     | B<br>3 units          | B1<br>3 units       | 6  | 5A<br>(without lab)<br>3 units  | 5.3                                      |
| ECONOMICS HL                                     | D2/D<br>3 units       | D2<br>3 units       | 6  | 4B<br>3 units                   | 5.3                                      |
| GEOGRAPHY HL                                     | D2/D<br>3 units       | D5<br>3 units       | 6  | 4E<br>3 units                   | 5.3                                      |
| HISTORY<br>(any region) HL                       | D2/C2 or D<br>3 units | C2 or D6<br>3 units | 6  | 3B or 4F<br>3 units             | 5.3                                      |
| LANGUAGE A1<br>(any language, except English) HL | C1/C2<br>3 units      | N/A                 | 0  | 3B & 6A<br>(UC only)<br>3 units | 5.3                                      |
| LANGUAGE A2<br>(any language, except English) HL | C1/C2<br>3 units      | N/A                 | 0  | 3B & 6A<br>(UC only)<br>3 units | 5.3                                      |
| LANGUAGE A1<br>(any language) HL                 | C1/C2<br>3 units      | C2*<br>3 units      | 6*                                       | 3B<br>3 units                   | 5.3                                      |
| LANGUAGE A2<br>(any language) HL                 | C1/C2<br>3 units      | C2*<br>3 units      | 6*                                       | 3B<br>3 units                   | 5.3                                      |
| LANGUAGE B<br>(any language) HL                  | C1/C2<br>3 units      | N/A                 | 6*                                       | 6A<br>3 units                   | 5.3                                      |
| MATHEMATICS HL                                   | A2<br>3 units         | B4*<br>3 units      | 6*                                       | 2A<br>3 units                   | 5.3                                      |
| PHYSICS HL                                       | B<br>3 units          | B1<br>3 units       | 6  | 5A<br>(without lab)<br>3 units  | 5.3                                      |
| PSYCHOLOGY HL                                    | D<br>3 units          | D9<br>3 units       | 3  | 4I<br>3 units                   | 5.3                                      |
| THEATRE HL                                       | C<br>3 units          | C1*<br>3 units      | 6*                                       | 3A<br>3 units                   | 5.3                                      |

\* A minimum score of 4 is needed for CSU credit.

**CSU GE** – The IB examinations may be incorporated into the certification of California State University General Education-Breadth requirements by any certifying institution. All CSU campuses will accept the minimum units shown and apply them toward fulfillment of the designated General Education-Breadth area if the examination is included as part of a full or subject-area certification. Please note that individual CSU campuses may choose to grant more units than those specified toward completion of General Education-Breadth requirements.

**IGETC** – IB Exams must be used in an area indicated regardless of where the certifying California Community College's discipline is located.

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## Classroom and Lab Access

With the exception of persons expressly invited by the faculty, or persons providing an accommodation per Special Services, persons sitting in on a class or lab or using an athletic facility must be enrolled in that class or lab.

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## Course Auditing

In accordance with the California Education Code Section 76370 and District policy, students may audit courses specifically designated by the College as eligible for audit. Students who audit classes will be expected to participate in all class activities as required by the instructor. No credit is awarded. Further information can be obtained in the division offices.

### Conditions for Course Auditing

1. The course has been designated by the College as eligible for audit.
2. The student is ineligible to enroll for credit because the course has already been taken for the maximum number of times allowed within the Coast Community College District.

NOTE: Permission to audit a class requires the approval of the faculty member and Division Dean. Students who enroll in a class for the semester requested are ineligible for an audit option.

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## Disabled Students' Rights and Responsibilities

1. Under Section 504 of the Rehabilitation Act of 1973 and Title II of the Americans with Disabilities Act of 1990, Orange Coast College will take all necessary steps to ensure that no student with a verified disability is denied the benefits of, excluded from participation in, or otherwise subjected to discrimination in an education program because of the absence of auxiliary aids or academic accommodations.
2. Participation by students with disabilities in Orange Coast College's Disabled Students Programs and Services (DSPS) shall be entirely voluntary.
3. A student with a verified disability may be entitled to auxiliary aids or academic accommodations. The decision for authorization of such accommodations is the responsibility of the DSPS counselor after a review of documentation verifying the disability and any resulting educational barriers.
4. Each student has the right to privacy of his/her confidential information. No information held by the Orange Coast College DSPS will be released without written permission of the student.

### Responsibilities

Students may have services terminated from the DSPS for any of the following reasons:

1. Failure to provide information from an appropriate professional to verify the students' disability.
2. Failure of the student to complete and sign the Student Education Plan.
3. Failure to complete the required testing to determine eligibility in the learning disabilities program.
4. Students using interpreter services must notify Orange Coast College of any absences at least 24 hours in advance. Upon the first unreported absence, the interpreter may be canceled for the next class. The student must discuss the unreported absence with the DSPS counselor before interpreter services are resumed. If the student accumulates three unreported absences, interpreter services may be terminated for the semester.
5. Students utilizing reader or tutoring services must notify the service provider in advance of any absences. Three unexcused absences may result in termination of services.
6. Students attending Adapted Kinesiology or DSPS tutoring classes may be dropped from these classes if they exceed three absences.
7. Students must conform to the college's code of conduct. Students not conforming to this code will be referred to the Dean of Students for disciplinary action.
8. Students not making measurable progress toward the goals established in the Student Education Plan may have services terminated.
9. Students enrolled in regular classes must meet the academic standards established by the College. Failure to meet these standards may result in suspension from the college.

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## Equal Opportunity Policy

Orange Coast College is committed to providing equal opportunities in its educational programs and activities. Therefore, neither an Orange Coast College student nor a Coast Community College District employee, nor any applicant for enrollment or employment, shall be unlawfully denied the benefits of, or be unlawfully subject to, discrimination on the basis of race, color, sex, gender identity, religion, age, national origin, ancestry, sexual orientation, marital status, physical or mental disability, and/or veteran status. Inquiries about the District's Equal Opportunity Policy should be directed to the Director of Personnel Services at (714) 432-5670 in Administration, or the District Office of Human Resources.

Inquiries regarding compliance and/or grievance procedures may be directed to the Title IX and Student Relations Officer and/or the 504/ADA coordinator.

Title IX Officer and 504/ADA Coordinator

Shannon Quihuiz

Associate Dean, Title IX & Student Relations

Administration Building

Phone: (714) 432-5930

[squihuiz@occ.cccd.edu](mailto:squihuiz@occ.cccd.edu)

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## Family Rights and Privacy Act of 1974 Policy (FERPA)

Orange Coast College may release student directory information upon request, provided such release is approved by the College president or a designee. Students may request in writing to the College president that directory information not be released. The president or a designee may limit or deny the release of specific categories of directory information based upon a determination of the best interests of the student.

Directory information is defined to mean one or more of the following: student's name, city of residence, date and place of birth, major field of study, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and previous public or private school attended.

Any currently enrolled or former students shall have access to any and all of their records on file at the College. Such access shall be granted within 15 working days of a written request and shall be subject to procedures established by the Dean of Enrollment Services for academic records or the Dean of Counseling Services for counseling files.

Students, by written request to the above administrator, may challenge the content of their records pursuant to Education Code section 76232. Such challenges will be processed according to procedures established by those responsible administrators. All students will receive annual notice about FERPA and their rights.

## Grades and Grade Points

Performance in each course is indicated by one of seven grades. Five of these grades signify passing work. Each grade and its value in grade points follows:

| Grade | Significance                         | Grade Points per Unit                |
|-------|--------------------------------------|--------------------------------------|
| A     | Excellent                            | 4                                    |
| B     | Good                                 | 3                                    |
| C     | Satisfactory                         | 2                                    |
| D     | Passing; less than satisfactory      | 1                                    |
| F     | Failing                              | 0                                    |
| P     | Pass; at least satisfactory          | Hours awarded; not counted in GPA    |
| NP    | No Pass; not satisfactory or failing | No hours awarded; not counted in GPA |
| EW    | Excused Withdrawal                   | No hours awarded; not counted in GPA |
| MW    | Military Withdrawal                  | No hours awarded; not counted in GPA |

The grade point average is calculated by dividing the number of grade points earned by the number of GPA hours for the grades of A, B, C, D, F. The grades of P and NP, and the symbols of IP, Incomplete (I) and W are not used in the grade point average calculation.

A disciplinary grade of "F" may be assigned for violations of the Academic Honesty Policy, consistent with the District Student Code of Conduct.

The following non-evaluative symbols may be used as defined. These symbols are not used when calculating the grade point average.

| Symbol   | Definition          |
|----------|---------------------|
| P        | Pass                |
| NP       | No Pass             |
| W        | Withdrawal          |
| EW       | Excused Withdrawal  |
| MW       | Military Withdrawal |
| I<br>INP | Incomplete          |
| IP       | In Progress         |
| RD       | Report Delayed      |

## Grade Changes

Students requesting a change from a substandard grade to a withdrawal due to a serious, documented, extenuating circumstance, must submit the appropriate petition no later than the end of the subsequent semester. OCC semesters are: Fall, Spring, and Summer. (Except grade grievance cases which have a shorter time limit. See Grade Grievance information in catalog). Petitions are subject to review.

NOTE: Students that believe their grade was submitted in error also must adhere to the one-year deadline (from the term in which the grade was received) to contest their grade. No exceptions will be made.

## Abbreviation/Definition

### W (Withdraw)

1. A "W" grade will be assigned for students who officially withdraw prior to the end of week 12 of the term for full-semester classes, week 6 of the term for eight-week classes, and 75 percent of the class for all other courses.
2. No notation ("W" or otherwise) is made on the permanent record of a student who withdraws prior to the third Monday of the term for full-semester classes, or 20 percent of a class for all other classes.

Specific drop deadline dates can be found on the Web at MyOCC (Student Class Program/Web Schedule Bill). Students are responsible for withdrawing from a class within the appropriate time to avoid an unsatisfactory grade. **Students may drop a class using the MyOCC website, or by letter to the Enrollment Center, U.S. postmarked prior to the drop deadline.**

### I (Incomplete)

If agreed upon between the instructor and the student, a student may receive an "I" grade when work in the class cannot be completed by the last day of the semester due to extenuating circumstances.

- a. Most of the academic work must be completed and there must be a justifiable reason for receiving the incomplete such as an accident or illness.
- b. The condition for removal of the "I" shall be stated by the instructor in a written record, including the grade the incomplete will revert to if the student doesn't meet the condition for removal within the stated period of time.
- c. All academic work must be completed and submitted to the instructor per written agreement with the student, which will be valid no longer than one year following the end of the semester in which it was assigned.

- d. An incomplete not made up within the specified timeline will revert to the alternate grade assigned by the instructor when the "I" was assigned.
- e. A student may not re-enroll in a class in which an incomplete was awarded.

### IP (In Progress)

The "IP" abbreviation is used only in those courses which extend beyond the usual academic term. The "IP" symbol remains on the student's academic record to document enrollment, but is not used in calculating grade point averages. If a student enrolled in an "open-entry, open-exit" course is assigned an "IP" at the end of a term and does not re-enroll in that course during the next term, the appropriate grade will be assigned.

### Grade or Pass/No Pass Option

Students who enroll in courses designated "graded or pass/no pass" may select the pass/no pass option via their MyOCC account until the class starts. Once the class has started, students may request pass/no pass by submitting a Pass/No Pass Request Form to the Enrollment Center on the first floor of Watson Hall.

- Students must choose the grade or pass/no pass option no later than the third week of a semester-length course or before the completion of 20 percent of the course. Pass/no pass options are not reversible after this time.
- Before selecting the pass/no pass option, students should consult with a counselor. Generally, it is recommended that students select a letter grade in courses satisfying requirements for majors, general education or a high school course deficiency.
- Grades of "NP" are considered unsatisfactory for progress probation or dismissal
- In courses where one performance standard determines unit credit, only a "P" or "NP" is given. A maximum of 15 units of Pass/No Pass graded courses may be used towards an associate degree. Students also should consult with a counselor to determine pass/no pass eligibility for specific courses prior to submitting the pass/no pass forms.

Students may repeat a course in which they received a “NP”, “D”, “F” or “W” two additional times for credit within the Coast Community College District (Orange Coast College, Golden West College, or Coastline Community College). After three unsuccessful attempts, a student’s registration in the course is automatically blocked (BP4225). Only the second grade and units in the repeated course will be counted when determining grade point average. A student can request to have the first substandard grade for a repeated course removed from the grade point average calculation by filling out a form in Enrollment Services (Petition to Exclude a Sub-Standard Grade from GPA Calculation).

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## Grade Grievance

Recognizing that a trusting, positive relationship between students and instructors is vital to successful learning and teaching, the Grade Grievance procedure at Orange Coast College is intended to provide all parties with due process in the event of a disagreement or misunderstanding regarding classroom policies or grades. The Grade Grievance process does not address personality, character, or styles of teaching; this process takes into account only the grading concern of the student to determine if the California Code of Education was violated.

The final grade that is assigned to a student is the purview of the course instructor who teaches the course. The California Code of Regulations, Title 5, Section 55025, Grade Changes (a), states, *“In any course of instruction in a community college district for which grades are awarded, the instructor of the course shall determine the grade to be awarded each student in accordance with this article. The determination of the student’s grade by the instructor shall be final in the absence of mistake, fraud, bad faith, or incompetency.”*

Concerns about grades should be addressed as soon as possible in order to ensure availability of student and instructor records, and to permit time for a formal appeal, should one be necessary. Grade grievances will be permitted only through the end of the sixth week of the semester following the semester or summer session in which the grade was assigned. For more information, contact the Associate Dean, Student Relations at (714) 432-5930.

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## Illegal Distribution of Copyrighted Materials

OCC supports the Higher Education Opportunity Act and Digital Millennium Copyright Act, including efforts to eliminate the illegal distribution of copyrighted material.

The Coast Community College District abides by all relevant sections of the Education Code and United States copyright law. Board Policies (BP) and Administrative Procedures (AP) 3710 and 3750 provide information related to Securing of Copyright and Use of Copyrighted Materials. To review this information as well as other Board Policies and Administrative Procedures, please visit the District website at [www.cccd.edu](http://www.cccd.edu) (view Board of Trustees – Board Policies).

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## Liability

Throughout the academic year, some classes will meet at off-campus locations. The College will not provide transportation to these sites, and students enrolled in these classes are responsible for making their own transportation arrangements. Orange Coast College personnel may assist in coordinating this transportation and/or may recommend travel time, routes, carpooling, etc. However, the student does not have to follow these recommendations. The Coast Community College District is in no way responsible, nor does it assume liability, for any injuries or losses resulting from this non-sponsored transportation. If you ride with another student, that student is not an agent of, nor driving on behalf of the District.

Under the California Code of Regulations, Subchapter 5, Section 55450, if you participate in a voluntary field trip or excursion, you hold the District, its officers, agents and employees harmless from all liability or claims that may arise out of, or in connection with, your participation in this activity.

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## MyOCC

All admitted students receive a personal account to log in to MyOCC, the College’s student/staff portal, which may be accessed via the College website. Access to the following services and important information is available via MyOCC:

- Order official transcripts
- Access/print unofficial transcripts
- Access account balances and pay fees
- Check academic standing
- Check for holds on records/registration
- View important targeted announcements & OCC News
- Order a verification of enrollment
- Print a student class program Web Schedule Bill (includes specific course information including meeting dates/times, deadlines for each course, and a detail of fees paid)
- Register for classes
- Drop classes
- View registration history
- Change mailing address and/or phone number

- Access and print 1098T Hope Tax Credit Form
- Access CCCD student email account
- Purchase a parking permit
- Access the online textbook order system
- Access Library resources
- OCC student financial aid information
- Apple Store
- Important deadlines

It is the student’s responsibility to be aware of and adhere to state-mandated drop deadlines and deadlines to request a pass/no-pass option. In addition, students should be aware of and adhere to the deadlines for fee-payment and refund of fees. Students should check their MyOCC page, particularly their student class program (Web Schedule Bill), and their CCCD issued email account often for important updates and information. The CCCD email account and MyOCC message boards are the official communication methods that instructors and staff use to send students important information.

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## Non-Discrimination Policy

The District is committed to the concept and principles of providing equal opportunity in education and employment for all persons, and does not discriminate unlawfully in providing educational or employment opportunities to any person on the basis of race, color, sex, gender identity, gender expression, religion, age, national origin, ancestry, sexual orientation, marital status, medical condition, physical or mental disability, military or veteran status, or genetic information. This commitment applies to every aspect of education and personnel actions and practices in employment, development, advancement, and treatment of employees, students and the general public.

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## Declaración de no discriminación

El Distrito honra su compromiso para con el concepto y los principios de la igualdad de oportunidades de educación y empleo para todas las personas, y no discrimina ilegalmente a ninguna persona, en la prestación de oportunidades de educación o empleo, sobre la base de raza, color, género, identidad de género, expresión de género, religión, edad, origen nacional, ascendencia, orientación sexual, estado civil, afección médica, discapacidad física o mental, calidad de militar o veterano de guerra, o información genética. Este compromiso se aplica a todos los aspectos de las decisiones y prácticas de educación y gestión del personal en el empleo, así como en el desarrollo, avance y trato de los empleados, los estudiantes y el público en general.

## Chinh Sạch Bất Kỳ Thi

Cơ Quan cam kết theo đúng quan điểm và nguyên tắc tạo cơ hội bình đẳng trong giáo dục và việc làm cho tất cả mọi người, và không phân biệt đối xử bất hợp pháp trong việc cung cấp các cơ hội giáo dục và việc làm cho bất kỳ ai vì lý do sắc tộc, màu da, phái tính, đặc điểm giới tính, thể hiện giới tính, tôn giáo, tuổi, quốc gia nơi xuất thân, nguồn gốc tổ tiên, xu hướng tính dục, tình trạng hôn nhân, bệnh tật, khuyết tật về thể chất hoặc tinh thần, tình trạng quân ngũ hoặc cựu chiến binh, hoặc thông tin di truyền. Cam kết này áp dụng cho mọi hành động và cách thức hành động liên quan tới giáo dục và nhân sự trong việc làm, phát triển, thăng tiến, và đối xử với các nhân viên, học sinh và công chúng.

## Online Learning

As an important instructional tool and delivery system, the Web is used to enhance instruction at Orange Coast College in a wide variety of ways. Online learning opportunities at OCC include courses taught partially or completely via the Internet, as well as campus-based classes that include online materials and activities. All online courses are equivalent to their campus counterparts. Many of the online instructional modules offer students new and highly stimulating modes of learning.

Consult the OCC schedule of classes for more information about online courses.

### ***Extended Learning Attendance and Non-Participation Policy (Online Learning)***

All students enrolled in extended learning courses (online learning) must log in to each course and complete any assignment or other activity, to be determined by the instructor, that are required during the first week. Students who fail to complete first week assignments/activities within the instructor's deadline may be dropped.

After the first week and during the time period before the final withdrawal date, Students are responsible for withdrawing from a class within the appropriate time to avoid an unsatisfactory grade," as stated in this catalog. (See "Grades and Grade Points" section on page 33 for additional details.)

OCC's Attendance Policies state that "instructors may drop a student from a course when absences number the equivalent of two weeks of class recorded from the first day of instruction." In the case of extended learning, "absences" shall be defined as "non-participation." Instructors may drop students after the equivalent of two weeks of non-participation from the first day of class. Non-participation shall be defined as, but not limited to:

- Not following the instructor's participation guidelines as stated in the syllabus.
- Not submitting required assignments.
- Not contributing meaningful discussion in required chat rooms, discussion boards, or other online forums.
- Not participating in scheduled activities.
- Failure to communicate with the instructor as required.

It should be noted that simply logging into the course does not constitute participation. Students must demonstrate that they are actively participating in the course by submitting required assignments, contributing to discussion forums, etc. as outlined above.

## Probation and Disqualification Policy

### ***Probation***

A student in the Coast Community College District shall be placed on probation whenever one of the two conditions listed below are met.

#### **1. Academic Probation**

Has attempted at least 12 semester units at a college in the District as shown by the official academic record and has a cumulative grade point average of less than 2.0 in all units which were graded.

#### **2. Progress Probation**

Has attempted at least 12 semester units at a college in the District as shown by the official academic record and the percentage of all units in which the student has been enrolled for which entries of "W", "I," and "NP" are recorded reaches or exceeds 33 percent.

A student on probation from one district college shall be on probation at all three district colleges. All probationary students shall be notified of their status and provided with an opportunity for counseling services. (Title 5, Sections 55754, 55755).

### ***Disqualification***

A student in the Coast Community College District who is on academic or progress probation shall be disqualified whenever one of the two conditions listed below are met:

#### ***Academic Disqualification***

Any student on academic probation for two consecutive semesters shall be academically disqualified. However, any student on academic probation whose most recent semester grade point average equals or exceeds 2.0 or whose cumulative grade point average equals or

exceeds 2.0 shall not be disqualified but shall be continued on academic probation.

#### ***Progress Disqualification***

Any student who is on progress probation for two consecutive semesters shall be disqualified for lack of satisfactory progress. However, any student on progress probation whose most recent semester demonstrated that fewer than 50 percent of his/her units were "W," "I," and "NP" shall not be disqualified but shall be continued on progress probation.

Appeal for reinstatement: When notified of disqualification a student will be informed about appeal procedures, through the Counseling Division office.

Any student disqualified from a college within the Coast Community College District may be dismissed for a minimum of one semester. A student dismissed from one district college shall not attend another district college during the semester of disqualification. (Title 5, Section 55756).

## Privacy of and Access to Student Records

The Information Practices Act of 1977, California Civil Code, Sections 1798 et. seq., guarantee certain rights:

**The Right to Privacy.** Only information about a student that is relevant and necessary to carry out the purpose of the College will be collected. This information will be used only in the administration of specific College programs.

**The Right to Access.** Students may request access to any records about them that are maintained by the College. The College shall promptly let students or a chosen representative inspect or shall provide students copies of any document or item of information in their case record, within 15 working days of a written request. In a few cases, medical or psychological information will be released only with consent to an appropriate licensed professional.

**Protection Against Re-disclosure.** All persons who are allowed access to student records are prohibited from disclosing this information to anyone else without specific, informed and written consent. There are specific instances where information may be released without informed, written consent, such as in the case of a medical or mental health emergency.

**Student Identification Number.** Students are not required to provide their social security number except to receive student financial aid and the 1098T Hope Tax Credit Form. However, social security numbers are helpful in identifying student records upon transfer to other institutions. All students are strongly encouraged to select a personal identification number to protect electronic access to their records.

**Records Holds.** Per Title 5, a student's records may not be released if there are outstanding fee obligations.

## ***Withholding of Student Records***

In accordance with District Administrative Procedure 5035, the College Admissions and Records Director shall withhold grades, transcripts, diplomas, and registration privileges from any current or former student who fails to pay a proper financial obligation to the District. The student shall be given written notification and the opportunity to explain if the financial obligation is in error.

The definition of proper financial obligation shall include, but is not limited to: student fees; obligations incurred through the use of facilities, equipment or materials; library fines; unreturned library books; materials remaining improperly in the possession of the student; and/or any other unpaid obligation a current or former student owes to the District. A proper financial obligation does not include any unpaid obligation to a student organization.

## **Remedial Coursework Limits**

No more than 30 semester units of course credit may be assigned to a student for remedial coursework, except when the student is enrolled in one or more courses in English as a Second Language or is identified as having a learning disability. This limit may be waived if the student can show significant and/or measurable progress toward the development of skills appropriate to enrollment in college-level courses. Students needing remedial instruction beyond the course credit restrictions set forth in this section shall be referred to appropriate non-credit adult basic education programs conducted by an adult school.

## **Repetition of Courses**

For courses in which a "D," "F," "NP," or "W" was recorded on the student's academic transcript, the student may repeat the course two additional times within the Coast District (Orange Coast College, Golden West College, or Coastline Community College). After three unsuccessful attempts, a student's registration in the course is automatically blocked (BP4225). Only students with an extenuating circumstance may petition the OCC Academic Petition Council for consideration of a fourth attempt. If approved, students will register for the course at the end of the priority registration period. Petitions are available in the Counseling Office, located on the third floor of Watson Hall, and should be filed at least 30 days prior to the semester start date. Students must meet all registration deadlines.

For courses in which an "A," "B," "C," or "P" was recorded on the student's academic transcript, the student may petition the OCC Academic Petition Council for approval to repeat the course only if there is a need to repeat the course due to a recency

requirement. The student must document the need to repeat the course (i.e. for admittance into a program, licensing requirement, etc.). Students should see a counselor to obtain the proper form.

If a student is authorized to repeat a course, the grade earned in the authorized repeat course will be used in GPA calculations. The grade earned in the previous attempt will be excluded from GPA calculations.

If a course is repeated after the student received a substandard grade, the student may submit a Petition to Exclude Sub-Standard Grade to have the substandard grade ("D," "F," or "NP") excluded from their grade point average. The course must be repeated in the Coast Community College District or at another regionally accredited college and the grade recorded in the latest semester the course was taken will count in the grade point average regardless of which grade is higher. Although the previous grade will not count in the grade point average, the grade will still appear on the student's academic transcript.

If an incomplete grade ("I") was recorded on the student's academic transcript, the student may not re-enroll in the course. The incomplete grade is changed according to the requirements as set forth by the faculty member who assigned the incomplete (see Incomplete under Grades and Grade Points for more information.)

## ***Repeatability of Activities Courses***

New regulations governing the repetition of credit courses in the California Community College system — effective Fall 2014 — have eliminated repeatability in active participation courses in kinesiology, art, dance, theatre arts, and most music courses. Intercollegiate athletics and some music courses that are required for transfer programs will be the only courses that will remain repeatable; all other courses previously offered as repeatable will be offered as one-time enrollment courses.

While students will not, in most cases, be allowed to repeat individual active participation courses in kinesiology, art, dance, music, and theatre arts, they will still be allowed to enroll in a series of active participatory courses that are related in content (commonly referred to as a family of courses) **a maximum of four times, provided prerequisites are satisfied.** This is a state regulation and applies to all athletics, dance, music and theatre arts activity classes **in the District.**

For example, all ballet courses are part of the "Ballet Family." Repeatable courses that are related in content and taken prior to Fall 2014 will count toward the four-enrollment limitation. A student who previously enrolled in Dance A110 twice can only take two more courses in the family; a student who previously enrolled in Dance A110 four times may not take any additional courses in the family. Due to the regulatory changes, a student who is unable to successfully complete one course in a family after three attempts

will not be allowed to enroll in any subsequent courses in the family. Therefore, the Dance and Music families include the following courses:

### **DANCE:**

Ballet Family: DANC A110, A111, A144, A172, A244, A254.

Jazz Family: DANC A120, A121, A143, A173, A243, A253.

Modern Family: DANC A101, A102, A145, A171, A245, A255.

Tap Family: DANC A125, A126, A146, A174, A246, A256.

### **MUSIC:**

Musicianship Family: MUS A180, A185, A280, A285

Theory Family: MUS A181, A186, A285, A286

Voice Family: MUS A145, A146, A213, A214, A215, A216

A family of courses may include more than four courses, but students are limited to a maximum of four courses in any family within the District. Further, all grades — including "W"s, will count toward the four — course enrollment limitation and for computing the grade point average (GPA). Students can repeat athletics, art, dance, music, and theatre arts courses that are included in Family of Courses in which a "NP," "D," "F" grade was earned or "W" was assigned; however, **all enrollments count toward the four enrollment maximum for each family of courses.**

## **Service Complaint**

Orange Coast College and its employees make every effort to serve students and non-students courteously and efficiently, including acting in accordance with College policies and state and federal laws. Individuals dissatisfied with a campus policy or the conduct of a College employee can bring a complaint — a written or verbal notice of dissatisfaction — to the attention of the appropriate faculty, staff or administrator at any time. If a problem is identified, applicable remedies will be put in place as soon as possible. Before filing a complaint, individuals should make every effort to resolve their dissatisfaction informally with the College personnel immediately involved. If addressing an issue informally does not lead to satisfactory resolution, the individual may register a complaint with the appropriate supervisor or administrator. If, after contacting the appropriate supervisor or administrator, the individual is not satisfied with the outcome, they may file a Complaint Form. Service complaints escalating to this level should be submitted in writing (a Complaint Form is available via the OCC website) so that the appropriate administrator can investigate the complaint and respond.



Most complaints, grievances or disciplinary matters should be resolved at the campus level; this is the quickest and most successful way of resolving issues involving a California Community College (CCC). Students are encouraged to work through the campus complaint process first before escalating issues to any of the following resources. Issues that are not resolved at the campus level may be presented:

- To the Accrediting Commission for Community and Junior Colleges (ACCJC) at [www.accjc.org/complaint-process](http://www.accjc.org/complaint-process) if a complaint is associated with the institution's compliance with academic program quality and accrediting standards. ACCJC is the agency that accredits the academic programs of the California Community Colleges.
- To the CCC Chancellor's Office by completing a Web form if the complaint does not concern CCC's compliance with academic program quality and accrediting standards.
- If the complaint involves unlawful discrimination, to the Chancellor's Office website at [extranet.cccco.edu/Divisions/Legal/Discrimination.aspx](http://extranet.cccco.edu/Divisions/Legal/Discrimination.aspx)

For more information, please visit the California Community College State Chancellor's Office Complaint Form site at [www.californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx](http://www.californiacommunitycolleges.cccco.edu/ComplaintsForm.aspx)

## Sexual Misconduct

Sexual Misconduct comprises a broad range of unwelcome behaviors focused on sex and/or gender that may or may not be sexual in nature. Any intercourse or other intentional sexual touching or activity without the other person's consent is Sexual Assault. Sexual Misconduct encompasses Sexual Harassment, Sexual Assault, Sexual Exploitation, or Gender-based Harassment, which is a form of Harassment based on gender identity, gender expression, or non-conformity with gender stereotypes. Sexual Misconduct may also encompass acts of a sexual nature, including acts of Sexual Stalking, Domestic Violence, and Dating Violence, intimidation, or for Retaliation following an incident where alleged Sexual Misconduct or has occurred.

Sexual Misconduct can occur between strangers or acquaintances, or people who know each other well, including between people involved in an intimate or sexual relationship, can be committed by anyone regardless of gender identity, and can occur between people of the same or different sex or gender.

Sexual Misconduct is a form of Sex Discrimination which violates Title VII of the Federal Civil Rights Act of 1964 as amended; Title IX of the Education Amendments of 1972; California state law; and the Coast Community College District Board policies.

If you have questions regarding the behaviors of sexual misconduct or if you would like to discuss your concern with an administrator, please contact the Associate Dean, Title IX & Student Relations at (714) 432-5930, Director of Mental Health Services (CONFIDENTIAL) at (714) 432-6858 or visit the OCC website for the College's complete policy on Sexual Misconduct at [http://www.orangecoastcollege.edu/student\\_services/sexual-misconduct/Pages/Home%20Page.aspx](http://www.orangecoastcollege.edu/student_services/sexual-misconduct/Pages/Home%20Page.aspx).

## Student Classifications

Students are classified as follows:

**Freshman** — A student who has completed fewer than 30 units

**Sophomore** — A student who has completed 30 or more units

**Part-time** — A student carrying fewer than 12 units per semester (for Summer session, fewer than 6 units)

**Full-time** — A student carrying 12 or more units per semester (for Summer session, 6 or more units)

### *Enrollment Status for Reporting Purposes*

**Full-time** — A student carrying 12 or more units per semester (for Summer session, 6 or more units)

**Three-Quarter time** — A student carrying 9 to 11.99 units per semester (for Summer session, status not used)

**Half-time** — A student carrying 6 to 8.99 units per semester (for Summer session, 3 to 5.99 units)

**Less Than Half-time** — A student carrying .5 to 5.99 units per semester (for Summer session, .5 to 2.99 units)

## Student Community Standards and Code of Conduct

Students enrolled at Orange Coast College assume an obligation to conduct themselves in accordance with our institutional mission and values, the laws of the State of California, federal laws and regulations, the California Education Code, and the policies and procedures of the Coast Community College District. The Student Code of Conduct has been established by the Coast Community College District Board of Trustees to provide notice to students of the type of conduct that is expected of each student.

Copies of the Coast Community College District Student Code of Conduct and Disciplinary Procedures which includes complete definitions of the above violations are available in the Office of the Dean of Student Services and on the Coast Community College District website (under BP5500 & Administrative Procedures 5500).

## Student Due Process Procedure

If charges are brought against a student by another student or by a representative of the College, that student should get information about the College's due process procedure from the Dean of Students Office. The due process procedure guarantees fair and reasonable treatment of all concerned parties. OCC is bound by the laws of State of California, the California Education Code and the policies and procedures of the Coast Community College District.

## Student Responsibility & Campus Communication

OCC makes every effort to communicate important information in a timely manner. In an effort to minimize costs, OCC utilizes the Coast Community College District issued student email and targeted announcements posted in students' MyOCC portals as the official means of communication. Students are expected to check their MyOCC and student email account on a regular basis for important information about registration, grades, holds and deadlines. Students are responsible for being aware of state-mandated and College deadlines, and should verify all transactions.

## Study Load

The average student carries a 15 unit full academic load during a semester at Orange Coast College. This load requires most students to spend 40-45 hours each week preparing for and attending classes. The College recommends that entering freshmen carrying a full academic load (15 or more units) plan to work no more than 12-16 hours each week. Students who have a poor high school record — below a "C" average — probably should work no more than 6-8 hours each week.

Students need to take 15 units per semester, or 30 semester units per academic year, in order to graduate within two years. No OCC student may carry more than 19 units during a semester, 9 units during summer, or 6 units during intersession without the permission of the OCC Dean of Counseling Services. This maximum applies to the combination of all units in which the student enrolls per semester/term in the Coast Community Colleges (Orange Coast, Golden West and Coastline).

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## Transcript Requests

Orange Coast College has retained Credentials, Inc. to accept transcript orders online via a secure website. Official transcripts must be ordered online. OCC does not accept transcript orders through the mail.

Current students may access the Credentials, Inc. service through their MyOCC account. Former students may access the online service at [www.credentials-inc.com/tplus?ALUMTRO001250](http://www.credentials-inc.com/tplus?ALUMTRO001250).

Students on campus will have access to computers for online ordering in Watson Hall, the Computing Center, and the Library.

The first two transcripts and/or verification of record are provided free. Each additional transcript or verification of record costs \$5.

For more information, including fees for expedited processing, please visit [www.orangecoastcollege.edu/enrollment/records/Pages/Transcripts.aspx](http://www.orangecoastcollege.edu/enrollment/records/Pages/Transcripts.aspx). Please note that OCC does not offer same day transcript service.

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## Veterans, Active Duty Military, and Credit for Military Training

Orange Coast College is approved for training veterans under all applicable laws. The College helps veterans by cooperating with the Veterans Administration and the California State Department of Veterans Affairs. OCC establishes policies and programs for educating veterans and active-duty military personnel.

Under Title 5, Section 55024, members of the service called to active duty during a semester in which they are enrolled, may petition to withdraw under special circumstances. The withdrawal will be posted as "MW" - Military Withdrawal on the student's transcript and will be non-punitive, which means that it will not count in the student's grade point average nor will it count towards academic or progress probation/disqualification. Students with orders to report during a semester in which they are enrolled should contact Veterans Services on the first floor of Watson Hall for the appropriate petition form.

OCC recognizes and grants academic credit to veterans for eligible military service and training credit completed in the armed forces (refer to the Alternate Methods of Study policies on pages 26 of this catalog for more detailed information).

# Graduation Requirements

## Associate Degree (AA, AS)

Orange Coast College awards the Associate Degree to students who have met all the requirements for graduation. OCC offers the Associate in Arts and the Associate in Science Degrees. Check with your counselor to determine which degree you should complete.

In accordance with law and with rules and regulations of the Board of Governors of the California Community Colleges and the Board of Trustees of the Coast Community College District, the requirements for the degree of Associate in Arts or Associate in Science include the following:

### 1. UNIT REQUIREMENT

60 UNITS, with at least a 2.0 grade point average. At least 12 of the units must be earned at OCC, with a minimum of one course taken for a letter grade. At least 3 units in an advanced course from the program must be completed at OCC. A student must be enrolled at the time of application for graduation. Units earned at an accredited college or university on a credit/no credit basis will be counted toward the degree requirements of the college, to a maximum of 15 units.

### 2. MAJOR REQUIREMENT

Complete the AA or AS major requirements as detailed in the Degree and Certificate section of this catalog.

### 3. MATHEMATICS REQUIREMENT

Demonstrate competence in mathematics by either obtaining a satisfactory grade (grade of "C" or better or "pass") in a mathematics course at or above the level of Intermediate Algebra as demonstrated by prior coursework, or by demonstrating competency that is comparable through the completion of a college level math course that has Intermediate Algebra as a prerequisite: Psychology A160 or Math A100 or higher, with the exception of Math A220.

### 4. GENERAL EDUCATION REQUIREMENT

Students may choose to complete Option 1 (OCC AA/AS GE), Option 2 (CSU GE), or Option 3 (IGETC) to satisfy the general education requirement. See the General Education Patterns section of this catalog for more information.

### 5. GLOBAL AND MULTICULTURAL REQUIREMENT (Required for AA degree only)

Some of the courses listed in this requirement can also be used to meet General Education Requirements. Courses that are repeatable for credit can only be used once in this area.

-Select one or more courses from the following totaling 3 units:

Anthropology A100\*, A100H\*, A102\*, A110\*, A150\*, A190\*, Art A108\*, Communication Studies A155\*, Counseling A107\*, A107H\*, Dance A130\*, A133\*, A135\*, A137\*, A138\*, Early Childhood A126, English A152\*, A173\*, Ethnic Studies A100\*, A150\*, Fashion A125, Food and Nutrition A185, Geography A185\*, History A101\*, A110\*, A141, A142, A145\*, A150\*, A151\*, A152\*, A161\*, A161H\*, A162\*, A162H\*, Philosophy A120\*, Psychology A105\*, Religious Studies A110\*, A120\*, A140\*, A150\*, A160, Sociology A100\*, A100H\*, A115\*, A150\*, A190\*

\*Denotes courses that fulfill CSU GE Breadth and/or IGETC requirements. See the General Education Patterns section of this catalog for more information.

## Associate Degree for Transfer (AA-T, AS-T)

The Student Transfer Achievement Reform Act (Senate Bill 1440, codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer," an established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. **Students completing these degrees are guaranteed admission to the CSU system, but not to a particular campus or major.**

In order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that accepts the AA-T or AS-T degree will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is designated a "high-unit major"). This degree may not be the best option for students intending to transfer to a particular CSU campus, or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer

requirements.

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

1. Minimum of 60 CSU-transferable semester units.
2. Minimum GPA of at least 2.0 in all CSU-transferable coursework. While a minimum of 2.0 is required for admission, some majors require a higher GPA. Consult with a counselor for more information.
3. Completion of a minimum of 18 semester units in the major as detailed in the Degree and Certificate section of this catalog. All courses in the major must be completed with a grade of C or better.
4. Certified completion of the California State University General Education-Breadth pattern (CSU General Education Breadth — Option 2) OR the Intersegmental General Education Transfer Curriculum (IGETC — Option 3).

## Certificate Awards

Orange Coast College offers two types of certificate awards in career programs designed to prepare the graduate to enter a particular field of employment. At least 3 units in an advanced course from the certificate must be completed at OCC.

### 1. Certificate of Achievement

Requires 12 or more units in an approved program. Certificates of Achievement are not automatically awarded. A petition must be filed in Enrollment Services at the beginning of the semester in which the student will be completing his or her final requirements. Forms are also available online. Petitioning periods are listed below.

### 2. Certificate of Specialization

Approved programs of less than 18 units. Certificates of Specialization are not awarded automatically. Petitions are submitted to the division office of each specific program. The procedures for each division will vary (please call for details.) Most division offices prefer that students complete all of the required courses and then provide a copy of the transcript. Some divisions will allow applications for Certificates of Specialization prior to finishing. Certificates of Specialization are **not** printed on official academic transcripts.

A list of certificate programs and requirements can be found in the Degree and Certificate section of this catalog. Check with a counselor to determine the requirements for completion.

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## Continuous Attendance and Catalog Rights

For awarding of a degree or certificate, students may follow the catalog requirements that were in effect for the academic year when their attendance at Orange Coast College began or follow the catalog requirements in effect during subsequent years of attendance, provided that continuous enrollment has been maintained. Continuous enrollment is defined as enrollment in a course at Orange Coast College for at least one semester in a calendar year. The student must receive a grade of A, B, C, D, F, P, NP, W, I, or IP for the course.

The Academic Petition Council may authorize or require substitutions for discontinued courses.

Catalog rights do not apply to the certification of general education for transfer. Students must follow the general education pattern in effect when they petition for certification. Courses used for certification must be on the approved list at the time they are taken.

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## Minimum Grade Requirement

In order to be awarded a degree or certificate, students are required to obtain a grade of "C" or better in all program-required courses.

Grades of "CR" or "P" will be accepted whereas "CR" or "P" meet the equivalency of a "C" or better.

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## Petition for Graduation

Degrees and certificates are not automatically awarded. A petition must be filed at the Enrollment Center on the first floor of Watson Hall at the beginning of the semester in which the student completes the final requirements. Forms are also available online at [www.orangecoastcollege.edu/enrollment/Pages/Graduation.aspx](http://www.orangecoastcollege.edu/enrollment/Pages/Graduation.aspx)

Petitioning periods are as follows:

Summer — July 1 through August 1

Fall — September 1 through November 1

Spring — January 2 through March 1

Note: If a break in enrollment occurs (resulting in the loss of Catalog Rights) students must comply with the competency, general education and major course requirements in effect at the time the student resumes attendance in order to meet Graduation requirements.

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## Requirements for Additional Associate Degrees

1. Students are not permitted to acquire duplicate associate degrees in the same major from another college within the Coast Community College District.
2. General Education requirements earned for one associate degree may be applied toward an additional associate degree.
3. A student who holds a degree from any regionally accredited institution may earn an additional associate degree in a specific major.
4. A candidate for an additional associate degree must complete the requirements for a separate major at Orange Coast College, including an additional 12 or more major-related units of credit at Orange Coast College beyond the requirements for the prior or additional degree.
5. A student must complete all the required courses listed in the current catalog and general education.
6. A student may obtain an associate degree for transfer (AA-T/AS-T) and an associate degree (AA/AS) in a different major without an additional 12 units of coursework.
7. A student may obtain an associate degree for transfer (AA-T/AS-T) and an associate degree (AA/AS) in the same major without an additional 12 units of coursework.

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## Waiver of Associate Degree and/or Certificate Requirements

Students wishing to substitute or waive courses which satisfy the Associate Degree or Certificate of Achievement requirements must see a counselor and petition the Academic Petition Council. Counselors are located on the third floor of Watson Hall.

## Associate in Science General Education 2019-2020: Option 1 (Orange Coast College General Education)

Orange Coast College grants the degree of Associate in Science. Below are general education requirements for the AS degree.

For additional information regarding earning an Associate in Science Degree, please see the Graduation Requirements on page 39-40. Only one Associate in Science degree will be awarded to a student by OCC.

Complete a minimum of 18 units distributed among the following. One course may not be used to meet two separate requirements.

\*\*Suspended courses that are not currently offered.

### AREA A: ENGLISH COMMUNICATION

Students will be able to read, write, listen, and speak competently while demonstrating critical/analytical thinking skills. Six semester units (or eight quarter units) to include one course from A1 and one course from A2.

#### A1 English Composition

English A100, with a grade of "C" or better

#### A2 Communication and Analytical Thinking

Business A139

Communication Studies A100, A110, A220, A240

Computer Science A115\*\*

English A101 or A101H, A102 or A102H, A109

Mathematics A100, A103, A104, A106, A115, A120, A140, A155, A160 or A160H, A170, A180 or A180H, A182H, A185 or A185H, A230, A235, A260, A280 or A280H, A285 or A285H, A290H

Philosophy A150, A155

Philosophy/Mathematics A220

Psychology A160, A270

### AREA B: PHYSICAL AND BIOLOGICAL SCIENCES

Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions. Three semester units (or four quarter units).

Anthropology A185 or A185H

Astronomy A100 or A100H, A101, A102, A103, A200

Biology A100 or A100H, A101, A115, A125, A180, A182, A183, A185, A210, A220 or A220H\*\*, A221, A225, or A225H, A283

Chemistry A100, A110, A130, A180, A185, A220, A225

Ecology A100

Environmental Science & Ecology A100

Engineering A110

Food and Nutrition A195

Geography A130, A180 or A180H

Geology A105 or A105H, A106, A160, A110, A185 or A185H

Horticulture A100

Marine Science A100 or A100H, A180,

A185, A187

Physics A110, A120, A130, A185 or A185H, A280, A285

Psychology A250

Ethnic Studies A100, A150,

Foreign Language - Any course numbered A160 - A285H

Gender Studies A187

History A100, A101, A110, A115, A128, A141, A142, A145, A150, A151, A152, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A176, A179, A180 or A180H, A185 or A185H, A187, A190, A195

Humanities A100, A101 or A101H

Mathematics A220

Philosophy A100, A110, A115, A118, A120, A125, A165, A185, A220

Psychology A105, A150, A255

Religious Studies A100, A110, A115, A120, A130, A140, A150, A180

### AREA D: SOCIAL AND BEHAVIORAL SCIENCES

Students will use the theoretical and methodological principles of the social and behavioral sciences to explain and evaluate institutions, groups, and individuals across social, economic, and global contexts of historical periods. Three semester units (or four quarter units).

American Studies A100

Anthropology A100 or 100H, A102, A105, A110, A150, A187, A190, A280, A285

Communication Studies A155, A165

Counseling A107 or A107H

Early Childhood A126

Economics A100, A110, A170 or A170H, A175 or A175H

Ethnic Studies A100, A150, A190\*\*

Gender Studies A100, A120, A130, A150, A165, A187

Geography A100 or A100H, A150, A160, A185

Global Studies A101, A102

Health Education A122

History A100, A101, A115, A128, A141, A142, A145, A150, A151, A152, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A176, A179, A180 or A180H, A185 or A185H, A187, A190, A195, A197, A198

Human Development A180, A190

Political Science A101, A110, A180, A180H, A185, A188, A190, A200

Psychology A100 or A100H, A105, A130, A165, A185, A190 or A190H, A220, A260, A270

Public Health A200, A202

Sociology A100 or A100H, A105, A110, A150, A185 or A185H, A190\*\*, A200

### AREA C: ARTS AND HUMANITIES

Students will develop skill sets associated with the arts and humanities by analyzing aesthetic qualities, evaluating and developing rational arguments, identifying cultural and historical influences, and engaging in artistic expression. Six semester units (or eight quarter units) to include at least one course from C1 and one course from C2.

#### C1 Arts

Architectural Technology A290 or A290H A296 or A296H

Art A100 or A100H, A101 or A101H, A102, A103, A104\*\*, A107, A108, A109, A110, A114, A115, A120 or A120H, A125, A141, A142, A145, A147, A150, A263, A269

Dance A101, A102, A106, A107, A108, A110, A115, A116, A117, A118, A120, A125, A130, A133, A135, A136, A137, A138, A139, A142, A143, A144, A145, A146, A147, A148, A149, A150, A152, A160, A170, A200, A211, A230

Digital Media Arts and Design A181

Film & Television A100, A103, A110, A150

Humanities A100

Interior Design A180, A190

Music A100, A105, A115, A116, A140, A139, A143, A180

Photography A101, A120 or A120H, A123, A130

Theatre Arts A100, A101, A105, A106, A110, A170

#### C2 Humanities

Anthropology A190

Communication Studies A110, A120, A150, A155, A180

English A101 or A101H, A102 or A102H, A119, A141 or A141H, A143 or A143H, A147 or A147H, A148 or A148H, A150 or A150H, A151 or A151H, A152 or A152H, A156 or A156H, A160 or A160H, A161 or A161H, A170 or A170H, A172, A173 or A173H, A176 or A176H, A179, A181 or A181H, A187 or A187H, A270 or A270H, A275 or A275H

## Associate in Arts General Education 2019-2020: Option 1 (Orange Coast College General Education)

Orange Coast College grants the degree of Associate in Arts. Below are OCC's general education requirements for the AA degree.

For additional information regarding earning an Associate in Arts Degree, please see the Graduation Requirements on pages 39-40. Only one Associate in Arts Degree will be awarded to a student by OCC.

Complete a minimum of 28 units distributed among the following. One course may not be used to meet two separate requirements.

\*\*Suspended courses that are not currently offered.

### AREA A: ENGLISH LANGUAGE COMMUNICATION AND ANALYTICAL THINKING:

Students will be able to read, write, listen, and speak competently while demonstrating critical/analytical thinking skills. Six semester units (or 8-10 quarter units) to include English A100 and one course from Group 2. It is strongly recommended that students begin the composition requirement within their first 12 units of coursework.

#### 1. Composition

English A100 with a grade of "C" or better

#### 2. Communication and Analytical Thinking

Business A139

Communication Studies A100, A110, A120, A180, A220, A240

Digital Media Arts and Design A181

Electronic Technology A047

English A101 or A101H, A102 or A102H, A105, A109

Machine Technology A121

Any Math course A100 or higher

Philosophy A150, A155, A220

Psychology A160, A270

Technology A040

### AREA B: PHYSICAL AND BIOLOGICAL SCIENCES; SCIENTIFIC INQUIRY; LIFE SCIENCE:

Students will apply critical thinking skills concerning the causes and effects of natural phenomena and will become familiar with the rational approach that researchers use to analyze data and formulate logical conclusions. A minimum of four semester units (or six-eight quarter units) including a lab **OR** six semester or nine quarter units of lecture-only courses. Lab courses are underlined.

Anthropology A185 or A185H, A185 & A185L

Astronomy A100 or A100H, A100 & A100L or A100M, A100H & A100L or A100M, A101, A102, A103, A200

Biology A100 or A100H, A101, A114, A115, A125, A180, A182, A182 & A182L, A183,

A183 & A183L, A185, A210, A220, A221, A225 or A225H, A283

Chemistry A100, A110, A130, A180, A185, A220 & A220L, A225 & A225L

Ecology A100

Environmental Science & Ecology A100

Engineering A110

Food and Nutrition A195

Geography A130, A180 or A180H, A180 & A180L, A180H & A180L

Geology A105 or A105H, A105 & A105L or A105H & A105M, A105 & A105M,

A105H & A105L, A106, A110, A160, A185 or A185H, A185 or A185H & A185L or A185M

Horticulture A100

Kinesiology A272, A282

Marine Science A100, A100 & A100L, A100H & A100M, A100 & A100M, A100H & A100L, A180, A180 & A180L, A185, A185 & A185L, A187

Physics A110, A110 & A111, A120, A130, A185 or A185H, A280, A285

Psychology A250

### AREA C: ARTS AND HUMANITIES:

Students will develop skill sets associated with the arts and humanities by analyzing aesthetic qualities, evaluating and developing rational arguments, identifying cultural and historical influences, and engaging in artistic expression. A minimum of three semester units (or four-five quarter units) to include one course from Group One and one course from Group Two.

#### 1. Theory

Anthropology A190

Architectural Technology A105, A115, A171, A205, A290 or A290H, A296 or A296H

Art A100 or A100H, A101 or A101H, A102, A103, A104\*\*, A107, A108, A109, A114, A115

Communication Studies A120, A155, A180

Dance A160, A170, A200, A230

English A101 or A101H, A102 or A102H, A119, any literature course A141 through A285

Ethnic Studies A100, A150

Film & Television A100, A103, A150

Foreign Language - any course numbered A160 through A285H

History A101, A145, A150, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A176, A180 or A180H, A185 or A185H, A187, A195

Humanities A100, A101H

Interior Design A180, A190

Mathematics A220

Music A100, A105, A139, A143, A180

Philosophy A100, A115, A118, A120, A125, A150, A165, A185, A220

Photography A101, A130

Religious Studies A100, A110, A115, A120, A130, A140, A150, A180

Theater Arts A100, A101, A105

#### 2. Active Participation

Art A110, A120 or A120H, A125, A141, A142, A145, A147, A150, A263, A269

Communication Studies A110, A120, A150

Construction Technology A116

Dance A101, A102, A106, A107, A108, A110, A111, A116, A117, A118, A120, A121,

A125, A126, A130, A133, A135, A137, A138, A139, A142, A143, A144, A145,

A146, A147, A148, A149, A150, A152, A153, A155, A158, A159, A160, A171,

A172, A173, A174, A203, A211, A212, A243, A244, A245, A246, A250, A253,

A254, A255, A256

Digital Media Arts and Design A181

English A119, A121, A122, A124, A126, A127, A131

Film & Television A110

Music A115, A116, A120, A129, A132, A133, A140, A141, A144, A145, A150, A230,

A233, A234

Photography A120 or A120H, A123

Theatre Arts A106, A110, A170

### AREA D: SOCIAL AND BEHAVIORAL SCIENCE:

Students will use the theoretical and methodological principles of the social and behavioral sciences to explain and evaluate institutions, groups, and individuals across social, economic, and global contexts of historical periods. A minimum of 12 semester units (or 15-18 quarter units) to include two courses from Group One, and one course each from Group Two and Group Three.

#### 1. U.S. History and Constitution and American Ideals

Political Science A180 or A180H AND one of the following courses: History A170 or A170H or A175 or A175H

#### 2. Social and Economic Institutions

Anthropology A100 or A100H, A102, A105, A110, A150, A190, A280, A285

Communication Studies A155, A165

Counseling A107 or A107H

Early Childhood A126

Economics A100, A110, A170 or A170H, A175 or A175H

Ethnic Studies A100, A150, A190

Gender Studies A100, A120, A130, A150, A165, A187

Geography A100 or A100H, A150, A185  
 Global Studies A101, A102  
 Health Education A122  
 History A101, A140, A141, A142, A145,  
 A150, A151, A152, A161 or A161H, A162  
 or A162H, A176, A180 or A180H, A185  
 or A185H, A187, A195, A198  
 Psychology A105, A150, A165, A185, A255  
 Political Science A101, A110, A185, A188,  
 A190, A200  
 Public Health A202  
 Sociology A100 or A100H, A105, A110,  
 A150, A185 or A185H, A190, A200

**3. Behavioral Science**

Anthropology A187  
 Health Education A220  
 Human Development A180, A190  
 Psychology A100 or A100H, A130, A190 or  
 A190H, A220, A260, A270  
 Public Health A200

**AREA E: LIFE SKILLS, LIFE-LONG  
 LEARNING AND SELF  
 DEVELOPMENT:**

Students will develop and demonstrate the life skills of interpersonal relationships, self-understanding and management, and decision making for professional success and personal well-being. A minimum of three semester units to include one course from Group One and one course from Group Two.

**1. Theory/ Non-activity**

Accounting A100  
 Allied Health A130  
 Anthropology A105  
 Business A100, A120, A125  
 Communication Studies A100, A155, A170  
 Computer & High Technology A100  
 Computer Information Systems A100, A111  
 Counseling A100, A101, A104, A105, A107,  
 A107H, A109, A110, A120, A135, A170  
 Early Childhood A126  
 Economics A110  
 Emergency Medical Technology A100  
 Family & Consumer Science A180  
 Emergency Medical Technology A100  
 Family & Consumer Science A180  
 Fashion A170  
 Food & Nutrition A136, A140, A170, A185  
 Health Education A100, A111, A112, A122,  
 A136, A270, A271  
 Human Development A180, A190  
 Interior Design A100  
 Kinesiology A202, A270, A282  
 Leadership Studies A180, A200  
 Marketing A100, A110  
 Library A100  
 Philosophy A120  
 Psychology A105, A110, A130, A140, A165,  
 A200, A215  
 Public Health A100, A202

Religious Studies A120  
 Sociology A105, A110

**2. Activity**

A minimum of one unit of Kinesiology, Dance, or Marine Activities (must be an activity course).

## Associate Degree General Education 2019-2020: Option 2 (California State University General Education)

To earn a Bachelor's degree from the California State University, each student must complete 48-51 semester units in general education. Nine to twelve of these units must be taken as upper division course work after transfer. Orange Coast College will certify the extent to which the lower-division General Education Breadth Requirements have been met for students meeting the following A-E pattern. Students seeking certification must complete at least 12 of these units at OCC.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

Any one course may be used to satisfy only one required sub-area (i.e. if Communication Studies A110 is used to satisfy sub-area A1, it may not be used to satisfy sub-area C2), with the exception of Area B where lab courses taken to meet the B3 requirement will also count in B1 or B2. A cross-listed course (the same course listed under more than one department such as History A150 and Ethnic Studies A150) may be used to meet only one requirement.

**IMPORTANT NOTE:** Courses on this list are approved for a specific academic term. Students wishing to use a course to meet a CSU General Education Breadth requirement must be sure that the course is approved for the academic term in which it is taken.

### THIS LIST IS VALID ONLY FOR COURSES TAKEN FALL 2019 THROUGH SUMMER 2020.

For courses taken prior to Fall 2019, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

#### AREA A: COMMUNICATION IN THE ENGLISH LANGUAGE AND CRITICAL THINKING

Nine semester units (or 12-15 quarter units) including one course from each sub-area with a grade of "C" or better.

##### A1 Oral Communication

Communication Studies A100, A110

##### A2 Written Communication

English A100

##### A3 Critical Thinking

Communication Studies A220, A240

English A101 or A101H, A102 or A102H, A109

Mathematics A220

Philosophy A150, A155, A220

#### AREA B: PHYSICAL UNIVERSE AND ITS LIFE FORMS

A minimum of nine semester units (or 12-15 quarter units) including at least one course from each sub-area. Must include at least one laboratory course. Lab courses are underlined.

##### B1 Physical Science

Astronomy A100 or A100H, A100 & A100L, A100H & A100L or A100M, A101, A102, A103, A200

Chemistry A100, A110, A130, A180, A185, A220, A220L, A225, A225L

Geography A130, A180 or A180H, A180 & A180L, A180H & A180L

Geology A105 or A105H, A105 & A105L, A105H & A105M, A105H & A105L, A105 & A105M, A106, A110, A160, A185, A185 & A185L

Marine Science A185, A185 & A185L

Physics A110, A111, A120, A130, A185, A280, A285

##### B2 Life Science

Anthropology A185 or A185H, A185 & A185L

Biology A100, A100H, A101, A115, A125, A180, A182, A182H, A182 & A182L, A183, A183 & A183L, A185, A210, A220, A221, A225, A283

Environmental Science & Ecology A100, A100H, A101

Horticulture A100

Marine Science A100 or A100H, A100 & A100L, A100H & A100M, A100 & A100M, A100H & A100L, A180, A180 & A180L, A187

Psychology A250

##### B3 Laboratory Activity

One of the courses taken in Area B1 or B2 must include a lab. Lab courses are underlined.

##### B4 Mathematical Concepts

One course from the following with a grade of "C" or better:

Mathematics A100, A103, A104, A115, A120, A140, A155, A160, A170, A180 or A180H, A182H, A185 or A185H, A230, A235, A280 or A280H, A285 or A285H, A290H

Psychology A160

#### AREA C: LITERATURE, PHILOSOPHY, & FOREIGN LANGUAGE

A minimum of nine semester units (or 12-15 quarter units) with at least one course in C1 and one course in C2.

#### C1 Arts

Architectural Technology A290 or A290H, A296 or A296H

Art A100 or A100H, A101 or A101H, A102, A103, A107, A108, A109, A109H, A114, A115, A120, A125, A141, A142, A145, A147, A150, A263, A269

Dance A200, A230

Digital Media Arts and Design A181

Film/Video A100, A150

Humanities A100\*

Interior Design A180, A190

Music A100, A105, A115, A116, A139, A140, A143, A180

Photography A120, A123, A130

Theatre Arts A100, A101, A105, A106, A110

#### C2 Humanities

Anthropology A190

Chinese A180, A185

Communication Studies A110, A120, A150, A155, A180

English A101, A102, A119, A141 or A141H, A143 or A143H, A147 or A147H, A148 or A148H, A150 or A150H, A151 or A151H, A152 or A152H, A156 or A156H, A160 or A160H, A161 or A161H, A168, A170 or A170H, A172, A173 or A173H, A176 or A176H, A179, A181 or A181H, A187 or A187H, A270 or A270H, A275 or A275H

Ethnic Studies A100

French A180 or A180H, A185 or A185H, A280, A285

German A180, A185, A280, A285

History A101, A151, A152, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A176, A180 or A180H, A185 or A185H

Humanities A100\* or A101H

Italian A180, A185, A280, A285

Japanese A180, A185, A185H, A280, A285

Mathematics A220

Philosophy A100, A115, A118, A120, A125, A165, A185, A220

Photography A101

Portuguese A180, A185

Religious Studies A100, A110, A115, A120, A130, A140, A150, A180

Spanish A160, A165, A180 or A180H, A185 or A185H, A280 or A280H, A285

Vietnamese A180, A185, A280, A285

\* Course will satisfy either C1 or C2



**AREA D: SOCIAL, POLITICAL, AND ECONOMIC INSTITUTIONS AND BEHAVIOR; HISTORICAL BACKGROUND**

A minimum of nine semester units (or 12-15 quarter units) with courses from at least two sub-areas

Anthropology A100 or A100H, A102, A105, A187, A190, A280, A285  
 Communication Studies A155, A165  
 Counseling A107 or A107H  
 Economics A100, A110, A170 or A170H, A175 or A175H  
 Ethnic Studies A100, A150, A190  
 Gender Studies A100, A130, A165, A187  
 Geography A100 or A100H, A150, A185  
 Global Studies A101, A102  
 Health Education A122  
 History A101, A145, A150, A151, A152, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A176, A180 or A180H, A185 or A185H, A187, A195  
 Human Development A180  
 Political Science A101, A110, A180 or A180H, A185, A188, A190, A200  
 Psychology A100 or A100H, A105, A130, A165, A185, A190 or A190H, A220, A260, A270  
 Sociology A100 or A100H, A110, A150, A185 or A185H, A200

**AREA E: LIFE LONG LEARNING AND SELF-DEVELOPMENT**

Three semester units (or four-five quarter units); no more than one unit of activity courses.

**Non-Activity**

Anthropology A105  
 Communication Studies A100, A170  
 Counseling A104, A105, A107 or A107H, A109, A110, A120, A135  
 Dance A133  
 Economics A110  
 Emergency Medical Services A100  
 Family & Consumer Science A180  
 Food & Nutrition A136, A140, A170  
 Health Education A100, A122, A136, A270, Human Development A180  
 Kinesiology A202, A270, A271  
 Psychology A105, A110, A130, A165, A200  
 Public Health A100,

**Activity**

Athletics A109, A119, A222, A235, A236, A238, A240, A241, A242, A243, A244, A245, A246, A250, A251, A252, A253, A254, A255, A257, A258, A259, A260, A261, A263  
 Dance A101, A102, A106, A107, A108, A110, A111, A113, A115, A116, A117, A118, A120, A121, A125, A126, A129, A130, A133, A135, A137, A138, A139,

A142, A143, A144, A145, A146, A147, A148, A149, A150, A152, A153, A155, A156, A158, A159, A171, A172, A173, A174, A201, A202, A203, A208, A211, A212, A223, A243, A244, A245, A246, A248, A250, A253, A254, A255, A256  
 Kinesiology A105, A106, A107, A108, A110, A111, A112, A115, A126, A127, A128, A129, A130, A131, A132, A137, A138, A139, A141, A145, A146, A147, A150, A152, A153, A154, A155, A156, A157, A170, A171, A172, A173, A174, A175, A176, A211, A212, A215, A228, A231, A232, A232, A241, A246, A247, A251, A252, A253, A254

Marine Activities A136, A137, A138, A139

**AMERICAN INSTITUTIONS REQUIREMENT** (*Not part of CSU General Education Breadth. May be completed prior to transfer.*)

In addition to the General Education Requirements listed above, all students must complete coursework in American History and Constitution for graduation from CSU. Completion of History A170 or A170H, A175 or A175H, in Area D and Political Science A180 or A180H in Area D will fulfill this requirement.

## Associate Degree General Education 2019-2020: Option 3 (IGETC)

Completion of the Intersegmental General Education Transfer Curriculum (IGETC) will satisfy the lower division general education requirements of either the California State University or the University of California system. The IGETC should be completed in its entirety before transferring or the student may be subject to the general education requirements of the campus to which they have been admitted.

Students seeking GE transfer certification are eligible for a Certificate of Achievement award.

All courses must be completed with grades of "C" or better. Grades of "credit" can be used if "credit" is equal to a "C" or better. There are limits to the number of units that can be taken P/NP.

Courses used to meet IGETC requirements must be at least three semester units or four quarter units.

**IMPORTANT NOTE:** Courses on this list are approved for a specific academic term. Students wishing to use a course to meet an IGETC requirement must be sure that the course is approved for the academic term in which it is taken. **THIS LIST IS VALID ONLY FOR COURSES TAKEN FALL 2019 THROUGH SUMMER 2020.** For courses taken prior to Fall 2019, students should check the master list which shows the dates that courses were added or deleted since the original list was published in 1991. This list is available in the Counseling Center or Transfer Center in Watson Hall.

### AREA 1: ENGLISH COMMUNICATION

CSU: Three courses (one from each group). Nine semester units (or 12-15 quarter units).

UC: Two courses (one from Group A and one from Group B). Six semester units (or eight to 10 quarter units).

#### Group 1A: English Composition

English A100

#### Group 1B: Critical Thinking - English Composition

English A101 or A101H, A102 or A102H, A109

Philosophy A150

#### Group 1C: Oral Communication (CSU ONLY)

Communication Studies A100, A110

### AREA 2: MATHEMATICAL CONCEPTS AND QUANTITATIVE REASONING

One course. At least three semester units (or four to five quarter units).

Math A100, A115, A140, A155, A160, A170, A180 or A180H, A182H, A185 or A185H, A230, A235, A280 or A280H, A285 or A285H, A290H

Psychology A160

### AREA 3: ARTS AND HUMANITIES

Three courses, with at least one course from Group A and one from Group B. Nine semester units (or 12-15 quarter units).

#### Group 3A: Arts

Architectural Technology A290 or A290H, A296 or A296H

Art A100 or A100H, A101 or A101H, A102, A103, A107, A108, A109, A114, A115

Dance A200, A230

Film/Video A100

Music A100, A105, A115, A139, A143, A180

Photography A123, A130

Theatre Arts A100, A101, A105

#### Group 3B: Humanities

Communication Studies A155, A180

Chinese A185

English A141 or A141H, A143 or A143H, A147 or A147H, A148 or A148H, A150 or A150H, A151 or A151H, A152 or A152H, A156 or A156H, A160 or A160H, A161 or A161H, A168, A170 or A170H, A173 or A173H, A176 or A176H, A179, A181 or A181H, A187 or A187H, A270 or A270H, A275 or A275H

Ethnic Studies A150

French A185 or A185H, A280, A285

Gender Studies A187

German A185, A280, A285

History A101, A145, A150, A151, A152, A161 or A161H, A162 or A162H, A170 or A170H, A175 or A175H, A180 or A180H, A185 or A185H, A187, A195

Humanities A100, A101H

Italian A185, A280, A285

Japanese A185 or A185H, A280, A285

Philosophy A100, A115, A118, A120, A125, A165, A185

Photography A101

Portuguese A185

Religious Studies A100, A110, A115, A120, A130, A140, A150, A180

Spanish A185 or A185H, A280 or A280H, A285,

Vietnamese A185, A280, A285

### AREA 4: SOCIAL AND BEHAVIORAL SCIENCES

Three courses from at least two disciplines. 9 semester units (or 12-15 quarter units).

Anthropology A100 or A100H, A102, A187, A190, A280, A285

Communication Studies A155

Economics A100, A170 or A170H, A175 or A175H

Ethnic Studies A100, A190

Gender Studies A100, A130, A187

Geography A100 or A100H, A150, A185

Global Studies A101, A102

History A101, A151, A152, A170 or A170H, A175 or A175H, A180 or A180H, A187

Human Development A180

Political Science A101, A110, A180 or A180H, A185

Psychology A100 or A100H, A105, A130, A165, A185, A190 or A190H, A220, A260

Sociology A100 or A100H, A110, A150, A185 or A185H

### AREA 5: PHYSICAL AND BIOLOGICAL SCIENCES

Two courses, with one from Group A and one from Group B. One of the courses must include a lab. Lab courses are underlined. Seven to nine semester units (or nine to 12 quarter units).

#### Group 5A: Physical Science

Astronomy A100 or A100H, A100 & A100L or A100H & A100M, A101, A102, A103

Chemistry A100, A110, A130, A180, A185, A200, A220, A220L, A225, A225L

Geography A180 or A180H, A180 & A180L or A180H & A180L

Geology A105 or A105H, A105 & A105L or A105H & A105M or A105 & A105M or A105H & A105L, A110, A160, A185, A185 & A185L

Marine Science A185, A185 & A185L

Physics A110, A110 & A111, A120, A130, A185, A280, A285

#### Group 5B: Biological Science

Anthropology A185 or A185H, A185 & A185L

Biology A100, A100H, A101, A115, A125, A180, A182, A182 & A182L, A183, A183 & A183L, A185, A210, A220, A221, A225, A283

Environmental Science & Ecology A100, A101

Marine Science A100 or A100H, A100 & A100L or A100H & A100M or A100 & A100M or A100H & A100L, A180, A180 & A180L

Psychology A250

#### Group 5C: Laboratory Activity

One of the courses taken in Group A or B must include a lab. Lab courses are underlined.

### LANGUAGE OTHER THAN ENGLISH (UC ONLY)

- Complete two years of a single high school foreign language with grades of "C" or better (high school transcripts must be on file at OCC), **OR**
- Complete Chinese, French, German, Hebrew, Italian, Japanese, Portuguese, Vietnamese A180 or Spanish A160 and A180. Advanced courses will validate this requirement, **OR**
- Earn a satisfactory score on one of the

following (results must be on file at OCC):

1. SAT Subject Test in a language other than English (Before 5/95 - score: 500. After 5/95 - Chinese: 520, French: 540, German: 510, Hebrew: 470, Italian: 520, Japanese: 510, Korean: 500, Latin: 530, Spanish: 520).
2. College Board Advanced Placement Examination in a language other than English (score: 3 or better)
3. International Baccalaureate Higher Level Examination in language other than English (score: 5 or better)
4. An achievement test administered by a college or university (score: proficiency equivalent to at least two years of high school language).
5. A passing grade on the international O Level or A Level exam in a language other than English.

**OR**

- D. Complete, with grades of "C" or better, two years of formal schooling at the sixth grade level or higher in an institution where the language of instruction is not English (documentation must be on file at OCC).
- E. Complete a Defense Language Institute course in a language other than English with a grade of "C" or better (documentation must be on file with Admissions and Records).

**NOTE:** Transfer credit for some courses may be limited by the University of California. Please see the UC Transferable Course List available in the Counseling Center or Transfer Center, or the Transfer Center home page on the Internet for these limitations.

**AMERICAN INSTITUTIONS REQUIREMENT**

*(Not part of IGETC. May be completed prior to transfer.)*

CSU has an American Institutions requirement that is separate from IGETC. Courses used to meet the CSU requirement can be double counted in Area 3 or 4. To meet the CSU requirement, students should take Political Science A180 or A180H **AND** one of the following courses: History A170, A170H, A175, A175H.

UC requires the completion of a college course or courses with a grade of "C" or better **OR** a one-year course in high school in U.S. history or a half-year course in U.S. history and a half-year course in American government with grades of "C" or better (UCLA requires grades of "B"). UCSB requires the completion of a college course. If you are using college coursework to satisfy this requirement, check the appropriate UC catalog to determine which course(s) to take.

## Transfer Information

This section of the Catalog is designed to help students plan an academic program for transfer to a four-year college or university. It includes information about the transfer process as well as general education. Please refer to [www.assist.org](http://www.assist.org) for lower division major requirements to the CSU and UC systems.

Since transfer requirements change frequently, students should meet with a counselor regularly to plan an academic program which will assure a smooth transition to the transfer institution of their choice.

Four-year colleges and universities often make changes in their requirements. The requirements listed in this section were updated at the time of publication; however, changes may have occurred after publication. Current Transfer Curriculum Guides and official articulation agreements are available in the Transfer Center, the Counseling Center, and on the Internet.

### Transfer to a Four-Year College or University

Orange Coast College provides the first two years of a four-year college or university program. Students enrolled in a transfer program will complete most of their general education and lower division major requirements before transferring. Students who are planning to transfer to a four-year college or university should meet with a counselor in the Counseling Center in Watson Hall to develop a Student Educational Plan, which will identify the courses needed to transfer.

### Transfer Center

The Transfer Center, in Watson Hall, provides information and assistance to students who are preparing to transfer to four-year colleges and universities. Representatives from four-year schools are available in the Transfer Center to meet with students individually and provide information about their programs, requirements and procedures. The Center maintains a complete resource library containing college catalogs and other information on transfer programs. The Center also provides applications for CSU, UC and several independent colleges and universities, as well as offering assistance in the four-year campus application process. The Transfer Center sponsors a Transfer Day in the fall semester with representatives on campus from over 80 colleges and universities from both California and out-of-state. College fairs are held each semester with representatives from Southern California colleges and universities providing information to potential students. Transfer-planning workshops are offered throughout the academic year. Organized tours to various four-year campuses are also available through the Transfer Center each semester.

### Transfer Center Web Page

The Transfer Center Web page on the Internet is a rich source of information for potential transfer students. Information at this site includes: a listing of scheduled events and college representative visits, transfer course requirements, articulation agreements, transfer planning guides, ratings and evaluations of colleges, student financial aid resources, and college search engines. There is also a complete application center which allows students to apply to colleges throughout the country electronically. The site can be reached at [www.orangecoastcollege.edu/transfer](http://www.orangecoastcollege.edu/transfer)

### ASSIST

ASSIST (Articulation System Stimulating Interinstitutional Student Transfer) is a Web-based student transfer information system which contains data about how courses taken at California community colleges can be applied when transferring to a University of California or California State University campus. ASSIST has been designated as the official repository of articulation for California's public colleges and universities, and therefore provides the most accurate and up-to-date information available.

It includes information such as:

**UC Transferable Courses** - courses from California community colleges that transfer to all University of California campuses.

**CSU Transferable Courses** - courses from California community colleges that transfer to any CSU campus for credit.

**CSU General Education Breadth Courses** - courses from California community colleges that can be used to satisfy CSU General Education Breadth requirements.

**IGETC (intersegmental General Education Transfer Curriculum) Courses** - courses from California community colleges that apply to the IGETC requirements.

**Articulation Agreements** - These agreements between a particular California community college and a four-year institution identify comparable lower division courses between the two institutions. These agreements are designed to help students prepare for transfer into a particular major at a specific institution.

ASSIST can be accessed at [www.assist.org](http://www.assist.org)

### Course Identification Numbering System (C-ID)

The Course Identification Numbering System (C-ID) is a statewide numbering system independent from the course numbers assigned by local California community colleges. A C-ID number next to a course signals that participating California colleges and universities have determined that courses offered by other California community colleges are comparable in content and scope to courses offered on their own campuses, regardless of their unique titles or local course number. Thus, if a schedule of classes or catalog lists a course bearing a C-ID number, for example COMM 110, students at that college can be assured that it will be accepted in lieu of a course bearing the C-ID COMM 110 designation at another community college. In other words, the C-ID designation can be used to identify comparable courses at different community colleges. However, students should always go to [www.assist.org](http://www.assist.org) to confirm how each college's course will be accepted at a particular four-year college or university for transfer credit.

The C-ID numbering system is useful for students attending more than one community college and is applied to many of the transferable courses students need as preparation for transfer. Because these course requirements may change, and because courses may

be modified and qualified for or deleted from the C-ID database, students should always check with a counselor to determine how C-ID designated courses fit into their educational plans for transfer.

Students may consult the [www.assist.org](http://www.assist.org) for specific information on C-ID course designations. Counselors always can help students interpret or explain this information.

## Transferability of Courses

Many courses offered at Orange Coast College will transfer to meet general education, major or elective requirements at four-year colleges and universities. **All courses numbered A100 or above will transfer to CALIFORNIA STATE UNIVERSITY.**

Courses which are transferable to the **UNIVERSITY OF CALIFORNIA** will be designated in the Courses section of the catalog with a UC at the end of the course description. Some of the courses which are transferable to the University of California have credit limitations. Check the UC Transferable Course List to determine these limitations. This list is available in the Counseling Center and the Transfer Center.

Independent and out-of-state colleges and universities usually accept most courses which are transferable to the University of California, and many of the courses acceptable at CSU. Articulation agreements are available for many colleges in the Transfer Center website.

## Transfer Opportunity Program (TOP)

Historically, underrepresented students (African Americans, Latinos and Native Americans) have made up a small percentage of transfer students. The Transfer Opportunity Program at Orange Coast College seeks to increase the pool of eligible underrepresented students and close the gap between minority and majority transfer students. TOP is designed to assist historically underrepresented students transfer to four-year colleges and universities. The primary goal of the program is to retain these students and increase the probability of their transfer. Through the program, these students are provided with support services including a college success course, information workshops, personal advisement and counseling, tutoring and group study sessions. For more information on joining TOP, contact 714-432-5792.

## Transfer Student Course Requirements

A student can transfer from Orange Coast College to a four-year college or university as a junior without loss of time or credits by completing the following:

1. **Lower Division Major Requirements:** These courses should be completed before transferring. They provide background and preparation in order to concentrate on the major beginning in the junior year. Course requirements for specific majors and schools are listed in the Transfer Curriculum Guides. These Guides are available in the Counseling Center and Transfer Center in Watson Hall.
2. **General Education Requirements:** These are the courses required of everyone to obtain a degree regardless of major. They are designed to provide students with the knowledge, skills and understanding which will enable them to function as intelligent and creative members of the community. Courses in writing, critical thinking, mathematics, sciences, arts and humanities, and the social sciences are included in general education.
3. **Electives:** These are transferable courses of choice taken in addition to courses for the major and general education requirements.

### Lower Division Major Requirements

Most majors at four-year colleges and universities require the completion of one or more lower division courses as preparation for upper division coursework. Orange Coast College offers courses to meet the lower division requirements for most majors at most four-year schools.

Transfer Curriculum Guides are available that list the requirements for specific majors at UC Berkeley, UC Irvine, UC Los Angeles, UC San Diego, UC Santa Barbara, CSU Fullerton, CSU Long Beach, Cal Poly Pomona, San Diego State, San Francisco State, Cal Poly San Luis Obispo, Chapman and USC. Additional schools are included on most of the Guides. The Guides are available in the Counseling Center, the Transfer Center and on the Transfer Center website at [www.orangecoastcollege.edu/transfer](http://www.orangecoastcollege.edu/transfer)

Students should check the catalog of the college they wish to transfer to and meet with their counselor for additional information about major programs and requirements.

The courses listed below are required for the major at most four-year schools; however, many colleges require additional coursework to complete the lower division major requirements. The course information given below has been edited for catalog publication purposes and may not accurately reflect recent changes or total course requirements for particular programs or schools.

### Advertising

Communication Studies A180

Additional coursework may be required in Communications, Economics, Marketing and/or Political Science.

### Anthropology

Anthropology A100 (or A100H), A185/A185L, A280

Additional coursework may be required in Biology, Chemistry, Computer Science and/or Physics.

### Architecture/Landscape Architecture

Architecture A105, A110, A115, A180, A185, A205, A215

Additional coursework may be required in Architecture, Art, Drafting, Engineering, English, Mathematics and/or Physics.

Landscape Architecture requires coursework in Horticulture.

### Art

Art A100 (or A100H), A101 (or A101H), A110, A111, A120 (or A120H)

Additional coursework may be required in Art, Film and/or Photography

### Biology

Biology A180 (or A180H), A185\*, Chemistry A180, A185, A220/A221, A225/A226, Physics A130, A135, Math A180 (or A180H), A185 (or A185H)

Additional coursework may be required in Biology and/or Mathematics. Some schools will accept Physics A120 & A125 instead of A130 & A135.

\* Biology A182/A182L and A183/A183L can be substituted at some schools. Some schools require A182/A182L & A183/A183L instead of A185. Check current Transfer Curriculum Guide for latest information.

### Business (CSU)

Accounting A101, A102, Business A110, Economics A170, A175, Computer Information Systems A111, Math A115 or A155, Math A140, Math A160

Additional coursework may be required in Accounting, Business, Computer Science, Mathematics and/or Philosophy. CSU Fullerton requires Accounting A110 in addition to A101 & A102. CSULB requires Math A140 and A155.

### Business (UC and Independent)

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed Private colleges link on the transfer web page.

### **Chemistry**

Chemistry A180, A185, A220/A221, A225/A226, Mathematics A180(or A180H), A185(or A185H), A280(or A280H), Physics A185, A280, A285

Additional coursework may be required in Biology, Chemistry and/or Mathematics.

### **Child Development**

Human Development A180

Additional coursework may be required in Biology, Early Childhood, Food and Nutrition, Human Development, Psychology and/or Sociology.

### **Computer Science**

See Transfer Curriculum Guide for requirements.

### **Criminal Justice and Law**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Dance**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Economics**

Economics A170, A175, Mathematics A180 (or A180H), A185 (or A185H)

Additional coursework may be required in Accounting, Business and/or Mathematics.

### **Engineering**

See Transfer Curriculum Guide for requirements.

### **English**

English A100, A101 (or A101H), A270, A275

Additional coursework may be required in Communications, English, Foreign Language, History, Philosophy and/or Speech.

### **Environmental Studies**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Family and Consumer Science**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Film**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Food Science and Nutrition**

See Transfer Curriculum Guide for

requirements.

### **Foreign Languages**

Foreign Language through A285H.

### **Forestry/Natural Resources Management**

Biology A180, A185 or A182/A182L & A183/A183L, Chemistry A180, Mathematics A180 (or A180H)

Additional coursework may be required in Anthropology, Biology, Computer Science, Chemistry, Ecology, Economics, Geology, History, Mathematics, Physics and/or Political Science.

### **Geography**

Geography A180 (or A180H), A185

Additional coursework may be required in Biology, Chemistry, Economics, Geography, Marine Science, Mathematics and/or Political Science.

### **Geology**

Chemistry A180, A185, Geology A110, A185/A185L, Mathematics A180 (or A180H), A185 (or A185H), Physics A185, A280, A285

Additional coursework may be required in Biology, Chemistry, Geology and/or Mathematics.

### **Health Sciences**

See Transfer Curriculum Guide for requirements.

### **History**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Horticulture**

Biology A183/A183L, Chemistry A180, A185, Horticulture A181, A182, A183

Additional coursework may be required in Biology, Business, Chemistry, Computer Science and/or Mathematics.

### **Hotel and Food Service Management**

Accounting A101, A102, Computer Information Systems A111, Culinary Arts/Food Service Management/Hospitality, Travel & Tourism A100, Economics A170, A175

Additional coursework may be required in Biology, Business, Chemistry, Culinary Arts, Food and Nutrition, Food Service Management, Mathematics, Philosophy, Psychology, Sociology and/or Speech.

### **Interior Design**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed.

Private colleges link on the transfer web page.

### **Kinesiology**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Journalism**

Communication Studies A100, Journalism A110

Additional coursework may be required in Computer Information Systems, Economics, Film and/or Photography.

### **Liberal Studies**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Marine Science/Oceanography**

Biology A180, A185 or A182/A182L & A183/A183L, Chemistry A180, A185, Mathematics A180(or A180H), A185(or A185H), Physics A130, A135

Additional coursework may be required in Biology, Chemistry, Computer Science, Geology, Marine Science and/or Mathematics.

### **Mathematics**

Mathematics A180 (or A180H), A185 (or A185H), A280 (or A280H), A285 (or A285H)

Additional coursework may be required in Chemistry, Computer Science, Mathematics and/or Physics.

### **Music**

Music A180, A185, A280, A285

Majors must demonstrate keyboard proficiency. Additional coursework may be required in Foreign Language and/or Music.

### **Philosophy**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

### **Physics/Astronomy**

Mathematics A180 (or A180H), A185 (or A185H), A280 (or A280H), Physics A185, A280, A285

Additional coursework may be required in Astronomy, Chemistry, Computer Science and/or Mathematics.

### **Political Science**

Political Science A180 (or A180H), A185

Additional coursework may be required in Computer Science, Economics, History, Mathematics and/or Political Science.

**Public Relations**

Communication Studies A100, Journalism A110

Additional coursework may be required in Computer Information Systems, Economics, Film, Marketing, Photography and/or Political Science.

**Religious Studies**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

**Social Ecology**

Mathematics A160 (or A160H), Psychology A100 (or A100H), A280, Sociology A100 (or A100H)

**Social Science**

See Transfer Curriculum Guide for requirements.

**Social Work**

Mathematics A160 (or A160H), Psychology A100 (or A100H), Sociology A100 (or A100H)

Additional coursework may be required in Anthropology, Economics, History, Philosophy, Political Science, Psychology, Sociology and/or Speech.

**Speech and Communicative Disorders**

For UC, see [www.assist.org](http://www.assist.org) to obtain updated course list. Independent colleges are listed. Private colleges link on the transfer web page.

**Teaching**

Students wishing to teach in the public schools in California must obtain the appropriate credential. Both the Multiple Subjects Credential and the Single Subject Credential require the completion of specific coursework. The completion of a teaching credential program usually requires five years of college. Most of the lower division coursework required for these programs is offered at OCC.

**Technology**

See Transfer Curriculum Guide for requirements.

**Theatre Arts**

Theatre Arts A106, A107

Additional coursework is required in Theatre Arts.

***Certification of General Education for Transfer to UC or CSU***

Upon a student's request, Orange Coast College will verify the completion of lower division general education requirements for transfer to the University of California (Intersegmental General Education Transfer Curriculum) or the California State University (either the CSU General Education Breadth Requirements or the Intersegmental General Education Transfer Curriculum). Students who transfer without certification will have to meet the general education requirements of the specific UC or CSU campus to which they are transferring. Meeting these requirements usually necessitates taking additional courses.

Both CSU General Education Breadth and the IGETC should be completed in their entirety prior to transfer. Students can request partial certification of CSU General Education Breadth sub-areas if all requirements within the sub-area are met. Students using the IGETC who are missing no more than two courses prior to matriculation at a four-year institution may request partial certification during any term except in the final term prior to graduation from the four-year institution.

Students who have taken courses at other colleges can have these courses "passed along" in the certification process. OCC will certify courses taken at other California community colleges and CSU in the areas designated by the offering college. Courses taken at California four-year colleges or out-of-state two- or four-year colleges will be certified if they are equivalent to courses on the IGETC or CSU General Education Breadth list taught at any of the California community colleges. Courses from foreign institutions cannot be used in the certification process.

Students requesting CSU General Education Breadth certification must complete at least 12 of the 39 required units at OCC.

OCC will certify courses only once. Certification is not automatic and must be requested after the completion of the last term, prior to transfer. This request should be made in the Enrollment Center in Watson Hall when final transcripts are sent to UC or CSU. Courses taken at other colleges after a student has left OCC will not be certified.

A course used in the certification process must be on either the IGETC or the CSU General Education Breadth list during the term in which it is taken. If a course is taken before it is approved for inclusion on the list, it cannot be certified. Similarly, a course which is taken after it has been removed from the list cannot be certified.

OCC will also certify the completion of the CSU American Institutions Requirement for students following either IGETC or CSU General Education Breadth.

**Admission Procedures for Four-Year Colleges and Universities**

Students should take the following steps in applying for admission:

1. Submit an application during the filing period. Do not send it early, as it will not be accepted before the initial filing date; sending it early will only delay processing.
2. If entrance exams (SAT, ACT) are required, register for them as soon as possible and at least six months in advance of transfer. Registration forms are available from the Assessment Center located in Watson Hall. Most four-year schools do not require entrance exams for transfer students.
3. Have the OCC Records Office send a copy of your Orange Coast College transcript to the transfer college as requested. Four-year colleges and universities will also require transcripts of coursework completed at all other educational institutions. Students must contact each school attended and request that official transcript be sent directly.

**CALIFORNIA STATE UNIVERSITY**

California State University has 23 campuses located throughout the state. While each campus within the system has its own unique geographic and curricular character, all campuses offer undergraduate and graduate instruction for professional and occupational goals, as well as broad liberal education. The CSU offers more than 1,500 bachelor's and master's degrees in some 200 subject areas. Campuses are located at Bakersfield, Channel Islands, Chico, Dominguez Hills, Fresno, Fullerton, Hayward, Humboldt, Long Beach, Los Angeles, Monterey Bay, Northridge, Pomona (Cal Poly), Sacramento, San Bernardino, San Diego, San Francisco, San Jose, San Luis Obispo (Cal Poly), San Marcos, Sonoma, Stanislaus, and Vallejo (California Maritime Academy).

**California State University – Admission Requirements for Transfers**

Students who transfer with 59 or fewer transferable semester units are considered lower-division transfer students.

Students who transfer with 60 or more transferable semester units are considered upper-division transfer students.

### **Lower Division Transfer Admission Requirements**

You are eligible if you:

1. Have a college GPA of 2.0 or better in all transferable units attempted.
2. Are in good standing at the last college or university attended.
3. Meet the admission requirements for a first-time freshman or have successfully completed necessary courses to make up the deficiencies you had in high school if you did not complete the 15-unit pattern of college preparatory subjects.
4. Meet the eligibility index (GPA and SAT/ACT scores) required for a freshman.
5. Some campuses may require the completion of English composition and general education math.
6. Many campuses do not admit lower-division transfers.

### **Upper Division Transfer Admission Requirements**

You are eligible for admission if you:

1. Have a college GPA of 2.0 or better (2.4 for non-California residents) in all transferable coursework.
2. Are in good standing at the last college attended.
3. Have completed or will complete prior to transfer at least 30 semester units of courses equivalent to general education requirements with a grade of C or better in each course. The 30 units must include the general education requirements in communication in the English language (English composition, oral communication and critical thinking) and one course of at least three units in college-level mathematics.

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## **General Education Requirements for California State University**

To earn a bachelor's degree from the California State University, each student must complete a program of general education. Orange Coast College offers two general education programs which will enable students to meet the lower division general education requirements for all CSU campuses prior to transfer. Students can complete either the Intersegmental General Education Transfer Curriculum (OCC General Education Option 3) or the CSU General Education breadth Requirements (OCC General Education Option 2). Students transferring to a specific CSU campus

also can meet the general education requirements of that campus.

### **CSU General Education Breadth Requirements**

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

- A. English Language Learning and Critical Thinking - 9 units
- B. Scientific Inquiry and Quantitative Reasoning - 9 units
- C. Arts and Humanities - 9 units
- D. Social Sciences - 9 units
- E. Life-Long Learning and Self Development - 3 units

California State University has an American Institutions requirement which can be satisfied prior to transfer by taking an American History course and a course in Political Science 180 or 180H in Area D.

### **Intersegmental General Education Transfer Curriculum (IGETC) for CSU**

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

1. English Communication - 9 units
2. Mathematical Concepts - 3 units
3. Arts and Humanities - 9 units
4. Social and Behavioral Science 9 units
5. Physical and Biological Sciences - 7-9 Units

California State University in addition has an American Institutions requirement which can be satisfied prior to transfer by taking Political Science A180 or A180H and one of the following courses: History A100, A170, A170H, A175, A175H.

The IGETC should be completed in its entirety prior to transfer. Students who are missing no more than two courses prior to matriculation at a four-year institution may request partial certification during any term except in the final term prior to graduation from the four-year institution.

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## **UNIVERSITY OF CALIFORNIA**

The University of California has 10 campuses located throughout the state. Each campus within the system has its own unique geographic and academic character. The university offers bachelor's, master's and doctoral degrees in a variety of subject areas. Campuses of the university are located at Berkeley, Davis, Irvine, Los Angeles, Merced, Riverside, San Diego, San Francisco (Schools of Medicine, Dentistry and Pharmacy), Santa Barbara and Santa Cruz.

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## **University of California – Admission Requirements**

Students planning to transfer to the University of California must follow the requirements listed below:

1. Applicants eligible for admission to the University as freshmen, meaning they satisfied the Subject, Scholarship, and Examination Requirements or were defined by the university during their senior year as Eligible in the Local Context (ELC), are eligible to transfer after they have a "C" (2.0) average in their transferable college coursework.
2. Applicants who met the Scholarship Requirement but did not satisfy the A-G subject requirements must take transferable college courses in the missing high school subjects to be eligible to transfer.
3. Applicants not eligible for admission to the University as freshmen because they did not meet the Scholarship Requirement must:
  - A. Complete 60 semester units of transferable college work with a grade point average of at least 2.4. Most campuses and majors require higher grade point averages.
  - B. Complete a course pattern requirement to include:
    1. Two transferable college courses (three semester or four to five quarter units each) in English Composition;
    2. One transferable college course (three semester or four to five quarter units each) in mathematical concepts and quantitative reasoning; and
    3. Four transferable college courses (three semester or four to five quarter units each) 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.

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## **Community College Honors Transfer Program - UCI**

The Community College Honors Transfer Program gives students priority consideration for admission to University of California, Irvine. Students in this program may use the UCI Library and attend selected cultural activities on UCI's campus. Students wishing to participate in this program must first apply to and be accepted into the OCC Honors Program. Additional information about this program is available in the Transfer Center in Watson Hall.



## UC Davis - Transfer Admission Guarantee (TAG)

The UC Davis Transfer Admission Guarantee guarantees admission to UC Davis for students completing all program requirements. TAG students receive priority admission to UCD. The TAG is a formal written agreement between UC Davis, OCC and the student which outlines the courses and GPA required before transferring. It can be written after completion of 30 semester units of transferable course work.

## UC Irvine - Transfer Admission Guarantee (TAG)

UC Irvine's Transfer Admission Guarantee offers provisional admission to well-qualified students in most majors. OCC students must meet with a UCI representative in the Transfer Center for a review of their qualifications. Qualified applicants will be offered preliminary provisional admission to UCI and provided with recommendations for coursework that should be completed prior to transfer. Participants in this program must have a GPA designated in all transferable coursework.

## UCLA - Transfer Alliance Program (TAP)

The Transfer Alliance Program with UC Los Angeles gives students priority consideration for admission to UCLA's College of Letters and Science (except for the Communications Studies major). Students participating in TAP learn more about UCLA through meetings with UCLA counselors, faculty and students. TAP students may use the UCLA Library and participate in cultural and athletic events on the UCLA campus. Students wishing to participate in the program first must be accepted into the OCC Honors Program.

## UC Merced - Transfer Admission Guarantee (TAG)

UC Merced offers students who have completed all of their coursework at a California community college the opportunity to have guaranteed admission into their major at UC Merced. For more information please visit the Transfer Center.

## UC Riverside - Transfer Admission Guarantee (TAG)

Students participating in the Transfer Admission Guarantee with UC Riverside are guaranteed admission. Students who want to participate in this program must visit the UCR website for more details. UCR also has an honors transfer program called the Honors Alliance for Riverside Transfers (HART). Participants in HART must first apply and be accepted into the OCC Honors Program.

## UC Santa Barbara - Transfer Admission Guarantee (TAG)

UC Santa Barbara has established a Transfer Admission Guarantee which guarantees admission for fall terms. The TAG includes most majors in both the College of Letters and Science and the College of Engineering. To see if they qualify, students must make an appointment in the OCC Transfer Center.

## UC Santa Cruz - Transfer Admission Guarantee (TAG)

UC Santa Cruz's Transfer Admission Guarantee provides students with the opportunity to have their academic records reviewed in advance of the regular application process. Those who are approved for TAG know their admission to UCSC is guaranteed for the following fall; they won't have to wait until spring to learn their admission decision.

## General Education Requirements for the University of California

To earn a bachelor's degree from the University of California, each student must complete a program of general education. To meet the general education requirements of the university, students can complete either the Intersegmental General Education Transfer Curriculum (Orange Coast College General Education Option 3) or individual campus general education requirements. OCC strongly recommends that students follow the IGETC rather than the individual campus requirements as this will provide more flexibility when applying to transfer. IGETC should not be used for the following: Business Administration, Chemistry, Environmental Design and Natural Resources at UC Berkeley, Nursing at UCLA, Revell and Roosevelt College at UCSD, Engineering at all UC campuses, and other high-unit majors at UC campuses (e.g. biological and physical sciences). Students who began at a UC campus and who intend to transfer back to the same campus cannot use IGETC. Some UC campuses do not allow students who began at another UC campus to use IGETC. Students in the above categories should follow the General Education requirements of the UC campus they are transferring to.

### *Intersegmental General Education Transfer Curriculum (IGETC) for UC*

See the Graduation Requirements section of the Catalog for specific courses which meet these requirements.

1. English Communication - six units
2. Mathematical Concepts - three units
3. Arts and Humanities - nine units
4. Social and Behavioral Sciences - nine units

5. Physical and Biological Sciences - seven to nine Units
6. Language Other Than English - zero to five units

The IGETC should be completed in its entirety prior to transfer. Students who are missing no more than 2 courses prior to matriculation at a four year institution may request partial certification during any term except in the final term prior to graduation from the four year institution.

## Individual Campus General Education Requirements

Each campus of the university has its own general education requirements. Students transferring to a specific UC campus can meet the general education requirements of that campus rather than follow the IGETC.

Orange Coast College has articulated individual general education requirements with several UC campuses.

## Independent and Out-of-State Colleges and Universities

In addition to state supported colleges and universities in California, there are many outstanding independent institutions in the state. There are also many colleges, both private and public, located throughout the United States which Orange Coast College students can transfer to. Each of these institutions has its own unique requirements for admission. In order to determine eligibility, students should visit the school's website and consult with their counselor.

## General Education Requirements for Independent and Out-of-State Colleges and Universities

Orange Coast College has articulated general education requirements with many colleges and universities located in California. Copies of these agreements can be found on **MyOCC**.

**MyOCC** is your one-stop website that connects you to the Online Class Schedule, Registration, as well as many other features. You can also access your Coast Community College District student email account which is used for all official forms of communication from the College.

You can log into **MyOCC** from any computer with an internet connection and web browser (Chrome/Internet Explorer 7/Firefox). **MyOCC** works on PC and Mac computers.

| <b>Degree &amp; Certificate Programs</b>                              | <b>Certificate of Specialization</b> | <b>Certificate of Achievement</b> | <b>AA Degree Major</b> | <b>AS Degree Major</b> | <b>AA-T Degree Major</b> | <b>AS-T Degree Major</b> | <b>Page #</b> |
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| <b>Aviation Maintenance Technology (Technology Division)</b>          |                                      |                                   |                        |                        |                          |                          |               |
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| Helicopter Theory and Maintenance                                     | ✓                                    |                                   |                        |                        |                          |                          | 72            |
| Airframe  |                                      | ✓                                 |                        | ✓                      |                          |                          | 72-73         |
| Airframe and Powerplant   |                                      | ✓                                 |                        | ✓                      |                          |                          | 73            |
| Powerplant  |                                      | ✓                                 |                        | ✓                      |                          |                          | 73-74         |
| <b>Aviation Science (Technology Division)</b>                         |                                      |                                   |                        |                        |                          |                          |               |
| Aviation Science  |                                      | ✓                                 |                        | ✓                      |                          |                          | 74-75         |
| Aircraft Dispatcher   |                                      | ✓                                 |                        |                        |                          |                          | 75            |
| Airline Transport Pilot   | ✓                                    |                                   |                        |                        |                          |                          | 76            |
| Commercial Pilot  | ✓                                    |                                   |                        |                        |                          |                          | 76            |
| Flight Operations   | ✓                                    |                                   |                        |                        |                          |                          | 76            |
| Instrument Pilot  | ✓                                    |                                   |                        |                        |                          |                          | 76            |
| Private Pilot   | ✓                                    |                                   |                        |                        |                          |                          | 77            |
| Unmanned Aircraft Systems   | ✓                                    |                                   |                        |                        |                          |                          | 77            |
| <b>Biology (Math and Sciences Division)</b>                           |                                      |                                   |                        |                        |                          |                          |               |
| Biology   |                                      |                                   |                        | ✓                      |                          | ✓                        | 77-78         |

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| <b>Business (Business and Computing Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Business Administration  |                                      | ✓                                 |                        | ✓                      |                          | ✓                        | 78-79         |
| Entrepreneurship   | ✓                                    |                                   |                        |                        |                          |                          | 79            |
| Finance  | ✓                                    |                                   |                        |                        |                          |                          | 80            |
| Not for Profit Management  | ✓                                    |                                   |                        |                        |                          |                          | 80            |
| <b>Cardiovascular Technology (Consumer and Health Sciences Division)</b> |                                      |                                   |                        |                        |                          |                          |               |
| Electrocardiography Technician   |                                      | ✓                                 |                        |                        |                          |                          | 80-81         |
| Echocardiography and Vascular Ultrasound                                 |                                      |                                   |                        | ✓                      |                          |                          | 81            |
| <b>Chemistry (Math and Sciences Division)</b>                            |                                      |                                   |                        |                        |                          |                          |               |
| Chemistry  |                                      |                                   |                        | ✓                      |                          |                          | 81            |
| <b>Communications Studies (Literature and Languages Division)</b>        |                                      |                                   |                        |                        |                          |                          |               |
| Communication Studies  |                                      |                                   |                        |                        | ✓                        |                          | 82            |
| Mass Communications / Media Studies                                      |                                      |                                   | ✓                      |                        |                          |                          | 82            |
| Social Media Strategist  |                                      | ✓                                 |                        |                        |                          |                          | 83            |
| <b>Computer Information Systems (Business and Computing Division)</b>    |                                      |                                   |                        |                        |                          |                          |               |
| Business Information Worker  | ✓                                    |                                   |                        |                        |                          |                          | 83            |
| Computer Information Systems   |                                      | ✓                                 |                        | ✓                      |                          |                          | 83            |
| Web Design   | ✓                                    |                                   |                        |                        |                          |                          | 84            |
| Unmanned Aircraft Systems —See Aviation Science                          |                                      |                                   |                        |                        |                          |                          |               |
| <b>Information and Communications Technologies</b>                       |                                      |                                   |                        |                        |                          |                          |               |
| Enterprise Routing   | ✓                                    |                                   |                        |                        |                          |                          | 84            |
| Network Administration and Operations                                    | ✓                                    |                                   |                        |                        |                          |                          | 84            |
| Network Administration - Linux   | ✓                                    |                                   |                        |                        |                          |                          | 84            |
| Network Administration - Windows   | ✓                                    |                                   |                        |                        |                          |                          | 84-85         |
| Network Infrastructure   | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| Network Professional   | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| Network Security   | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| Network Services and Applications  | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| Network Technician   | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| Virtualization and Cloud Computing                                       | ✓                                    |                                   |                        |                        |                          |                          | 85            |
| <b>Computer Science (Business and Computing Division)</b>                |                                      |                                   |                        |                        |                          |                          |               |
| Computer Science   |                                      |                                   |                        |                        |                          | ✓                        | 86            |
| Computer Science   |                                      | ✓                                 |                        | ✓                      |                          |                          | 86            |
| C++ Programming  | ✓                                    |                                   |                        |                        |                          |                          | 86            |
| Java Programming   | ✓                                    |                                   |                        |                        |                          |                          | 86-87         |
| Python Programming   | ✓                                    |                                   |                        |                        |                          |                          | 87            |
| <b>Construction Technology (Technology Division)</b>                     |                                      |                                   |                        |                        |                          |                          |               |
| Carpentry  | ✓                                    |                                   |                        |                        |                          |                          | 87            |
| Concrete and Masonry   | ✓                                    |                                   |                        |                        |                          |                          | 87            |
| Fine Woodworking   | ✓                                    |                                   |                        |                        |                          |                          | 87            |
| Plumbing   | ✓                                    |                                   |                        |                        |                          |                          | 88            |
| Residential Electrical   | ✓                                    |                                   |                        |                        |                          |                          | 88            |
| Construction Technology  |                                      | ✓                                 |                        | ✓                      |                          |                          | 88            |
| Master Construction Specialist   |                                      | ✓                                 |                        | ✓                      |                          |                          | 88-89         |
| Residential Construction Development First Award                         |                                      | ✓                                 |                        | ✓                      |                          |                          | 89            |
| Residential Construction Development Second Award                        |                                      | ✓                                 |                        |                        |                          |                          | 89-90         |
| Residential Construction Development Third Award                         |                                      | ✓                                 |                        |                        |                          |                          | 90            |
| <b>Culinary Arts (Consumer and Health Sciences Division)</b>             |                                      |                                   |                        |                        |                          |                          |               |
| Baking and Pastry - Basic  | ✓                                    |                                   |                        |                        |                          |                          | 90            |
| Advanced Baking and Pastry   |                                      | ✓                                 |                        | ✓                      |                          |                          | 90-91         |
| Culinary Arts - Basic  |                                      | ✓                                 |                        |                        |                          |                          | 91            |
| Advanced Culinary Arts   |                                      | ✓                                 |                        | ✓                      |                          |                          | 91-92         |

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| <b>Culinology® &amp; Food Science (Consumer and Health Sciences Division)</b>     |                                      |                                   |                        |                        |                          |                          |               |
| Culinary Food Science Assistant - Level I   |                                      | ✓                                 |                        |                        |                          |                          | 92            |
| Culinology® - Level II Professional Level   |                                      |                                   |                        | ✓                      |                          |                          | 92-93         |
| <b>Dance (Visual and Performing Arts Division)</b>                                |                                      |                                   |                        |                        |                          |                          |               |
| Pilates Instructor  |                                      | ✓                                 |                        |                        |                          |                          | 93            |
| Dance Instructor  |                                      | ✓                                 |                        | ✓                      |                          |                          | 93-94         |
| World Dance   |                                      | ✓                                 | ✓                      |                        |                          |                          | 94-95         |
| Dance   |                                      |                                   | ✓                      |                        |                          |                          | 95-96         |
| <b>Dental Assisting, Registered (Consumer and Health Sciences Division)</b>       |                                      |                                   |                        |                        |                          |                          |               |
| Dental Assisting, Registered  |                                      | ✓                                 |                        | ✓                      |                          |                          | 96            |
| <b>Diagnostic Medical Sonography (Consumer and Health Sciences Division)</b>      |                                      |                                   |                        |                        |                          |                          |               |
| Diagnostic Medical Sonography   |                                      |                                   |                        | ✓                      |                          |                          | 97            |
| <b>Dietetics – See Nutrition and Dietetics</b>                                    |                                      |                                   |                        |                        |                          |                          |               |
| <b>Digital Media Arts and Design (Visual and Performing Arts Division)</b>        |                                      |                                   |                        |                        |                          |                          |               |
| Animation   |                                      | ✓                                 |                        | ✓                      |                          |                          | 97-98         |
| Graphic Design  |                                      | ✓                                 |                        | ✓                      |                          |                          | 98            |
| UX Design   |                                      | ✓                                 |                        | ✓                      |                          |                          | 98-99         |
| <b>Economics (Behavioral and Social Sciences Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Economics   |                                      |                                   |                        |                        | ✓                        |                          | 99            |
| <b>Display and Visual Presentation – See Fashion</b>                              |                                      |                                   |                        |                        |                          |                          |               |
| <b>Education (Consumer and Health Sciences Division)</b>                          |                                      |                                   |                        |                        |                          |                          |               |
| Early Childhood Education   |                                      |                                   |                        |                        |                          | ✓                        | 100           |
| Infant and Toddler Teacher  |                                      | ✓                                 |                        | ✓                      |                          |                          | 100           |
| Associate Preschool Teacher   |                                      | ✓                                 |                        |                        |                          |                          | 100-101       |
| Preschool Teacher   |                                      | ✓                                 |                        | ✓                      |                          |                          | 101           |
| Early Childhood Administration  |                                      | ✓                                 |                        | ✓                      |                          |                          | 101           |
| Elementary Teacher Education  |                                      |                                   |                        |                        | ✓                        |                          | 102           |
| <b>Emergency Medical Services (Consumer and Health Sciences Division)</b>         |                                      |                                   |                        |                        |                          |                          |               |
| Emergency Medical Services  | ✓                                    |                                   |                        |                        |                          |                          | 102-103       |
| <b>Engineering (Math and Sciences Division)</b>                                   |                                      |                                   |                        |                        |                          |                          |               |
| Engineering   |                                      |                                   |                        | ✓                      |                          |                          | 103           |
| <b>English Department (Literature and Languages Division)</b>                     |                                      |                                   |                        |                        |                          |                          |               |
| English   |                                      |                                   | ✓                      |                        | ✓                        |                          | 104-105       |
| <b>Fashion (Consumer and Health Sciences Division)</b>                            |                                      |                                   |                        |                        |                          |                          |               |
| Industrial Sewing   | ✓                                    |                                   |                        |                        |                          |                          | 105           |
| Apparel Construction  |                                      | ✓                                 |                        | ✓                      |                          |                          | 105           |
| Apparel Industry Sustainability   | ✓                                    |                                   |                        |                        |                          |                          | 105-106       |
| Design  |                                      | ✓                                 |                        | ✓                      |                          |                          | 106           |
| Display and Visual Presentation   |                                      | ✓                                 |                        | ✓                      |                          |                          | 106-107       |
| Fashion Merchandising   |                                      | ✓                                 |                        | ✓                      |                          |                          | 107           |
| Production/Product Development  |                                      | ✓                                 |                        | ✓                      |                          |                          | 107           |
| <b>Film &amp; Television (Visual and Performing Arts Division)</b>                |                                      |                                   |                        |                        |                          |                          |               |
| Film & Television   |                                      | ✓                                 | ✓                      |                        |                          |                          | 107-108       |
| Film, Television, & Electronic Media  |                                      |                                   |                        |                        |                          | ✓                        | 108-109       |
| Immersive Media (VR/AR)   |                                      | ✓                                 |                        |                        |                          |                          | 109           |
| Media Arts and Creative Entertainment   |                                      | ✓                                 |                        |                        |                          |                          | 109-110       |
| <b>Fitness Specialist – See Kinesiology</b>                                       |                                      |                                   |                        |                        |                          |                          |               |
| <b>Food Science – See Culinology®</b>   |                                      |                                   |                        |                        |                          |                          |               |
| <b>Food Service Management Commercial (Consumer and Health Sciences Division)</b> |                                      |                                   |                        |                        |                          |                          |               |
| Catering  |                                      | ✓                                 |                        |                        |                          |                          | 110           |
| Quick Service   | ✓                                    |                                   |                        |                        |                          |                          | 110           |
| Restaurant Supervision  |                                      | ✓                                 |                        |                        |                          |                          | 110-111       |
| Restaurant  |                                      |                                   |                        | ✓                      |                          |                          | 111           |

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| <b>Food Service Management Institutional (Consumer and Health Sciences Division)</b>                          |                                      |                                   |                        |                        |                          |                          |               |
| Dietetic Service Supervisor   |                                      | ✓                                 |                        |                        |                          |                          | 111           |
| Dietetic Service Manager  |                                      | ✓                                 |                        |                        |                          |                          | 112           |
| <b>Foreign Languages (Literature and Languages Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| Foreign Language  |                                      |                                   | ✓                      |                        |                          |                          | 112-113       |
| Spanish   |                                      |                                   |                        |                        | ✓                        |                          | 113           |
| <b>General Education Transfer Certificates – Refer to the Graduation Requirements section of this catalog</b> |                                      |                                   |                        |                        |                          |                          |               |
| Certificate of Achievement – CSU General Education  |                                      | ✓                                 |                        |                        |                          |                          | 44-45         |
| Certificate of Achievement – IGETC  |                                      | ✓                                 |                        |                        |                          |                          | 45-47         |
| <b>Geography (Social and Behavioral Sciences Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| Geography   |                                      |                                   | ✓                      |                        | ✓                        |                          | 113-114       |
| <b>Geology (Math and Sciences Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Earth Science   |                                      |                                   |                        | ✓                      |                          |                          | 114-115       |
| Geology   |                                      |                                   |                        |                        |                          | ✓                        | 115           |
| <b>Global Studies (Social and Behavioral Sciences Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Global Studies  |                                      |                                   |                        |                        | ✓                        |                          | 115-116       |
| <b>Health Education - See Public Health</b>   |                                      |                                   |                        |                        |                          |                          |               |
| <b>Heating, Ventilation, Air Conditioning &amp; Refrigeration (Technology Division)</b>                       |                                      |                                   |                        |                        |                          |                          |               |
| HVACR Technology  |                                      | ✓                                 |                        | ✓                      |                          |                          | 116           |
| <b>History (Social and Behavioral Sciences Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| History   |                                      |                                   |                        |                        | ✓                        |                          | 117           |
| <b>Horticulture (Math and Science Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Horticulture  |                                      | ✓                                 |                        | ✓                      |                          |                          | 117-118       |
| Landscape Site Design Elements  | ✓                                    |                                   |                        |                        |                          |                          | 118           |
| Basic Landscape Design  | ✓                                    |                                   |                        |                        |                          |                          | 118           |
| Intermediate Landscape Design and Landscape Specialist  | ✓                                    |                                   |                        |                        |                          |                          | 118-119       |
| Advanced Landscape Design and Landscape Specialist  | ✓                                    |                                   |                        |                        |                          |                          | 119           |
| The Professional Practice A Landscape Design & Construction Business  | ✓                                    |                                   |                        |                        |                          |                          | 119           |
| Retrofitting California Urban Gardens   | ✓                                    |                                   |                        |                        |                          |                          | 119           |
| <b>Hospitality, Travel, and Tourism (Consumer and Health Sciences Division)</b>                               |                                      |                                   |                        |                        |                          |                          |               |
| Airline Travel Management   |                                      | ✓                                 |                        |                        |                          |                          | 120           |
| Flight Attendant and Airline and Travel Careers   |                                      | ✓                                 |                        | ✓                      |                          |                          | 120-121       |
| Front Office Specialist   |                                      | ✓                                 |                        |                        |                          |                          | 121           |
| Hotel Management  |                                      |                                   |                        | ✓                      |                          |                          | 122           |
| Human Resource Management   |                                      | ✓                                 |                        | ✓                      |                          |                          | 122           |
| Meeting and Event Management  |                                      | ✓                                 |                        | ✓                      |                          |                          | 123           |
| Sales and Marketing Specialist  |                                      | ✓                                 |                        | ✓                      |                          |                          | 123           |
| Spa Management  |                                      | ✓                                 |                        | ✓                      |                          |                          | 124           |
| Travel Specialist   |                                      | ✓                                 |                        | ✓                      |                          |                          | 124           |
| <b>Integrative Health (Consumer and Health Sciences Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Integrative Health Coach  |                                      | ✓                                 |                        | ✓                      |                          |                          | 125           |
| <b>Interior Design (Consumer and Health Sciences Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| Interior Merchandising – Level 1  |                                      | ✓                                 |                        |                        |                          |                          | 125-126       |
| Interior Design Assistant – Level 2   |                                      |                                   |                        | ✓                      |                          |                          | 126           |
| Interior Design – Professional Level 3  |                                      | ✓                                 |                        |                        |                          |                          | 126           |
| Kitchen & Bath – Advanced   | ✓                                    |                                   |                        |                        |                          |                          | 126-127       |
| <b>Journalism (Literature and Languages Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Journalism  |                                      |                                   | ✓                      |                        | ✓                        |                          | 127-128       |
| <b>Kinesiology (Kinesiology and Athletics Division)</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Yoga Instructor Training  | ✓                                    |                                   |                        |                        |                          |                          | 128           |
| Athletics Training Level 1  |                                      | ✓                                 |                        |                        |                          |                          | 128           |
| Fitness Specialist  |                                      | ✓                                 |                        | ✓                      |                          |                          | 129           |

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| Kinesiology   |                                      |                                   |                        |                        | ✓                        |                          | 129-130       |
| <b>Leadership Studies (Business and Computing Division)</b>               |                                      |                                   |                        |                        |                          |                          |               |
| Leadership Studies  | ✓                                    |                                   |                        |                        |                          |                          | 130           |
| <b>Liberal Arts</b>   |                                      |                                   |                        |                        |                          |                          |               |
| Liberal Arts  |                                      |                                   | ✓                      |                        |                          |                          | 130           |
| <b>Management (Business and Computing Division)</b>                       |                                      |                                   |                        |                        |                          |                          |               |
| Management Institute  | ✓                                    |                                   |                        |                        |                          |                          | 131           |
| Management and Leadership Studies   |                                      | ✓                                 |                        | ✓                      |                          |                          | 131           |
| Retail  |                                      | ✓                                 |                        | ✓                      |                          |                          | 131-132       |
| <b>Manufacturing Technology (Technology Division)</b>                     |                                      |                                   |                        |                        |                          |                          |               |
| CNC Operator  | ✓                                    |                                   |                        |                        |                          |                          | 132           |
| CNC Programmer  | ✓                                    |                                   |                        |                        |                          |                          | 132           |
| Machinist   |                                      | ✓                                 |                        | ✓                      |                          |                          | 132           |
| CNC Machine Operator  |                                      | ✓                                 |                        | ✓                      |                          |                          | 133           |
| CNC Machine Programmer  |                                      | ✓                                 |                        | ✓                      |                          |                          | 133           |
| Tooling   |                                      | ✓                                 |                        | ✓                      |                          |                          | 133           |
| <b>Marine Science (Math and Sciences Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Marine Science  |                                      |                                   |                        | ✓                      |                          |                          | 134           |
| Aquarium Science  |                                      | ✓                                 |                        |                        |                          |                          | 134-135       |
| <b>Marketing (Business and Computing Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Advertising   | ✓                                    |                                   |                        |                        |                          |                          | 135           |
| Entry Level Marketing   | ✓                                    |                                   |                        |                        |                          |                          | 135           |
| General Marketing   |                                      | ✓                                 |                        | ✓                      |                          |                          | 135           |
| International Business  | ✓                                    | ✓                                 |                        | ✓                      |                          |                          | 135-136       |
| Sales   | ✓                                    |                                   |                        |                        |                          |                          | 136           |
| <b>Math (Math and Sciences Division)</b>                                  |                                      |                                   |                        |                        |                          |                          |               |
| Math  |                                      |                                   |                        |                        |                          | ✓                        | 136           |
| <b>Medical Assisting (Consumer and Health Sciences Division)</b>          |                                      |                                   |                        |                        |                          |                          |               |
| CCMA Eligible Program   |                                      | ✓                                 |                        | ✓                      |                          |                          | 137           |
| <b>Music (Visual and Performing Arts Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Business Employee   |                                      | ✓                                 | ✓                      |                        |                          |                          | 137-138       |
| MIDI Applications   |                                      | ✓                                 | ✓                      |                        |                          |                          | 138           |
| Music   |                                      |                                   | ✓                      |                        | ✓                        |                          | 138-139       |
| Musical Entertainer—Instrumental  |                                      | ✓                                 | ✓                      |                        |                          |                          | 139-140       |
| Musical Entertainer—Vocal   |                                      | ✓                                 | ✓                      |                        |                          |                          | 140           |
| Studio Guitar Performer   |                                      | ✓                                 | ✓                      |                        |                          |                          | 140           |
| <b>Natural Science (Math and Sciences Division)</b>                       |                                      |                                   |                        |                        |                          |                          |               |
| Natural Science   |                                      |                                   |                        | ✓                      |                          |                          | 141           |
| <b>Neurodiagnostic Technology (Consumer and Health Sciences Division)</b> |                                      |                                   |                        |                        |                          |                          |               |
| Neurodiagnostic Technology  | ✓                                    |                                   |                        | ✓                      |                          |                          | 141-142       |
| Polysomnography Cross-Training Option                                     |                                      |                                   |                        | ✓                      |                          |                          | 142           |
| <b>Nutrition and Dietetics (Consumer and Health Sciences Division)</b>    |                                      |                                   |                        |                        |                          |                          |               |
| Nutrition and Dietetics Technician  |                                      |                                   |                        | ✓                      |                          |                          | 142-143       |
| Nutrition and Dietetics   |                                      |                                   |                        |                        |                          | ✓                        | 143           |
| Nutrition Education   |                                      | ✓                                 |                        | ✓                      |                          |                          | 144           |
| Nutrition and Fitness Education   |                                      | ✓                                 |                        |                        |                          |                          | 144           |
| <b>Philosophy (Social and Behavioral Sciences Division)</b>               |                                      |                                   |                        |                        |                          |                          |               |
| Philosophy  |                                      |                                   |                        |                        | ✓                        |                          | 145           |
| <b>Photography (Visual and Performing Arts Division)</b>                  |                                      |                                   |                        |                        |                          |                          |               |
| Photography – Still   |                                      | ✓                                 |                        | ✓                      |                          |                          | 145-146       |
| Photography Digital Technician  |                                      | ✓                                 |                        |                        |                          |                          | 146           |
| Digital SLR Photography & Videography                                     |                                      | ✓                                 |                        |                        |                          |                          | 146           |

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| <b>Physics (Math and Sciences Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| Physics  |                                      |                                   |                        |                        |                          | ✓                        | 147           |
| <b>Political Science (Social and Behavioral Sciences Division)</b>                 |                                      |                                   |                        |                        |                          |                          |               |
| Political Science  |                                      |                                   |                        |                        | ✓                        |                          | 147-148       |
| <b>Polysomnographic Technology (Consumer and Health Sciences Division)</b>         |                                      |                                   |                        |                        |                          |                          |               |
| Polysomnographic Technology  |                                      |                                   |                        | ✓                      |                          |                          | 148           |
| <b>Professional Mariner (Consumer and Health Sciences Division)</b>                |                                      |                                   |                        |                        |                          |                          |               |
| Professional Mariner   |                                      | ✓                                 |                        | ✓                      |                          |                          | 149           |
| <b>Psychology (Social and Behavioral Sciences Division)</b>                        |                                      |                                   |                        |                        |                          |                          |               |
| Psychology   |                                      |                                   |                        |                        | ✓                        |                          | 150           |
| <b>Public Health (Kinesiology and Athletics Division)</b>                          |                                      |                                   |                        |                        |                          |                          |               |
| Public Health  |                                      |                                   | ✓                      |                        |                          |                          | 150-151       |
| Public Health Science  |                                      |                                   |                        |                        |                          | ✓                        | 151           |
| <b>Radiologic Technology – Diagnostic (Consumer and Health Sciences Division)</b>  |                                      |                                   |                        |                        |                          |                          |               |
| Radiologic Technology – Diagnostic   |                                      |                                   |                        | ✓                      |                          |                          | 152           |
| <b>Real Estate (Business and Computing Division)</b>                               |                                      |                                   |                        |                        |                          |                          |               |
| Real Estate Broker   |                                      | ✓                                 |                        | ✓                      |                          |                          | 153           |
| Real Estate Salesperson  | ✓                                    |                                   |                        |                        |                          |                          | 153           |
| <b>Religious Studies (Social and Behavioral Sciences Division)</b>                 |                                      |                                   |                        |                        |                          |                          |               |
| Religious Studies  | ✓                                    |                                   | ✓                      |                        |                          |                          | 153-154       |
| <b>Respiratory Care (Consumer and Health Sciences Division)</b>                    |                                      |                                   |                        |                        |                          |                          |               |
| Respiratory Care   |                                      |                                   |                        | ✓                      |                          |                          | 154-155       |
| Polysomnographic Technology Option   |                                      |                                   |                        | ✓                      |                          |                          | 155           |
| <b>Sociology (Social and Behavioral Sciences Division)</b>                         |                                      |                                   |                        |                        |                          |                          |               |
| Sociology  |                                      |                                   |                        |                        | ✓                        |                          | 155-156       |
| <b>Speech-Language Pathology Assistant (Consumer and Health Sciences Division)</b> |                                      |                                   |                        |                        |                          |                          |               |
| Speech Language Pathology Assistant  |                                      |                                   |                        | ✓                      |                          |                          | 156           |
| <b>Theatre Arts (Visual and Performing Arts Division)</b>                          |                                      |                                   |                        |                        |                          |                          |               |
| Theatre Arts   |                                      |                                   | ✓                      |                        | ✓                        |                          | 156-157       |
| Media Arts and Creative Entertainment – See Film & Television                      |                                      |                                   |                        |                        |                          |                          |               |
| <b>Welding Technology (Technology Division)</b>                                    |                                      |                                   |                        |                        |                          |                          |               |
| Welding Technology   |                                      | ✓                                 |                        | ✓                      |                          |                          | 158           |
| Basic Welding (SMAW) Skill Certificate   | ✓                                    |                                   |                        |                        |                          |                          | 158           |
| Intermediate Welding (SMAW) Skill Certificate                                      | ✓                                    |                                   |                        |                        |                          |                          | 159           |
| Advanced Welding (SMAW)  | ✓                                    |                                   |                        |                        |                          |                          | 159           |
| Advanced I Welding (FCAW)  | ✓                                    |                                   |                        |                        |                          |                          | 159           |
| Advanced II Welding (FCAW)   | ✓                                    |                                   |                        |                        |                          |                          | 159           |
| Gas Metal Arc Welding (GMAW)   | ✓                                    |                                   |                        |                        |                          |                          | 159-160       |
| Gas Tungsten Arc Welding (GTAW)  | ✓                                    |                                   |                        |                        |                          |                          | 160           |
| Orbital Welding  | ✓                                    |                                   |                        |                        |                          |                          | 160           |
| Pipe Welding   | ✓                                    |                                   |                        |                        |                          |                          | 160           |

| <b>Degree &amp; Certificate Programs</b>                               | <b>Certificate of Completion</b> | <b>Certificate of Competency</b> | <b>Page #</b> |
|--|----------------------------------|----------------------------------|---------------|
| <b>NONCREDIT CERTIFICATES</b>  |                                  |                                  |               |
| <b>Allied Health (Consumer and Health Sciences Division)</b>           |                                  |                                  |               |
| Personal Care Aide   | ✓                                |                                  | 161           |
| Skills Enhancement for Consumer and Health Sciences                    |                                  | ✓                                | 161           |
| <b>Business (Business and Computing Division)</b>                      |                                  |                                  |               |
| Not for Profit Management  | ✓                                |                                  | 161           |
| <b>Chemistry (Literature and Language Division)</b>                    |                                  |                                  |               |
| Chemistry Skills   |                                  | ✓                                | 161-162       |
| <b>Consumer Studies</b>  |                                  |                                  |               |
| Retail Employment  | ✓                                |                                  | 162           |
| <b>English (Literature and Language Division)</b>                      |                                  |                                  |               |
| Academic Preparartion in English                                       |                                  | ✓                                | 162           |
| <b>English as a Second Language (Literature and Language Division)</b> |                                  |                                  |               |
| ESL Support for Freshman Composition                                   |                                  | ✓                                | 162           |
| <b>English Language Learning (Literature and Language Division)</b>    |                                  |                                  |               |
| English Language Learning Support for Parents                          |                                  | ✓                                | 163           |
| English Language Learning Support for U.S. Citizanship                 |                                  | ✓                                | 163           |
| Grammar Review   |                                  | ✓                                | 163           |
| Language Transition to College   |                                  | ✓                                | 163           |
| Multi-skills English   |                                  | ✓                                | 163           |
| Oral Communication   |                                  | ✓                                | 164           |
| Speaking about Reading   |                                  | ✓                                | 164           |
| Workplace English  |                                  | ✓                                | 164           |
| <b>Kinesiology (Kinesiology and Athletics Division)</b>                |                                  |                                  |               |
| Lifeguard Training, Professional Rescue                                | ✓                                |                                  | 164           |
| Yoga Instuctor Training  | ✓                                |                                  | 164           |
| <b>Math (Math and Sciences Division)</b>                               |                                  |                                  |               |
| Math Skills Development  |                                  | ✓                                | 165           |
| <b>Tutoring (Library and Learning Division)</b>                        |                                  |                                  |               |
| Tutoring Skills and Strategies   | ✓                                |                                  | 165           |



# CREDIT DEGREE AND CERTIFICATE PROGRAMS

## ACCOUNTING

### ACCOUNTING

#### CERTIFICATE OF ACHIEVEMENT

The Accounting certificate program contains coursework in financial and managerial accounting, computerized accounting, and intermediate, tax, and cost accounting. Completing the program will provide students with the skills necessary for employment in a variety of accounting positions. Career opportunities include: accounts payable/receivable specialist, cost accountant, disbursement specialist, full charge bookkeeper, general ledger specialist, junior accountant, payroll specialist, senior accountant, and tax staff.

#### Program Outcomes

1. Demonstrate various activities performed in the accounting function of industry, apply comprehensive accounting skills, utilize technical knowledge, and display ethical behaviors and practices.
2. Demonstrate technical knowledge of accounting related topics that provide major course transfer to a four-year institution.

| Course                                       |      |              | Units     |
|--|------|--------------|-----------|
| <b>FIRST SEMESTER</b>                        |      |              |           |
| Financial Accounting                         | ACCT | A101         | 4         |
| Introduction to Business / Honors            | BUS  | A100 / A100H | 3         |
| Introduction to Computer Information Systems | CIS  | A111         | 3         |
| <b>Subtotal</b>                              |      |              | <b>10</b> |
| <b>SECOND SEMESTER</b>                       |      |              |           |
| Managerial Accounting                        | ACCT | A102         | 4         |
| Accounting with Quickbooks and Excel         | ACCT | A110         | 3         |
| <b>Subtotal</b>                              |      |              | <b>7</b>  |
| <b>THIRD SEMESTER</b>                        |      |              |           |
| Intermediate Accounting 1                    | ACCT | A212         | 3         |
| Business Communication                       | BUS  | A139         | 3         |
| <b>Subtotal</b>                              |      |              | <b>6</b>  |
| <b>FOURTH SEMESTER</b>                       |      |              |           |
| Individual Income Tax                        | ACCT | A111         | 3         |
| Or   |      |              |           |
| Business Taxation                            | ACCT | A116         | 3         |
| Cost Accounting                              | ACCT | A210         | 3         |
| Intermediate Accounting 2                    | ACCT | A213         | 3         |
| Auditing                                     | ACCT | A218         | 3         |
| <b>Subtotal</b>                              |      |              | <b>12</b> |
| <b>Total Units</b>                           |      |              | <b>35</b> |

## ASSOCIATE IN SCIENCE DEGREE

Complete the Accounting Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

#### Accounting Suggested Electives:

|                                  |      |      |   |
|----------------------------------|------|------|---|
| Volunteer Income Tax Assist      | ACCT | A114 | 1 |
| Payroll                          | ACCT | A119 | 3 |
| Not-for-Profit Accounting        | ACCT | A216 | 3 |
| Business Law                     | BUS  | A110 | 3 |
| Introduction to Entrepreneurship | BUS  | A240 | 3 |
| Applied Management               | MGMT | A100 | 3 |

## ENTRY-LEVEL ACCOUNTING

#### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework. Completion of the certificate will enable students to apply for entry-level positions in accounting.

#### Program Outcomes

1. Demonstrate knowledge of an accounting process by performing appropriate accounting functions manually or by utilizing G/L software.
2. Define and apply the different concepts of cost used to assist managers in making business decisions by performing profitability and cost analysis.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| <b>Total Units</b>                   |      |      | <b>11</b> |

## BUSINESS TAXATION COMPETENCY

#### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on business taxation.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of business taxation using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Business Taxation                    | ACCT | A116 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## COST ACCOUNTING COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on cost accounting. Completion of the certificate will enable students to apply for entry-level positions in the area of cost accounting.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of cost accounting using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Cost Accounting                      | ACCT | A210 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## FINANCIAL ACCOUNTING COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with accounting and computer accounting coursework focusing on intermediate accounting concepts. Completion of the certificate will enable students to prepare for the financial reporting section of the CPA exam.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of business taxation using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Intermediate Accounting 1            | ACCT | A212 | 3         |
| Intermediate Accounting 2            | ACCT | A213 | 3         |
| <b>Total Units</b>                   |      |      | <b>17</b> |

## GOVERNMENTAL ACCOUNTING COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on governmental accounting. Students are required to obtain a grade of "C" or better in all required courses at OCC.

#### Program Outcome

1. Students will be able to demonstrate generally accepted accounting practices in the area of governmental accounting using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Governmental Accounting              | ACCT | A215 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## INDIVIDUAL TAXATION COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on the taxation of individuals. Completion of the certificate will enable students to apply for entry-level positions in individual tax preparation.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of cost accounting using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Individual Income Tax                | ACCT | A111 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## NON-PROFIT ACCOUNTING COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on non-profit accounting. Completion of the certificate will enable students to apply for entry-level positions in accounting with various non-profit agencies.

#### Program Outcome

1. Demonstrate generally accepted accounting practices in the area of non-profit accounting using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Not-for-Profit Accounting            | ACCT | A216 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## PAYROLL ACCOUNTING COMPETENCY

### CERTIFICATE OF SPECIALIZATION

This certificate, issued through the Business and Computing Division, provides students with basic accounting and computer accounting coursework focusing on payroll accounting. Completion of the certificate will enable students to apply for entry-level positions in accounting with an emphasis in payroll.

1. Demonstrate generally accepted accounting practices in the area of payroll accounting using various forms of technology.

| Course                               |      |      | Units     |
|--------------------------------------|------|------|-----------|
| Financial Accounting                 | ACCT | A101 | 4         |
| Managerial Accounting                | ACCT | A102 | 4         |
| Accounting with Quickbooks and Excel | ACCT | A110 | 3         |
| Payroll                              | ACCT | A119 | 3         |
| <b>Total Units</b>                   |      |      | <b>14</b> |

## ANTHROPOLOGY

### ANTHROPOLOGY

#### ASSOCIATE IN ARTS DEGREE

The Anthropology Program is a comprehensive program with opportunities to experience all four of the primary fields of research within the discipline. Our objective is to apply theory and offer hands-on experience to enable the student to gain a broad perspective of the diversity of interests that can be acquired by pursuing a degree in Anthropology

#### Program Outcome

1. Gain an understanding of and an appreciation for human diversity across time and space.

| Course  |      |              | Units |
|---|------|--------------|-------|
| <b>Core Courses - Complete ten (10) units from the following:</b> |      |              |       |
| Cultural Anthropology / Honors                                    | ANTH | A100 / A100H | 3     |
| Physical Anthropology / Honors                                    | ANTH | A185 / A185H | 3     |
| Physical Anthropology Lab   | ANTH | A185L        | 1     |
| Introduction to Archaeology                                       | ANTH | A280         | 3     |

**Subtotal 10**

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

|   |      |               |   |
|---|------|---------------|---|
| Native American                         | ANTH | A102          | 3 |
| Anthropology of Nonverbal Behavior      | ANTH | A105          | 3 |
| Comparative Cultures                    | ANTH | A110          | 3 |
| Introduction to Primate Studies         | ANTH | A187          | 3 |
| Introduction to Linguistics             | ANTH | A190          | 3 |
| World Ethnology                         | ANTH | A285          | 3 |
| World Regional Geography                | GEOG | A100          | 3 |
| Physical Geography / Honors             | GEOG | A180 / A180H  | 3 |
| Physical Geography Lab / Honors         | GEOG | A180L / A180M | 1 |
| Cultural Geography                      | GEOG | A185          | 3 |
| World History 1 / Honors                | HIST | A161 / A161H  | 3 |
| World History 2 / Honors                | HIST | A162 / A162H  | 3 |
| Western Civilization 1 / Honors         | HIST | A180 / A180H  | 3 |
| Western Civilization 2 / Honors         | HIST | A185 / A185H  | 3 |
| Child Growth and Development            | HMDV | A180          | 3 |
| Life Span and Developmental Psychology  | PSYC | A130          | 3 |
| Principles of Human Sexuality 1         | PSYC | A165          | 3 |
| Introduction to Sociology / Honors      | SOC  | A100 / A100H  | 3 |
| Introduction to Marriage and the Family | SOC  | A110          | 3 |

**Subtotal 9**

**Minimum Program Major Units 19**

**AA General Education Option 1, 2, or 3 Varies**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

## ANTHROPOLOGY

### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Anthropology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Anthropology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

#### Program Outcomes

1. Gain an understanding of and an appreciation for human diversity across time and space.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                         |      |              | Units    |
|--------------------------------|------|--------------|----------|
| <b>Core Courses:</b>           |      |              |          |
| Cultural Anthropology / Honors | ANTH | A100 / A100H | 3        |
| Physical Anthropology          | ANTH | A185/A185H   | 3        |
| Introduction to Archaeology    | ANTH | A280         | 3        |
| <b>Subtotal</b>                |      |              | <b>9</b> |

#### LIST A - Select three to five (3-5) units from the following:

|                                    |      |            |   |
|------------------------------------|------|------------|---|
| Physical Anthropology Lab          | ANTH | A185L      | 1 |
| Introduction to Linguistics        | ANTH | A190       | 3 |
| Introduction to Statistics         | MATH | A160/A160H | 4 |
| Or                                 |      |            |   |
| Statistics for Behavioral Sciences | PSYC | A160       | 4 |

**Subtotal 3-5**

#### LIST B - Select three to five (3-5) units from the following or any course not taken in List A:

|  |      |               |   |
|--|------|---------------|---|
| Human Anatomy                                  | BIOL | A220          | 5 |
| Introduction to Geographic Information Systems | GEOG | A190          | 2 |
| *General Geology / Honors                      | GEOG | A105 / A105H  | 3 |
| And  |      |               |   |
| *General Geology Laboratory / Honors           | GEOG | A105L / A105M | 1 |
| Environmental Geology                          | GEOG | A160          | 4 |
| *Evolution of the Earth                        | GEOG | A185          | 3 |
| And  |      |               |   |
| *Evolution of the Earth Lab                    | GEOG | A185L         | 1 |
| Introduction to Experimental Methods           | PSYC | A280          | 4 |
| Or   |      |               |   |
| Introduction to Research Methods               | SOC  | A200          | 3 |

**Subtotal 3-5**

*Continued on next page*

**ANTHROPOLOGY AA-T (CONTINUED)**

**Program Outcome**

**LIST C - Select three to five (3-5) units not already taken from List A or B or from the following courses:**

|   |      |              |   |
|---|------|--------------|---|
| Native American                                     | ANTH | A102         | 3 |
| Anthropology of Nonverbal Behavior                  | ANTH | A105         | 3 |
| Multicultural Behavior                              | ANTH | A150         | 3 |
| Introduction to Primate Studies                     | ANTH | A187         | 3 |
| World Ethnology                                     | ANTH | A285         | 3 |
| Intercultural Communications                        | CMST | A155         | 3 |
| Cultural Geography                                  | GEOG | A185         | 3 |
| Ethnic Groups of the United States: Their Histories | HIST | A150         | 3 |
| Introduction to Sociology / Honors                  | SOC  | A100 / A100H | 3 |
| The Ethnic Family                                   | SOC  | A190         | 3 |

|                             |              |
|-----------------------------|--------------|
| <b>Subtotal</b>             | <b>3</b>     |
| <b>Program Major Units</b>  | <b>18-22</b> |
| <b>CSU or IGETC for CSU</b> | <b>37-39</b> |

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

*\*Lecture and applicable lab course must both be taken to fulfill area credit.*

**ARCHITECTURAL TECHNOLOGY**

**Mission Statement**

The OCC Architectural Technology Program endeavors to empower students to lead productive and creative professional lives in the context of Architecture and Environmental Design.

**Program Description**

The Architectural Technology Program offers courses in design, building materials, construction documents, design visualization and graphics, computer-assisted design, building information modeling and fabrication. Our comprehensive program provides students with the discipline and critical thinking skills necessary to transfer to a broad range of universities and the training and technical skills to gain employment with the many and varied firms in Southern California that hire our graduates. Former California Architects Board President, Christine Lampert, AIA, rates our program as one of the top community college programs in the state. OCC's Architecture program has a long history of successful graduates and our current students continue to excel as indicated by winning design awards, high transfer rates, and becoming valued members of the professional community.

**ARCHITECTURE**

**ASSOCIATE IN SCIENCE DEGREE**

The Architecture Associate in Science degree provides courses to help develop students understanding of the concepts, skills and competencies necessary for further study in the field. The program prepares students in the areas of critical thinking, design, and visual communication. Students who are interested in transfer to a university professional program in Architecture and/or related Environmental Design should contact an OCC counselor for assistance in additional course preparation.

**Program Outcome**

1. Student will be able to demonstrate critical thinking, design, and visual communication as related to architecture.

| Course | Units |
|--------|-------|
|--------|-------|

**Core Courses - Complete fifteen (15) units from the following:**

|  |      |              |   |
|--|------|--------------|---|
| Architectural Drawing and Design Visualization 1 | ARCH | A105         | 2 |
| Introduction to Architecture / Honors            | ARCH | A110 / A110H | 2 |
| Architectural Design and Theory 1                | ARCH | A115         | 4 |
| Architectural Drawing and Design Visualization 2 | ARCH | A205         | 3 |
| Architectural Design and Theory 2                | ARCH | A215         | 4 |

**Subtotal** **15**

**Restricted Electives - Complete a minimum of three (3) units from the following:**

|                                      |      |              |   |
|--------------------------------------|------|--------------|---|
| Architectural Construction Documents | ARCH | A180         | 4 |
| Environmental Design Systems         | ARCH | A185         | 4 |
| Building Materials and Systems       | ARCH | A220         | 4 |
| Architectural Design and Theory 3    | ARCH | A230         | 5 |
| History of Architecture 1 / Honors   | ARCH | A290 / A290H | 3 |
| History of Architecture 2 / Honors   | ARCH | A296 / A296H | 3 |

**Subtotal** **3**

**Minimum Program Major Units** **18**

**AS General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

**ARCHITECTURAL DESIGN 1**

**CERTIFICATE OF ACHIEVEMENT**

This certificate may be completed with no required textbook costs. All required courses will have at least one section each semester that has either an online textbook provided to you free of charge or no required textbook. Most of the restricted electives are also textbook cost free. Elective courses not textbook cost free are mark with an asterisk (\*). You may be required to purchase other course supplies for these classes. You may also choose to purchase a print copy of any of these texts if you wish.

**Program Outcome**

1. An entry-level professional position at an architectural or related design office.

| Course | Units |
|--------|-------|
|--------|-------|

**FIRST SEMESTER**

|  |      |      |   |
|--|------|------|---|
| Architectural Drawing and Design Visualization 1 | ARCH | A105 | 2 |
| Introduction to Architecture                     | ARCH | A110 | 2 |
| BIM 1 for Architecture                           | ARCH | A155 | 2 |

**Subtotal** **6**

**SECOND SEMESTER**

|  |      |            |   |
|--|------|------------|---|
| Architectural Design and Theory 1                | ARCH | A115       | 4 |
| Architectural Construction Documents             | ARCH | A180       | 4 |
| Architectural Drawing and Design Visualization 2 | ARCH | A205       | 3 |
| Architectural Design Restricted Elective(s)      | ARCH | (see list) | 2 |

**Subtotal** **13**

**Total Units** **19**

**Architectural Design 1 Restricted Electives:**

No course may be applied to more than one Architectural Design award.

|  |      |       |   |
|--|------|-------|---|
| Introduction to Environmental Sustainability | ARCH | A101  | 1 |
| Intro to FrameCAD Steel Framing              | ARCH | A104  | 1 |
| Tiny House Design                            | ARCH | A107  | 1 |
| FrameCAD Studio 1                            | ARCH | A121  | 2 |
| FrameCAD Studio 2                            | ARCH | A122  | 2 |
| CAD 2-D for Architecture                     | ARCH | A150* | 2 |
| BIM 2 for Architecture                       | ARCH | A156  | 2 |
| 3-D Modeling: Sketchup 1                     | ARCH | A160  | 2 |
| 3-D Modeling: Rhino 1                        | ARCH | A162  | 2 |
| Presentation Graphics                        | ARCH | A165  | 2 |
| Presentation Video                           | ARCH | A167* | 1 |
| Introduction to Design Fabrication           | ARCH | A170  | 1 |
| Design Fabrication 1                         | ARCH | A171  | 2 |
| Design Fabrication 2                         | ARCH | A172  | 2 |
| Design/Build 1 for Architecture              | ARCH | A201  | 2 |
| FrameCAD Workshop 1                          | ARCH | A241  | 2 |
| FrameCAD Workshop 2                          | ARCH | A242  | 2 |
| FrameCAD Workshop 3                          | ARCH | A243  | 2 |

**Architectural Design 2 Restricted Electives:**

No course may be applied to more than one Architectural Design award.

|  |      |       |   |
|--|------|-------|---|
| Introduction to Environmental Sustainability | ARCH | A101  | 1 |
| Intro to FrameCAD Steel Framing              | ARCH | A104  | 1 |
| Tiny House Design                            | ARCH | A107  | 1 |
| FrameCAD Studio 1                            | ARCH | A121  | 2 |
| FrameCAD Studio 2                            | ARCH | A122  | 2 |
| CAD 2-D for Architecture                     | ARCH | A150* | 2 |
| BIM 2 for Architecture                       | ARCH | A156  | 2 |
| 3-D Modeling: Sketchup 1                     | ARCH | A160  | 2 |
| 3-D Modeling: Rhino 1                        | ARCH | A162  | 2 |
| Presentation Graphics                        | ARCH | A165  | 2 |
| Presentation Video                           | ARCH | A167* | 1 |
| Introduction to Design Fabrication           | ARCH | A170  | 1 |
| Design Fabrication 1                         | ARCH | A171  | 2 |
| Design Fabrication 2                         | ARCH | A172  | 2 |
| Design/Build 1 for Architecture              | ARCH | A201  | 2 |
| FrameCAD Workshop 1                          | ARCH | A241  | 2 |
| FrameCAD Workshop 2                          | ARCH | A242  | 2 |
| FrameCAD Workshop 3                          | ARCH | A243  | 2 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Architectural Design 1 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Architectural Design 2 Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**ARCHITECTURAL DESIGN 2**

**CERTIFICATE OF ACHIEVEMENT**

**Program Outcome**

1. Critical thinking, design, and visual communication for successful transfer to a university professional program in Architecture and/or related Environmental Design.
2. A junior/intermediate level drafting/design position at an architectural or related firm.

**Required Prerequisites:**

Architectural Design 1 Certificate of Achievement

|   |      |            |                    |           |
|---|------|------------|--------------------|-----------|
|   |      |            | <b>Subtotal</b>    | <b>19</b> |
| <b>Course</b>                               |      |            | <b>Units</b>       |           |
| <b>FALL</b>                                 |      |            |                    |           |
| Environmental Design Systems                | ARCH | A185       | 4                  |           |
| Architectural Drawing and Design Theory 2   | ARCH | A215       | 4                  |           |
| Architectural Design Restricted Elective(s) | ARCH | (see list) | 2                  |           |
|   |      |            | <b>Subtotal</b>    | <b>10</b> |
| <b>SPRING</b>                               |      |            |                    |           |
| Building Materials and Systems              | ARCH | A220       | 4                  |           |
| Architectural Drawing and Design Theory 3   | ARCH | A230       | 5                  |           |
| Architectural Design Restricted Elective(s) | ARCH | (see list) | 2                  |           |
|   |      |            | <b>Subtotal</b>    | <b>11</b> |
|   |      |            | <b>Total Units</b> | <b>40</b> |

**ARCHITECTURAL TECHNOLOGY  
DESIGN SPECIALIZATION CERTIFICATES**

Specialization Certificates are designed to give Architectural Technology majors a focus within their major and to give non-major students and professionals the opportunity to gain skills in one of five areas within the context of Architecture & Environmental Design.

**DESIGN/BUILD**

**CERTIFICATE OF ACHIEVEMENT**

**Program Outcome**

1. Design, develop, and construct small, sustainable projects.

|  |      |      |                    |  |  |              |
|--|------|------|--------------------|--|--|--------------|
|  |      |      | <b>Course</b>      |  |  | <b>Units</b> |
| Architectural Drawing and Design Visualization 1 | ARCH | A105 | 2                  |  |  |              |
| BIM 1 for Architecture                           | ARCH | A155 | 2                  |  |  |              |
| Design/Build 2 for Architecture                  | ARCH | A202 | 4                  |  |  |              |
| Design/Build 3 for Architecture                  | ARCH | A203 | 4                  |  |  |              |
| Furniture Making/Design                          | CNST | A116 | 4                  |  |  |              |
| Or   |      |      |                    |  |  |              |
| Construction Safety/CAL OSHA                     | CNST | A165 | 3                  |  |  |              |
|  |      |      | <b>Total Units</b> |  |  | <b>15-16</b> |

## DIGITAL FABRICATION FOR ARCHITECTURE

### CERTIFICATE OF ACHIEVEMENT

#### Program Outcome

- Design, develop, and construct three-dimensional environmental design installations and objects using digital fabrication tools.

| Course   |      |      | Units     |
|--|------|------|-----------|
| Architectural Drawing and Design Visualization 1 | ARCH | A105 | 2         |
| 3-D Modeling: Rhino 1                            | ARCH | A162 | 2         |
| 3-D Modeling: Rhino 2                            | ARCH | A163 | 2         |
| Design Fabrication 1                             | ARCH | A171 | 2         |
| Design Fabrication 2                             | ARCH | A172 | 2         |
| Design/Build 1 for Architecture                  | ARCH | A201 | 2         |
| <b>Total Units</b>                               |      |      | <b>12</b> |

## ENVIRONMENTAL RESOURCE MANAGEMENT

### CERTIFICATE OF SPECIALIZATION

#### Program Outcome

- Develop skills and resources needed to find jobs across all industry sectors related to environmental resource management.

| Course                                       |      |      | Units              |
|--|------|------|--------------------|
| Introduction to Environmental Sustainability | ARCH | A101 | 1                  |
| Introduction to Environmental Studies        | ARCH | A102 | 3                  |
| Introduction to Resource Management          | ARCH | A141 | 3                  |
| Environmental Advocacy                       | ARCH | A142 | 3                  |
| Environmental Studies Practicum              | ARCH | A190 | 1.5 - 2.5          |
| <b>Total Units</b>                           |      |      | <b>11.5 - 12.5</b> |

## FRAMECAD STEEL DESIGN

### CERTIFICATE OF SPECIALIZATION

The FrameCAD Steel Design Certificate prepares students and working professionals for design, production drawing, and file preparation for panelized steel frame production and installation. Course projects will use FrameCAD Structure and Detailer software to design and prepare files for production on a FrameCAD F325iT machine. FrameCAD is disrupting the way buildings get made by reducing waste, transportation, and build time and by increasing strength and longevity. People with skills in this transforming industry command high salaries and will be part of a new age of design/manufacture/build.

#### Program Outcome

- Successful students in this program will be able to design and produce digital files for a small structure using FrameCAD Structure and Detailer software and export the file for production in FrameCAD Factory.

| Course                          |      |      | Units    |
|---------------------------------|------|------|----------|
| Intro to FrameCAD Steel Framing | ARCH | A104 | 1        |
| FrameCAD Studio 1               | ARCH | A121 | 2        |
| FrameCAD Studio 2               | ARCH | A122 | 2        |
| FrameCAD Workshop 1             | ARCH | A241 | 2        |
| <b>Total Units</b>              |      |      | <b>7</b> |

## FRAMECAD STEEL PRODUCTION

### CERTIFICATE OF SPECIALIZATION

The FrameCAD Steel Production Certificate prepares students and working professionals for design file preparation, cold form steel(CFS) fabrication, CFS panel production and assembly, and preparation for project delivery. Course projects will use FrameCAD design software to produce custom projects using FrameCAD Factory software on a FrameCAD F325iT machine. Students will also be trained to maintain and operate the machine, prepare worksite documents, and learn to organize workflow safely. People with skills in this transforming industry command high salaries and will part of a new era of integrative design and construction.

#### Program Outcome

- Successful students in this program will be able to safely manufacture steel frame custom components using a FrameCAD F325iT machine and safely assemble the components into a structure.
- Successful students will be able to operate and maintain a FrameCAD machine and be able to document projects, materials, and machine records.
- Successful students will be able to organize and schedule project workflow to utilize the machine and workers efficiently and safely.

| Course                          |      |      | Units    |
|---------------------------------|------|------|----------|
| Intro to FrameCAD Steel Framing | ARCH | A104 | 1        |
| FrameCAD Workshop 1             | ARCH | A241 | 2        |
| FrameCAD Workshop 2             | ARCH | A242 | 2        |
| FrameCAD Workshop 3             | ARCH | A243 | 2        |
| <b>Total Units</b>              |      |      | <b>7</b> |

## INTEGRATED PROJECT DESIGN

### CERTIFICATE OF ACHIEVEMENT

#### Program Outcome

- Design, develop, fabricate, construct and administrate multi-disciplinary projects using BIM and integrated digital technologies.

| Course                  |      |      | Units    |
|-------------------------|------|------|----------|
| BIM 1 for Architecture  | ARCH | A155 | 2        |
| BIM 2 for Architecture  | ARCH | A156 | 2        |
| BIM Multidisciplinary   | ARCH | A157 | 2        |
| BIM Project Integration | ARCH | A158 | 2        |
| <b>Subtotal</b>         |      |      | <b>8</b> |

#### Select one (1) course from the following:

|                                 |      |      |           |
|---------------------------------|------|------|-----------|
| Design/Build 2 for Architecture | ARCH | A202 | 4         |
| Design/Build 3 Architecture     | ARCH | A203 | 4         |
| <b>Subtotal</b>                 |      |      | <b>4</b>  |
| <b>Total Units</b>              |      |      | <b>12</b> |

## SUSTAINABLE DESIGN

### CERTIFICATE OF ACHIEVEMENT

#### Program Outcome

- Design, develop, analyze, and promote sustainable environmental design practices.

| Course                                       |      |      | Units |
|--|------|------|-------|
| Introduction to Environmental Sustainability | ARCH | A101 | 1     |
| Introduction to Environmental Studies        | ARCH | A102 | 3     |
| Environmental Design Systems                 | ARCH | A185 | 4     |
| California Friendly Landscapes               | HORT | A190 | 2     |

**Subtotal** **10**

#### Select one (1) of the following courses:

|                                       |      |      |   |
|---------------------------------------|------|------|---|
| Introduction to Environmental Studies | ESEC | A100 | 3 |
| Or                                    |      |      |   |
| Horticulture Science                  | HORT | A100 | 3 |

**Subtotal** **3**

#### Select one (1) of the following courses:

|                        |      |      |     |
|------------------------|------|------|-----|
| Green Building Codes   | ARCH | A196 | 1.5 |
| Or                     |      |      |     |
| California Energy Code | ARCH | A197 | 1.5 |

**Subtotal** **1.5**

**Total Units** **14.5**

## ART

### ART HISTORY

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Art History for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Art History AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Art History Transfer Degree educates students on the history of art and its function as a global language. Courses are designed to foster an understanding of visual communication through study in context, culture, social, political, economic and religious conditions in different historical eras.

#### Program Outcomes

- Read, write, interpret and understand the major movements and concepts in art history.
- Conduct original research in the history of art.
- Understand the significance and application of art historical styles, Cultures, artist and relevant vocabulary in art and design.
- Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |     |              | Units |
|---|-----|--------------|-------|
| <b>Core Courses:</b>                                  |     |              |       |
| Survey of Western Art: Pre-History to Gothic / Honors | ART | A100 / A100H | 3     |
| Survey of Western Art: Renaissance to Modern / Honors | ART | A101 / A101H | 3     |
| Beginning Drawing / Honors                            | ART | A120 / A120H | 3     |

**Subtotal** **9**

#### List A - Select one (1) course:

|                     |     |      |   |
|---------------------|-----|------|---|
| Survey of Asian Art | ART | A103 | 3 |
|---------------------|-----|------|---|

**Subtotal** **3**

#### List B - Select one (1) course:

|                                      |      |              |   |
|--------------------------------------|------|--------------|---|
| Color and Design: Two-Dimensional    | ART  | A110         | 3 |
| Color and Design: Three-Dimensional  | ART  | A111         | 3 |
| Life Drawing 1                       | ART  | A121         | 3 |
| Perspective Drawing                  | ART  | A125         | 3 |
| Painting 2                           | ART  | A131         | 3 |
| Sculpture 1                          | ART  | A141         | 3 |
| Ceramics 1                           | ART  | A150         | 3 |
| Ceramics 2                           | ART  | A151         | 3 |
| Printmaking 1                        | ART  | A170         | 3 |
| Printmaking 2                        | ART  | A171         | 3 |
| Screen Process Printing              | ART  | A175         | 3 |
| Watercolor 1                         | ART  | A263         | 3 |
| Typography 1                         | DMAD | A115         | 3 |
| Introduction to Computer Graphics    | DMAD | A181         | 3 |
| Graphic Design                       | DMAD | A182         | 3 |
| Introduction to Photography / Honors | PHOT | A120 / A120H | 3 |
| Personal Expression                  | PHOT | A122         | 3 |
| Art Photography                      | PHOT | A283         | 4 |

**Subtotal** **3-4**

#### List C - Select one course from the following list (3-5 units) OR any course from List A or B not previously taken:

|   |      |              |   |
|---|------|--------------|---|
| Cultural Anthropology / Honors                      | ANTH | A100 / A100H | 3 |
| Multicultural Behavior                              | ANTH | A150         | 3 |
| Introduction to Linguistics                         | ANTH | A190         | 3 |
| History of Architecture 1 / Honors                  | ARCH | A290 / A290H | 3 |
| History of Architecture 2 / Honors                  | ARCH | A296 / A296H | 3 |
| Introduction to Art                                 | ART  | A107         | 3 |
| Women in Art  | ART  | A108         | 3 |
| Public Speaking                                     | CMST | A110         | 3 |
| Appreciation of Dance                               | DANC | A200         | 3 |
| Introduction to Creative Writing                    | ENGL | A119         | 3 |
| Contemporary Ethnic America                         | ETHS | A100         | 3 |
| The Ethnic Family                                   | ETHS | A190         | 3 |
| History & Appreciation of the Cinema                | FILM | A100         | 3 |
| Elementary French 1                                 | FREN | A180         | 5 |
| Elementary German 1                                 | GRMN | A180         | 5 |
| Afro-American History                               | HIST | A101         | 3 |
| Ethnic Groups of the United States: Their Histories | HIST | A150         | 3 |
| History of the United States to 1876 / Honors       | HIST | A170 / A170H | 3 |
| History of the United States Since 1876 / Honors    | HIST | A175 / A175H | 3 |
| Introduction to the Humanities                      | HUM  | A100         | 3 |

*Continued on next page*

**ART HISTORY AA-T (CONTINUED)**

|                                   |           |              |   |
|-----------------------------------|-----------|--------------|---|
| Elementary Italian 1              | ITAL      | A180         | 5 |
| Elementary Japanese 1             | JAPN      | A180         | 5 |
| History and Appreciation of Music | MUS       | A100         | 3 |
| Introduction to Philosophy        | PHIL      | A100         | 3 |
| Ethics                            | PHIL/RLST | A120         | 3 |
| Elementary Spanish 1 / Honors     | SPAN      | A180 / A180H | 5 |
| Introduction to Theatre           | THEA      | A100         | 3 |
| Elementary Vietnamese 1           | VIET      | A180         | 5 |

**Subtotal** 3-5

**Program Major Units** 18-21

**CSU or IGETC for CSU** 37-39

**Transferable electives as needed to satisfy unit requirement** Varies

**Total Degree Units** 60

**ART SERVICES**

**CERTIFICATE OF SPECIALIZATION**

This certificate is designed to prepare students seeking careers as exhibition designers and museum and gallery professionals. The training program includes consideration of the total visual presentation, design, and production of exhibitions and public & media promotions in cultural institutions such as museums and galleries. The program also includes training in the handling, storage and cartage of cultural objects. Basic gallery practices in archiving, registration processes and related art management techniques are covered. Students are encouraged to work toward an Associate of Arts degree to accompany this certificate. In addition, students with a BA or MA/MFA in Studio Art or Art History could use this certificate to enhance their marketable skills in the field.

**Program Outcomes**

1. Exhibit skills in Exhibition Design and Museum & Gallery management.
2. Create a portfolio of accomplishments in Exhibition Design and Curating including a prospectus for an exhibition of the student's own design and curation.
3. Show competence in the skills associated with handling Artworks for shipping, transportation and exhibiting as well as basic understanding of museum protocols regarding registration and archiving techniques.

| Course                              |     |      | Units       |
|-------------------------------------|-----|------|-------------|
| <b>FIRST SEMESTER</b>               |     |      |             |
| Color and Design: Two-Dimensional   | ART | A110 | 3           |
| Exhibition Design 1                 | ART | A145 | 3           |
| <b>Subtotal</b>                     |     |      | <b>6</b>    |
| <b>SECOND SEMESTER</b>              |     |      |             |
| Color and Design: Three-Dimensional | ART | A111 | 3           |
| Exhibition Design 2                 | ART | A245 | 3           |
| <b>Subtotal</b>                     |     |      | <b>6</b>    |
| <b>THIRD SEMESTER</b>               |     |      |             |
| Contemporary Art History            | ART | A102 | 3           |
| Professional Studies                | ART | A180 | 2.5         |
| <b>Subtotal</b>                     |     |      | <b>5.5</b>  |
| <b>Total Units</b>                  |     |      | <b>17.5</b> |

**CERAMICS**

**CERTIFICATE OF SPECIALIZATION**

The Ceramics certificate covers the interaction of clay and glaze, studio organization and maintenance, and industrial specialization. This program is intended to provide the necessary tools for a student to perform at basic levels within the ceramic community. Career opportunities include quality control and/or product manager at a ceramic studio, and ceramics instruction.

**Program Outcomes**

1. Students will demonstrate extensive ceramic knowledge.
2. Students will be employable at entry-level in the ceramics industry.

| Course                      |     |      | Units     |
|-----------------------------|-----|------|-----------|
| <b>FIRST SEMESTER</b>       |     |      |           |
| Ceramics 1                  | ART | A150 | 3         |
| <b>Subtotal</b>             |     |      | <b>3</b>  |
| <b>SECOND SEMESTER</b>      |     |      |           |
| Ceramics 2                  | ART | A151 | 3         |
| World History of Ceramics   | ART | A148 | 3         |
| <b>Subtotal</b>             |     |      | <b>6</b>  |
| <b>THIRD SEMESTER</b>       |     |      |           |
| Intermediate Ceramic Design | ART | A152 | 3         |
| <b>Subtotal</b>             |     |      | <b>3</b>  |
| <b>FOURTH SEMESTER</b>      |     |      |           |
| Ceramics and Its Narrative  | ART | A153 | 3         |
| <b>Subtotal</b>             |     |      | <b>3</b>  |
| <b>Total Units</b>          |     |      | <b>15</b> |

**NARRATIVE ILLUSTRATION**

**CERTIFICATE OF ACHIEVEMENT**

The Narrative Illustration option places its emphasis on a great variety of drawing and painting courses. The diversity of its curriculum may lead the student into career alternatives, such as Illustration for books, including children's literature, magazines, entertainment art, editorial illustrations and corporate brochures. Students will work in hand made traditional media as well as digital art and illustrations.

**Program Outcomes**

1. Create a series of illustrations in a variety of mediums demonstrating techniques and applications of current hands-on illustration techniques.
2. Demonstrate proficiency in drawing, perspective, and various mediums.
3. Create a portfolio utilizing multiple design techniques for the purpose of becoming freelance commercial artists and/or acceptance to an art college or university for advanced learning.



| Course   |            |      | Units            |
|--|------------|------|------------------|
| <b>FIRST SEMESTER</b>  |            |      |                  |
| Color & Design Two-Dimensional                               | ART        | A110 | 3                |
| Beginning Drawing  | ART        | A120 | 3                |
| Introduction to Computer Graphics                            | DMAD       | A181 | 3                |
| Narrative Illustration Restricted Electives                  | (see list) |      | 2-3              |
| <b>Subtotal</b>  |            |      | <b>11-12</b>     |
| <b>SECOND SEMESTER</b>                                       |            |      |                  |
| Life Drawing 1   | ART        | A121 | 3                |
| Perspective Drawing  | ART        | A125 | 3                |
| Illustration & Computer Graphics 1 with Adobe Illustrator Or | DMAD       | A190 | 3                |
| Image Manipulation & Graphics with Photoshop                 | DMAD       | A193 | 3                |
| Narrative Illustration Restricted Electives                  | (see list) |      | 2-3              |
| <b>Subtotal</b>  |            |      | <b>11-12</b>     |
| <b>THIRD SEMESTER</b>  |            |      |                  |
| Drawing 2  | ART        | A124 | 3                |
| Painting 1   | ART        | A130 | 3                |
| Or   |            |      |                  |
| Digital Painting   | ART        | A135 | 3                |
| Story Illustration Techniques                                | ART        | A143 | 3                |
| Life Sculpture 1   | ART        | A142 | 3                |
| Or   |            |      |                  |
| Figure Composition   | ART        | A220 | 3                |
| Or   |            |      |                  |
| Life Painting 1  | ART        | A236 | 3                |
| <b>Subtotal</b>  |            |      | <b>12</b>        |
| <b>FOURTH SEMESTER</b>                                       |            |      |                  |
| Illustration 2 - Sequential Illustration                     | ART        | A144 | 3                |
| Professional Studies   | ART        | A180 | 2.5              |
| Narrative Illustration Restricted Electives                  | (see list) |      | 3-4              |
| <b>Subtotal</b>  |            |      | <b>8.5-9.5</b>   |
| <b>Total Units</b>   |            |      | <b>42.5-45.5</b> |

**First/Second Semester Narrative Illustration Restricted Electives:**

|                                       |      |              |   |
|---------------------------------------|------|--------------|---|
| Survey of Modern and Contemporary Art | ART  | A102         | 3 |
| Painting 1                            | ART  | A130         | 3 |
| Digital Painting                      | ART  | A135         | 3 |
| Color and Design Three-Dimensional    | ART  | A111         | 3 |
| Life Sculpture 1                      | ART  | A142         | 3 |
| Book Arts                             | ART  | A286         | 2 |
| Introduction to Business / Honors     | BUS  | A100 / A100H | 3 |
| Children's Literature / Honors        | ENGL | A143/ A143H  | 3 |
| Introduction to Marketing             | MKTG | A100         | 3 |

**Fourth Semester Narrative Illustration Restricted Electives:**

|  |      |      |   |
|--|------|------|---|
| Product Illustration                       | ART  | A118 | 2 |
| Life Painting 1                            | ART  | A236 | 3 |
| Character Design                           | ART  | A251 | 3 |
| Watercolor 1                               | ART  | A263 | 3 |
| Cartooning 1                               | ART  | A269 | 3 |
| Rapid Illustration Techniques              | DMAD | A117 | 3 |
| Illustration and Graphics with Illustrator | DMAD | A190 | 3 |
| Photo Graphics with Photoshop              | DMAD | A193 | 3 |
| 2D Animation                               | DMAD | A280 | 3 |
| 3D Computer Graphics Animation             | DMAD | A281 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Narrative Illustration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree may require more than 60 units for completion, depending on electives chosen.**

**STUDIO ARTS**

**ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Studio Arts for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Studio Arts AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The program will provide an opportunity to develop all the skills necessary to be successful in the field of art. Students build confidence in their abilities and the quality of their professional portfolios. They participate in rigorous problem solving and conceptual assignments to develop critical thinking, creative problem solving and aesthetic understanding skills. This major introduces students to foundation, history and technical knowledge of many facets of Art.

**Program Outcomes**

1. Display competence in the use of tools, materials and concepts by completing a portfolio of original art and design projects.
2. Demonstrate ability to evaluate works of art and design through critical discussion and written assignments.
3. Demonstrate an understanding of the contribution of art and design to human experience.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |     |              | Units     |
|---|-----|--------------|-----------|
| <b>Core Courses:</b>                                  |     |              |           |
| Survey of Western Art: Renaissance to Modern / Honors | ART | A101 / A101H | 3         |
| Color and Design: Two-Dimensional                     | ART | A110         | 3         |
| Color and Design: Three-Dimensional                   | ART | A111         | 3         |
| Beginning Drawing / Honors                            | ART | A120 / A120H | 3         |
| <b>Subtotal</b>                                       |     |              | <b>12</b> |

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

|  |     |              |          |
|--|-----|--------------|----------|
| Survey of Western Art: Prehistory to Gothic / Honors | ART | A100 / A100H | 3        |
| Survey of Asian Art                                  | ART | A103         | 3        |
| <b>Subtotal</b>                                      |     |              | <b>3</b> |

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

|                               |     |      |   |
|-------------------------------|-----|------|---|
| Life Drawing 1                | ART | A121 | 3 |
| Or                            |     |      |   |
| Advanced Drawing              | ART | A124 | 3 |
| Perspective Drawing           | ART | A125 | 3 |
| Painting 1                    | ART | A130 | 3 |
| Painting 2                    | ART | A131 | 3 |
| Sculpture 1                   | ART | A141 | 3 |
| Life Sculpture 1              | ART | A142 | 3 |
| Story Illustration Techniques | ART | A143 | 3 |
| Jewelry 1                     | ART | A147 | 3 |
| Ceramics 1                    | ART | A150 | 3 |
| Ceramics 2                    | ART | A151 | 3 |
| Printmaking 1                 | ART | A170 | 3 |
| Printmaking 2                 | ART | A171 | 3 |
| Screen Process Printing       | ART | A175 | 3 |
| Sculpture 2                   | ART | A241 | 3 |
| Jewelry 2                     | ART | A247 | 3 |

*Continued on next page*

**STUDIO ARTS AA-T (CONTINUED)**

|   |      |              |               |
|---|------|--------------|---------------|
| Introduction to Computer Graphics                                   | DMAD | A181         | 3             |
| Introduction to Photography / Honors                                | PHOT | A120 / A120H | 3             |
| Personal Expression   | PHOT | A122         | 3             |
| Art Photography   | PHOT | A283         | 4             |
| <b>Subtotal</b>   |      |              | <b>9-10</b>   |
| <b>Program Major Units</b>  |      |              | <b>24-25</b>  |
| <b>CSU or IGETC for CSU</b>   |      |              | <b>37-39</b>  |
| <b>Transferable electives as needed to satisfy unit requirement</b> |      |              | <b>Varies</b> |
| <b>Total Degree Units</b>   |      |              | <b>60</b>     |

**Math/Physics Required Courses - Complete three (3) of the following courses:**

|   |      |              |               |
|---|------|--------------|---------------|
| Calculus 1 / Honors   | MATH | A180 / A180H | 4             |
| And   |      |              |               |
| Calculus 2 / Honors   | MATH | A185 / A185H | 4             |
| Or  |      |              |               |
| Calculus 1 and 2 Honors   | MATH | A182H        | 5             |
| Calculus-Based Physics: Mechanics / Honors                          | PHYS | A185 / A185H | 4             |
| And   |      |              |               |
| Calculus Based Physics: Electricity/Magnetism                       | PHYS | A280         | 4             |
| Or  |      |              |               |
| Calculus Based Physics: Modern                                      | PHYS | A285         | 4             |
| <b>Subtotal</b>   |      |              | <b>13-16</b>  |
| <b>Program Major Units</b>  |      |              | <b>24-27</b>  |
| <b>AS General Education Option 1, 2, or 3</b>                       |      |              | <b>Varies</b> |
| <b>Transferable electives as needed to satisfy unit requirement</b> |      |              | <b>Varies</b> |
| <b>Total Degree Units</b>   |      |              | <b>60</b>     |

**ASTRONOMY**

**ASTRONOMY**

**ASSOCIATE IN SCIENCE**

Upon completion of the requirements for the Associate in Science Degree in Astronomy, students will be prepared to transfer to CSU/UC and obtain a baccalaureate degree in the following majors: astronomy, astrophysics, or physics. This degree is also a stepping stone toward research internships, entry-level opportunities within the field, e.g., observatory and planetarium operations, and provides a solid foundation for pursuing an advanced degree.

The department strongly recommends that all declared Astronomy majors complete the following courses prior to transfer: Computer Science A131 (Python Programming 1), Math A185/185H (Calculus 2), Math A280/280H (Calculus 3), and MathA285/285H (Linear Algebra and Differential Equations).

**Program Outcomes**

1. Describe the constituents of the Universe and the relevant physical processes underlying their behavior.
2. Become familiar with the methods of observational astronomy and the analysis of data.
3. Develop the necessary knowledge and skills to analyze evidence and evaluate claims as related to astronomy.
4. Be prepared for admission to California State University/University of California schools in astronomy/astrophysics.

| Course  |      |               | Units    |
|---|------|---------------|----------|
| <b>Astronomy Required Courses:</b>                                      |      |               |          |
| Introduction to Astronomy / Honors                                      | ASTR | A100 / A100H  | 3        |
| Introduction to Astronomy Laboratory / Honors                           | ASTR | A100L / A100M | 1        |
| Introduction to Astrophysics  | ASTR | A200          | 4        |
| <b>Subtotal</b>   |      |               | <b>8</b> |
| <b>Astronomy Electives - Complete one (1) of the following courses:</b> |      |               |          |
| Planetary Astronomy   | ASTR | A101          | 3        |
| Stellar Astronomy   | ASTR | A102          | 3        |
| Cosmology   | ASTR | A103          | 3        |
| <b>Subtotal</b>   |      |               | <b>3</b> |

**ATHLETICS**

**ATHLETICS**

**CERTIFICATE OF ACHIEVEMENT**

This Certificate of Achievement is designed for students who wish to participate in intercollegiate athletics at Orange Coast College and works towards completing lower division general education. It provides student athletes the opportunity to develop skills related to leadership, teamwork, collaboration, and personal responsibility within a team environment. Students who complete this certificate will have demonstrated excellence in lower division general education coursework and in intercollegiate athletic courses.

**Program Outcomes**

1. Make progress towards completing general education to be eligible to transfer to a four-year institution.
2. Gain transferable life skills related to teamwork, collaboration, dedication, and completion.

| Course   |      |      | Units |
|--|------|------|-------|
| <b>Intercollegiate Athletics Courses - Select three (3) units:</b> |      |      |       |
| Basketball Team - Women's  | ATHL | A235 | 1.5   |
| Cross Country Team - Women's                                       | ATHL | A236 | 3     |
| Crew Team - Women's  | ATHL | A238 | 3     |
| Golf Team - Women's  | ATHL | A239 | 3     |
| Soccer Team - Women's  | ATHL | A240 | 3     |
| Fastpitch Team   | ATHL | A241 | 3     |
| Swimming Team - Women's  | ATHL | A242 | 3     |
| Tennis Team - Women's  | ATHL | A243 | 3     |
| Track and Field Team - Women's                                     | ATHL | A244 | 3     |
| Volleyball Team - Women's  | ATHL | A245 | 3     |
| Water Polo Team - Women's  | ATHL | A246 | 3     |
| Sand Volleyball Team - Women's                                     | ATHL | A247 | 3     |
| Baseball Team  | ATHL | A250 | 3     |
| Basketball Team - Men's  | ATHL | A251 | 3     |
| Crew Team - Men's  | ATHL | A252 | 3     |
| Cross Country Team - Men's   | ATHL | A253 | 3     |

|                              |      |      |   |
|------------------------------|------|------|---|
| Football Team                | ATHL | A254 | 3 |
| Golf Team - Men's            | ATHL | A255 | 3 |
| Soccer Team - Men's          | ATHL | A257 | 3 |
| Swimming Team - Men's        | ATHL | A258 | 3 |
| Tennis Team - Men's          | ATHL | A259 | 3 |
| Track and Field Team - Men's | ATHL | A260 | 3 |
| Volleyball Team - Men's      | ATHL | A261 | 3 |
| Water Polo Team - Men's      | ATHL | A263 | 3 |

**Subtotal 3**

**Team Conditioning Courses - Select three (3) units:**

|                              |      |      |       |
|------------------------------|------|------|-------|
| Sports Conditioning          | ATHL | A109 | 5-2.5 |
| Athletic Team Training       | ATHL | A119 | 5-2.5 |
| Fitness for Performance      | ATHL | A129 | 5-2.5 |
| Cardiovascular Fitness       | KIN  | A105 | 5-2.5 |
| Weight Training              | KIN  | A106 | 5-1.5 |
| Fitness Programs I           | KIN  | A107 | 5-3   |
| Strength and Conditioning    | KIN  | A108 | 5-3   |
| Fitness Programs II          | KIN  | A207 | 5-3   |
| Strength and Conditioning II | KIN  | A208 | 5-3   |

**Subtotal 3**

|                      |            |  |    |
|----------------------|------------|--|----|
| Restricted Electives | (see list) |  | 12 |
|----------------------|------------|--|----|

**Subtotal 12**

**Total Units 18**

**Athletics Certificate Restricted Electives - Select twelve (12) units:**

|  |           |              |   |
|--|-----------|--------------|---|
| Cultural Anthropology / Honors                           | ANTH      | A100 / A100H | 3 |
| Comparative Cultures                                     | ANTH      | A110         | 3 |
| Introduction to Linguistics                              | ANTH      | A190         | 3 |
| Introduction to Astronomy / Honors                       | ASTR      | A100 / A100H | 3 |
| Introduction to Astronomy Lab                            | ASTR      | A100L        | 1 |
| Western Art: Pre-History to Gothic / Honors              | ART       | A100 / A100H | 3 |
| Western Art: Pre-History to Post Impressionism / Honors  | ART       | A101 / A101H | 3 |
| Contemporary Art History                                 | ART       | A102         | 3 |
| Introduction to Art                                      | ART       | A107         | 3 |
| Introduction to Biology / Honors                         | BIOL      | A100 / A100H | 4 |
| Human Biology  | BIOL      | A125         | 3 |
| Cell and Molecular Biology                               | BIOL      | A180         | 4 |
| General Microbiology                                     | BIOL      | A210         | 5 |
| Human Anatomy  | BIOL      | A220         | 5 |
| Anatomy-Physiology                                       | BIOL      | A221         | 4 |
| Human Physiology   | BIOL      | A225         | 5 |
| Principles of Chemistry                                  | CHEM      | A100         | 3 |
| Introduction to Chemistry                                | CHEM      | A110         | 5 |
| Preparation for General Chemistry                        | CHEM      | A130         | 4 |
| General Chemistry A                                      | CHEM      | A180         | 5 |
| Interpersonal Communication                              | CMST      | A100         | 3 |
| Public Speaking  | CMST      | A110         | 3 |
| Introduction to Mass Communication                       | CMST      | A180         | 3 |
| Career and Life Planning: A Holistic Approach            | COUN      | A104         | 3 |
| Strategies for College Success                           | COUN      | A105         | 3 |
| Introduction to Computer Graphics                        | DMAD      | A181         | 3 |
| Human Ecology  | ECOL      | A100         | 3 |
| Or   |           |              |   |
| Introduction to Environmental Science                    | ESEC      | A100         | 3 |
| Economics: General Concepts                              | ECON      | A100         | 3 |
| Microeconomics / Honors                                  | ECON      | A170 / A170H | 3 |
| Macroeconomics / Honors                                  | ECON      | A175 / A175H | 3 |
| Freshman Composition                                     | ENGL      | A100         | 3 |
| Critical Thinking, Reading, Writing: Literature / Honors | ENGL      | A101 / A101H | 4 |
| Contemporary Ethnic America                              | ETHS      | A100         | 3 |
| Ethnic Groups in the U.S.: Their Histories / Honors      | ETHS/HIST | A150 / A150H | 3 |
| History & Appreciation of the Cinema                     | FILM      | A100         | 3 |
| History of Radio & Television                            | FILM      | A150         | 3 |
| Nutrition, Fitness, and Performance                      | FN        | A136         | 3 |
| Nutrition  | FN        | A170         | 3 |
| World Regional Geography / Honors                        | GEOG      | A100 / A100H | 3 |
| General Geology / Honors                                 | GEOL      | A105 / A105H | 3 |
| General Geology Lab                                      | GEOL      | A105L        | 1 |
| World History 1 / Honors                                 | HIST      | A161 / A161H | 3 |
| Western Civilization 1 / Honors                          | HIST      | A180 / A180H | 3 |
| History of the US to 1876 / Honors                       | HIST      | A170 / A170H | 3 |

|   |           |              |   |
|---|-----------|--------------|---|
| History of the US Since 1876 / Honors                 | HIST      | A175 / A175H | 3 |
| Personal Health Education/Personal Health             | HLED/PUBH | A100         | 3 |
| Child Growth and Development                          | HMDV      | A180         | 3 |
| Horticulture Science                                  | HORT      | A100         | 3 |
| Introduction to the Humanities                        | HUM       | A100         | 3 |
| Introduction to Kinesiology                           | KIN       | A202         | 3 |
| First Aid and CPR                                     | KIN       | A203         | 3 |
| Fitness and Health                                    | KIN       | A270         | 3 |
| Drugs and Sports                                      | KIN       | A271         | 3 |
| Movement Analysis                                     | KIN       | A272         | 3 |
| Strength Conditioning & Theory                        | KIN       | A280         | 3 |
| Introduction to Exercise Physiology                   | KIN       | A282         | 3 |
| Nutrition, Fitness, and Performance                   | KIN       | A283         | 3 |
| Coastal Oceanography                                  | MRSC      | A185         | 3 |
| Coastal Oceanography Lab                              | MRSC      | A185L        | 1 |
| Oceanography/Honors                                   | MRSC      | A100 / A100H | 3 |
| History and Appreciation of Music                     | MUS       | A100         | 3 |
| Music from Bach to Rock                               | MUS       | A105         | 3 |
| Fundamentals of Music                                 | MUS       | A115         | 3 |
| History of Rock Music                                 | MUS       | A139         | 3 |
| Liberal Arts Mathematics                              | MATH      | A100         | 3 |
| College Algebra                                       | MATH      | A115         | 4 |
| Trigonometry  | MATH      | A120         | 3 |
| Finite Mathematics with Applications                  | MATH      | A155         | 4 |
| Precalculus   | MATH      | A170         | 4 |
| Calculus 1 / Honors                                   | MATH      | A180 / A180H | 4 |
| Intro to Statistics / Stats for Behavioral Sciences   | MATH/PSYC | A160         | 4 |
| Introduction to Philosophy                            | PHIL      | A100         | 3 |
| Ethics  | PHIL/RLST | A120         | 3 |
| Critical Reasoning and Writing                        | PHIL      | A150         | 3 |
| Introduction to Photography                           | PHOT      | A120         | 3 |
| History and Aesthetics of Still Photography           | PHOT      | A130         | 3 |
| American Government/Honors                            | PSCI      | A180 / A180H | 3 |
| Introduction to Psychology / Honors                   | PSYC      | A100 / A100H | 3 |
| Principles of Human Sexuality 1                       | PSYC      | A165         | 3 |
| Psychology of Personality                             | PSYC      | A220         | 3 |
| Social Psychology                                     | PSYC      | A260         | 3 |
| Introduction to Religious Studies                     | RLST      | A100         | 3 |
| World Religion  | RLST      | A110         | 3 |
| Introduction to Sociology / Honors                    | SOC       | A100 / A100H | 3 |
| Introduction to Marriage and the Family               | SOC       | A110         | 3 |
| Introduction to Race and Ethnicity                    | SOC       | A150         | 3 |
| Analysis of Social Problems / Honors                  | SOC       | A185 / A185H | 3 |
| Introduction to Theatre                               | THEA      | A100         | 3 |
| Introduction to History and Literature of the Theatre | THEA      | A101         | 3 |
| Drama And Acting                                      | THEA      | A105         | 3 |

## AVIATION MAINTENANCE TECHNOLOGY

The Aviation Maintenance Technology program is divided into five areas: Airframe, Powerplant, Airframe and Powerplant, Avionics, and Helicopters.

The Aviation Maintenance Technology fields are of continuing growth and opportunity. The opportunities vary from field to field depending on the population's need for travel, business, and pleasure. Overall, the opportunities and availability outlooks are good to excellent. Each program prepares students in a specific area of aviation maintenance and will enable them to seek entry-level or higher levels of employment for positions such as: aircraft technician, aircraft inspector, aircraft mechanic, airframe and/or powerplant mechanic, airframe and/or powerplant technician, aviation mechanic, avionics technician, engine overhaul mechanic, FAA repair station technician, general aviation maintenance mechanic, and helicopter mechanic.

*Continued on next page*

**AVIATION MAINTENANCE TECHNOLOGY (CONTINUED)**  
**Mission Statement**

The Aircraft Maintenance Technology program mission, following counsel of local community and industry leaders, is to provide quality instruction to promote student success with comprehensive training for those interested in entering the aviation maintenance profession and for professionals in the aviation maintenance field striving to improve their knowledge and skills in the areas comprising of Airframe, Powerplant, Avionics and Helicopter Maintenance.

Note: Although the courses within the department's degrees and certificates are sequenced, they may be started at any time.

**AVIONICS**

**CERTIFICATE OF SPECIALIZATION**

The Avionics program is designed to prepare students for entry-level positions as installation, maintenance, and repair technicians for avionic equipment in private, corporate, and commercial aircraft.

The aircraft industry is quickly evolving its level of sophisticated navigational and communications systems to include microprocessor-based systems in all areas of the airframe. This requires a new competent work force capable in the state-of-the-art technology of the future.

This two-semester certificate program combines theory and laboratory practices with hands-on application in actual aircraft. Upon completion, the student will be ready for employment in this fast growing and exciting field.

**Program Outcomes**

1. Have the necessary skills and training for AVIONICS proficiency which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

| Course                                      |     |      | Units      |
|---|-----|------|------------|
| <b>FALL</b>                                 |     |      |            |
| General Electricity                         | AMT | A151 | 3          |
| Aircraft Avionics Circuits                  | AMT | A182 | 4          |
| G.R.O.L. Avionics Rules & Regulations       | AMT | A188 | 1.5        |
| <b>Subtotal</b>                             |     |      | <b>8.5</b> |
| <b>SPRING</b>                               |     |      |            |
| Airframe Communication & Navigation Systems | AMT | A181 | 2          |
| Airframe & Powerplant Instrument            | AMT | A180 | 2.5        |
| Avionics Installations and Troubleshooting  | AMT | A184 | 4          |
| <b>Subtotal</b>                             |     |      | <b>8.5</b> |
| <b>Total Units</b>                          |     |      | <b>17</b>  |

**HELICOPTER THEORY AND MAINTENANCE**

**CERTIFICATE OF SPECIALIZATION**

This program provides students with the general knowledge of rotary wing development, technology, construction, and a general survey of the helicopter industry. This program also provides a good understanding of the helicopter type aircraft to interested individuals, technicians, and pilots.

**Program Outcomes**

1. Have the necessary skills and training for HELICOPTER MAINTENANCE proficiency which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

| Course                 |     |      | Units    |
|------------------------|-----|------|----------|
| <b>FALL</b>            |     |      |          |
| Theory and Operations  | AMT | A140 | 3        |
| Helicopter Maintenance | AMT | A290 | 4        |
| <b>Total Units</b>     |     |      | <b>7</b> |

**AIRFRAME**

**CERTIFICATE OF ACHIEVEMENT**

This program provides training for the student who desires to be an Airframe Technician. The training received enables the technician to return to service an airplane, related part, and appliance after performing, supervising or inspecting its maintenance or alterations. This Certificate of Achievement can be acquired in two semesters, one intersession, and one summer school session.

This certificate would enable students to achieve employment at local aircraft manufacturing and repair facilities.

**Program Outcomes**

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for AIRFRAME certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

| Course                                       |     |      | Units     |
|--|-----|------|-----------|
| <b>FALL</b>                                  |     |      |           |
| General Maintenance Records                  | AMT | A150 | 4         |
| General Electricity                          | AMT | A151 | 3         |
| General Airframe and Powerplant Fuel Systems | AMT | A152 | 2         |
| General Materials, Processes & Welding       | AMT | A153 | 3         |
| General Weight and Balance, Math and Physics | AMT | A154 | 3         |
| <b>Subtotal</b>                              |     |      | <b>15</b> |

## SPRING

|  |     |      |     |
|--|-----|------|-----|
| Airframe and Powerplant Electricity                  | AMT | A160 | 6   |
| Airframe and Powerplant Instrumentation              | AMT | A180 | 2.5 |
| Airframe Sheet Metal & Composite Structural Repair   | AMT | A161 | 5.5 |
| Airframe Assembly & Rigging, Pneumatics & EC Systems | AMT | A162 | 3   |
| Airframe Communication and Navigation Systems        | AMT | A181 | 2   |
| General Blueprint Reading and Drafting               | AMT | A155 | 2   |

**Subtotal** 21

## SUMMER

|                                    |     |      |     |
|------------------------------------|-----|------|-----|
| Airframe Hydraulics & Landing Gear | AMT | A163 | 4.5 |
|------------------------------------|-----|------|-----|

**Subtotal** 4.5

**Total Units** 40.5

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe written examination.

## ASSOCIATE IN SCIENCE DEGREE

Complete the Airframe Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## AIRFRAME AND POWERPLANT

### CERTIFICATE OF ACHIEVEMENT

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft.

Trained technicians are also successful in related fields of aircraft manufacturing, electronics, hydraulics, pneumatics, welding, sheet metal, quality control, civil and military defense. Additionally, students who have followed this program may earn an engineering degree at any one of several four-year institutions.

#### Program Outcomes

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for AIRFRAME & POWERPLANT certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

| Course                                     |     |      | Units     |
|--|-----|------|-----------|
| <b>FALL</b>                                |     |      |           |
| General Maintenance Records                | AMT | A150 | 4         |
| General Electricity                        | AMT | A151 | 3         |
| General Airframe & Powerplant Fuel Systems | AMT | A152 | 2         |
| General Materials, Processes & Welding     | AMT | A153 | 3         |
| General Weight & Balance, Math & Physics   | AMT | A154 | 3         |
| <b>Subtotal</b>                            |     |      | <u>15</u> |

## SPRING

|  |     |      |     |
|--|-----|------|-----|
| Airframe & Powerplant Electricity                    | AMT | A160 | 6   |
| Airframe & Powerplant Instrumentation                | AMT | A180 | 2.5 |
| Airframe Sheet Metal & Composite Structural Repair   | AMT | A161 | 5.5 |
| Airframe Assembly & Rigging, Pneumatics & EC Systems | AMT | A162 | 3   |

|   |     |      |   |
|---|-----|------|---|
| Airframe Communication & Navigation Systems | AMT | A181 | 2 |
| General Blueprint Reading & Drafting        | AMT | A155 | 2 |

**Subtotal** 21

## SUMMER

|                                    |     |      |     |
|------------------------------------|-----|------|-----|
| Airframe Hydraulics & Landing Gear | AMT | A163 | 4.5 |
|------------------------------------|-----|------|-----|

**Subtotal** 4.5

## FALL

|  |     |      |   |
|--|-----|------|---|
| Powerplant Reciprocating Engines                       | AMT | A170 | 6 |
| Powerplant Fuel Metering, Exhaust, & Induction Systems | AMT | A171 | 4 |

**Subtotal** 10

## SPRING

|  |     |      |     |
|--|-----|------|-----|
| Powerplant Ignition Systems                  | AMT | A174 | 2.5 |
| Powerplant Propeller and Lubricating Systems | AMT | A172 | 4   |
| Powerplant Gas Turbine Engines               | AMT | A173 | 6   |

**Subtotal** 12.5

**Total Units** 63

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Airframe & Powerplant written examinations.

## ASSOCIATE IN SCIENCE DEGREE

Complete the Airframe and Powerplant Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires 81 units for completion.**

## POWERPLANT

### CERTIFICATE OF ACHIEVEMENT

This program provides students with the technical skills and systems analysis necessary for entry-level positions as Airframe and Powerplant Certificated Mechanics in the aviation industry, such as airframe inspection, powerplant inspection, maintenance, and return-to-flight status of all types of U.S. Certificated aircraft. This certificate would enable a student to achieve employment in local powerplant and propeller overhaul facilities and repair stations.

#### Program Outcomes

1. Have the necessary skills and training for proficiency in taking written, oral and practical exams for POWERPLANT certification which may be required for employment.
2. Be able to improve or develop additional proficiencies required for professional growth or advancement in their current employment. All qualification training and tests are prescribed and follow the guide of the Federal Aviation.

*Continued on next page*

**POWERPLANT CERTIFICATE (CONTINUED)**

| Course  |                    |      | Units       |
|---|--------------------|------|-------------|
| <b>FALL</b>   |                    |      |             |
| General Maintenance Records                           | AMT                | A150 | 4           |
| General Electricity                                   | AMT                | A151 | 3           |
| General Airframe & Powerplant Fuel Systems            | AMT                | A152 | 2           |
| General Materials, Processes & Welding                | AMT                | A153 | 3           |
| General Weight & Balance, Math & Physics              | AMT                | A154 | 3           |
|   | <b>Subtotal</b>    |      | <b>15</b>   |
| <b>SPRING</b>   |                    |      |             |
| Airframe & Powerplant Instrument                      | AMT                | A180 | 2.5         |
| General Blueprint Reading and Drafting                | AMT                | A155 | 2           |
|   | <b>Subtotal</b>    |      | <b>4.5</b>  |
| <b>FALL</b>   |                    |      |             |
| Powerplant Reciprocating Engines                      | AMT                | A170 | 6           |
| Powerplant Fuel Metering, Exhaust & Induction Systems | AMT                | A171 | 4           |
|   | <b>Subtotal</b>    |      | <b>10</b>   |
| <b>SPRING</b>   |                    |      |             |
| Powerplant Ignition Systems                           | AMT                | A174 | 2.5         |
| Powerplant Propeller and Lubricating Sys              | AMT                | A172 | 4           |
| Powerplant Gas Turbine Engines                        | AMT                | A173 | 6           |
|   | <b>Subtotal</b>    |      | <b>12.5</b> |
|   | <b>Total Units</b> |      | <b>42</b>   |

Program approved by the Federal Aviation Administration (FAA).

Completion of the above enables the student to take the FAA Powerplant written examination.

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Powerplant Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**AVIATION SCIENCE**

In order to attain licensing as a pilot, students are required to satisfy aeronautical experience requirements as outlined in applicable subparts of the Federal Aviation Regulations (FAR). The majority of this experience must be accumulated in actual aircraft. Flight training is necessary for students to meet the specific requirements of FAR 61.109 (Private Pilot), FAR 61.65 (Instrument) and FAR 61.129 (Commercial) licensing. Flight time and Instructor fees are billed separately from ground school courses. In all APT Flight Lab classes, fees are \$125 per hour for primary training aircraft, \$155 per hour for complex training aircraft, and flight instructor fees are \$60 per hour in college owned aircraft. Minimum cost to meet the requirements of FAR 61.109 in college owned aircraft is approximately \$5500. However, most students require training beyond the minimum hours required in FAR 61.109, which increases total cost. Aircraft and instructor fees are subject to change.

College owned aircraft are currently being used for training under flight labs APT A120, APT A121, APT A122, APT A123 and APT A124. Total cost to meet the minimum requirements of FAR 61.65 is approximately \$8000. Most students require training beyond the minimum hours required of FAR 61.65. This will increase total cost. Fees are subject to change. Estimated cost to meet the minimum aeronautical experience requirements of FAR 61.129 is \$21,000. Aircraft and instructor fees are subject to change. At the completion of APT A120, (35 hours), APT A121,(74 hours),

APT A122, (120 hours), APT A123 (variable hours), and APT A124 (variable hours) students should have acquired the 250 minimum hours of total flight time required for licensing as a commercial pilot. Total program cost is approximately \$34,000.

FAA Certified Advanced Aviation Training Devices (AATD) may be used to accrue aeronautical experience requirements of FAR 61.109, FAR 61.65, and FAR 61.129. Costs for students to use college-owned AATD's will be \$60 per hour and flight instructor fees are \$60 per hour. Prices for AATD's and instructor fees are subject to change. The amount of aeronautical experience the FAA will accept in AATD's will be dependent on the airmen certificate sought. Refer to FAR 61.109, FAR 61.65, and FAR 61.129 for more information regarding the approved usage of AATD's for aeronautical experience.

Flight training is conducted in accordance with an FAA approved part 141 syllabus provided by the vendor. Veteran students using GI Bill Education Benefits are limited to a maximum amount of flight and ground training hours. Training expenses incurred beyond the maximum approved hours will be at the student's expense. Refer to the program requirements as outlined in the course syllabus.

All flight lab students are required to obtain a second-class medical certificate in order to qualify for flight lab participation and program certification.

Additional costs include but are not limited to, second-class medical certificate, pilot supplies, program materials, airport badge, no show fees and check-rides. These fees are not included in the total program cost and must be paid separately by the student.

All APT courses are financial aid eligible and VA benefit eligible if the student is enrolled with Aviation Science as their declared program of study (major).

All students, including VA benefit eligible students, are responsible to complete scheduled flight times. Students that fail to "show" for a scheduled flight time assume all fees incurred with the "no show" designation, and will be responsible for fees owed to the scheduled flight time provider.

For additional information regarding Aviation Pilot Training courses, contact the instructor or Division Dean of Technology (714) 432-5194. For additional information regarding Veterans Administration benefits contact the Veterans Services Office at (714) 432-0202 ext. 26376.

**AVIATION SCIENCE**

**CERTIFICATE OF ACHIEVEMENT**

This program of study academically prepares men and women of all ages for entry into the world of commercial aviation. In addition to airline flying many positions are available worldwide for trained commercial pilots. Businesses large and small hire corporate pilots for executive transport. Government agencies, both federal and state, hire commercial pilots for law enforcement, land management, wildlife management and staff logistics. Pilots are also in demand for fire suppression, emergency medical transportation and charter.

The curriculum is designed for students with no flying experience. Courses will systematically prepare individuals academically for the certificates and ratings required to operate aircraft as a commercial pilot. In addition, flight lab courses are offered as suggested electives enabling the student to complete all aspects of their training under the auspices of the college and to accrue the flight hours necessary for licensing as a commercial pilot.

The course of study can be tailored to individual requirements. The small business owner who only needs to use an aircraft for personal transportation can end their training with the 2 and preparation for the Instrument rating. A student seeking a career as a professional pilot would progress through the curriculum to earn a Commercial Pilot Certificate of Specialization along with a Turbine Transition Skill Certificate. All training is conducted in accordance labs are conducted in accordance with an approved FAR Part 141 syllabus.

**Program Outcomes**

1. Develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered written examinations for licensing as pilots.
2. Develop the analytical and critical thinking skills necessary for completion of aviation ground school academic courses giving them the background knowledge necessary to enter the air transportation industry as professionals in non-flying occupations.

| Course                               |     |      | Units     |
|--------------------------------------|-----|------|-----------|
| Private Pilot Aviation Ground School | APT | A130 | 5         |
| Aviation Navigation                  | APT | A132 | 3         |
| Aviation-Meteorology                 | APT | A133 | 3         |
| Advanced Aircraft & Engines          | APT | A146 | 3         |
| Basic Air Transportation             | APT | A180 | 3         |
| <b>Subtotal</b>                      |     |      | <b>17</b> |

Select nine (9) units from one of the following tracks (all units must be from the same track):

**Track 1:**

|   |     |      |   |
|---|-----|------|---|
| Instrument Pilot Aviation Ground School | APT | A134 | 3 |
| Aerodynamics                            | APT | A138 | 3 |
| Commercial Pilot Aviation Ground School | APT | A139 | 3 |

**Track 2:**

|   |     |      |          |
|---|-----|------|----------|
| Introduction to Airport Operations      | APT | A110 | 3        |
| Introduction to Flight Operations       | APT | A115 | 3        |
| Airline Transport Pilot Ground Schedule | APT | A145 | 3        |
| <b>Subtotal</b>                         |     |      | <b>9</b> |

Select six (6) units from the following electives (courses used above may not fulfill elective units):

|  |      |      |          |
|--|------|------|----------|
| Introduction to Airport Operations         | APT  | A110 | 3        |
| Introduction to Flight Operations          | APT  | A115 | 3        |
| Private Pilot Flight Lab                   | APT  | A120 | 1        |
| Instrument Pilot Flight Lab                | APT  | A121 | 1        |
| Commercial Pilot Flight Lab                | APT  | A122 | 1        |
| Private Pilot Adv. Flight Lab              | APT  | A123 | 1        |
| Advanced Commercial Pilot Flight Lab       | APT  | A124 | 1        |
| Multi-Engine Aircraft Operations Lab       | APT  | A126 | 1        |
| Flight Instructor Ground School            | APT  | A140 | 3        |
| Airline Transport Pilot Ground School      | APT  | A145 | 3        |
| Advanced Aircraft & Engines                | APT  | A146 | 3        |
| Human Factors and Crew Resource Management | APT  | A192 | 3        |
| Financial Accounting                       | ACCT | A101 | 4        |
| Managerial Accounting                      | ACCT | A102 | 2        |
| Microeconomics                             | ECON | A170 | 3        |
| Macroeconomics                             | ECON | A175 | 3        |
| <b>Subtotal</b>                            |      |      | <b>6</b> |

**Total Units 22**

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Aviation Science Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**PROFESSIONAL UPGRADE CERTIFICATES**

The following Professional Upgrade Certificates are intended for the advanced student or the employed aerospace professional who desires advanced or recurrent training in a specific area. Certificates may be obtained from the Technology Division office by bringing in official records showing the successful completion of required courses.

**AIRCRAFT DISPATCHER**

**CERTIFICATE OF ACHIEVEMENT**

In cooperation with the pilot, the flight dispatcher furnishes a flight plan that enables the aircraft to arrive at its destination on schedule with the maximum payload and the least operating cost. The flight dispatcher considers en route and destination weather, winds aloft, alternate destinations, fuel required, altitudes, and traffic flow. The dispatcher's signature, along with that of the pilot, releases the aircraft for flight. The dispatcher maintains a constant watch on all flights dispatched, and is responsible in joint agreement with the airline captain for flight planning, route and altitude selection, fuel load requirements, aircraft legality and complying with FAA regulations. The dispatcher is the go-between for the pilot and ground service personnel, and keeps all personnel concerned with the flight informed about its status. The dispatcher must be familiar with navigation facilities over airline routes and at airports as well as with the takeoff, cruising, and landing characteristics of all aircraft operated by the airline. The flight dispatcher also must ride periodically in the cockpit with the flight crew to observe flight routes, conditions, and airports.

**Program Outcome**

1. Students will develop the analytical and critical thinking skills necessary for completion of aircraft dispatcher training and successful completion of federally administered knowledge and practical tests.

| Course                                  |     |      | Units     |
|---|-----|------|-----------|
| <b>FALL</b>                             |     |      |           |
| Private Pilot Aviation Ground School    | APT | A130 | 5         |
| Aviation-Meteorology                    | APT | A133 | 3         |
| <b>Subtotal</b>                         |     |      | <b>8</b>  |
| <b>SPRING</b>                           |     |      |           |
| Aviation-Meteorology                    | APT | A132 | 3         |
| Instrument Pilot Aviation Ground School | APT | A134 | 3         |
| <b>Subtotal</b>                         |     |      | <b>6</b>  |
| <b>FALL</b>                             |     |      |           |
| Commercial Pilot Aviation Ground School | APT | A139 | 3         |
| <b>Subtotal</b>                         |     |      | <b>3</b>  |
| <b>SPRING</b>                           |     |      |           |
| Airline Transport Pilot Ground School   | APT | A145 | 3         |
| Aircraft Dispatcher                     | APT | A150 | 5         |
| <b>Subtotal</b>                         |     |      | <b>8</b>  |
| <b>Total Units</b>                      |     |      | <b>25</b> |

## AIRLINE TRANSPORT PILOT

### CERTIFICATE OF SPECIALIZATION

The Airline Transport Pilot certificate of specialization covers those areas of aeronautical knowledge required under Federal Aviation Regulation 61.155 for the FAA Airline Transport Pilot Certificate. Courses are also intended to satisfy the knowledge requirements for students who are pursuing careers as aircraft dispatchers.

#### Program Outcomes

1. Students will develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered knowledge exams for licensing as pilots.

| Course                                     |     |      | Units    |
|--|-----|------|----------|
| Aerodynamics                               | APT | A138 | 3        |
| Airline Transport Pilot Ground School      | APT | A145 | 3        |
| Human Factors and Crew Resource Management | APT | A192 | 3        |
| <b>Total Units</b>                         |     |      | <b>9</b> |

## COMMERCIAL PILOT

### CERTIFICATE OF SPECIALIZATION

A program of study that helps prepare a pilot, already in possession of a Private Pilot license flight instruction to meet the licensing requirements as a Commercial Pilot as well as preparing the student for the Commercial Pilot Knowledge Test. This course meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.125

#### Program Outcomes

1. Develop the analytical and critical thinking skills necessary for completion of flight training and successful completion of federally administered written examinations for licensing as pilots.
2. Develop the critical thinking and analytical thinking skills necessary for completion of academic courses giving them the knowledge necessary to enter the air transportation industry.

| Course                                  |     |      | Units     |
|---|-----|------|-----------|
| Aerodynamics                            | APT | A138 | 3         |
| Commercial Pilot Aviation Ground School | APT | A139 | 3         |
| Advanced Aircraft and Engines           | APT | A146 | 3         |
| Basic Air Transportation                | APT | A180 | 3         |
| <b>Total Units</b>                      |     |      | <b>12</b> |

#### Commercial Pilot Suggested Electives:

|                                      |     |      |   |
|--------------------------------------|-----|------|---|
| Commercial Pilot Flight Lab          | APT | A122 | 2 |
| Advanced Commercial Pilot Flight Lab | APT | A124 | 1 |

## FLIGHT OPERATIONS

### CERTIFICATE OF SPECIALIZATION

The Flight Operations Certificate of Specialization covers basic flight theory, advanced meteorology, airport and airline economics and management, advanced aircraft systems and aircraft navigation. Courses are intended to provide knowledge in topics which will allow the student to enter the work force in the field of flight operations. Careers include aircraft dispatch, aircraft and aircrew scheduling, airport operations and Fixed Base Operations.

#### Program Outcomes:

1. Develop critical and analytical thinking skills necessary for completion of federally administered knowledge tests.

| Course                                |     |      | Units     |
|---------------------------------------|-----|------|-----------|
| Introduction to Airport Operations    | APT | A110 | 3         |
| Introduction to Flight Operations     | APT | A115 | 3         |
| Private Pilot Aviation Ground School  | APT | A130 | 5         |
| Airline Transport Pilot Ground School | APT | A145 | 3         |
| Introduction to Business              | BUS | A100 | 3         |
| <b>Total Units</b>                    |     |      | <b>17</b> |

#### Flight Operations Suggested Electives:

|                       |      |      |   |
|-----------------------|------|------|---|
| Financial Accounting  | ACCT | A101 | 4 |
| Managerial Accounting | ACCT | A102 | 4 |
| Microeconomics        | ECON | A170 | 3 |
| Macroeconomics        | ECON | A175 | 3 |

## INSTRUMENT PILOT

### CERTIFICATE OF SPECIALIZATION

A program of study that helps prepare a pilot, already in possession of a Private Pilot license flight instruction to meet the licensing requirements as an Instrument Rated Pilot. This course meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.65(b).

#### Program Outcomes

1. Develop the critical and analytical thinking skills necessary for completion of instrument flight training and successful completion of federally administered practical and knowledge tests for the instrument rating.

### INSTRUMENT PILOT CERTIFICATE OF SPECIALIZATION

| Course                                  |     |      | Units    |
|---|-----|------|----------|
| Aviation Navigation                     | APT | A132 | 3        |
| Instrument Pilot Aviation Ground School | APT | A134 | 3        |
| <b>Total Units</b>                      |     |      | <b>6</b> |

#### Instrument Pilot Suggested Electives

|                             |     |      |   |
|-----------------------------|-----|------|---|
| Instrument Pilot Flight Lab | APT | A121 | 2 |
| Private Pilot Flight Lab    | APT | A120 | 2 |



## PRIVATE PILOT

### CERTIFICATE OF SPECIALIZATION

Private pilot training is the entry point to the exciting world of aviation. Private pilots are licensed to fly for personal pleasure and enjoyment. This course of study meets the aeronautical knowledge requirements of Federal Aviation Regulation (FAR) Part 61.105.

#### Program Outcomes

- Students will develop the analytical and critical thinking skills necessary for completion of federally administered practical and knowledge tests.

| Course                               |     |      | Units    |
|--------------------------------------|-----|------|----------|
| Private Pilot Aviation Ground School | APT | A130 | 5        |
| Aviation-Meteorology                 | APT | A133 | 3        |
| <b>Total Units</b>                   |     |      | <b>8</b> |

#### Private Pilot Suggested Electives:

|                          |     |      |   |
|--------------------------|-----|------|---|
| Private Pilot Flight Lab | APT | A120 | 1 |
|--------------------------|-----|------|---|

## UNMANNED AIRCRAFT SYSTEMS

### CERTIFICATE OF SPECIALIZATION

The program curriculum allows students to explore the entirety of unmanned aircraft systems. Courses highlight specific characteristics of different aircraft, how they are built and fundamentals of control and propulsion systems. Students will explore how unmanned aircraft systems integrate into the larger aviation systems, including safety policies, regulations and automation procedures.

The program can be tailored to meet the needs of individual students without any prior unmanned aircraft systems operating experience.

Upon completion of the program students will be prepared to become commercial Unmanned Aircraft Systems pilots, technicians and programmers in various industry sectors in a broad range of applications.

#### Program Outcomes

- Students who complete the Unmanned Aircraft Systems Certificate of Specialization will be capable of deploying and piloting unmanned aircraft systems, managing flight control systems, collecting and analyzing telemetry data, programming autonomous flight missions and securely communicating with a variety of different aircraft flying different types of missions.

| Course                                    |     |      | Units     |
|---|-----|------|-----------|
| Introduction to Unmanned Aircraft Systems | APT | A131 | 3         |
| Unmanned Aircraft Systems Lab             | APT | A151 | 1         |
| Introduction to UAS Automation            | CIS | A160 | 4         |
| Business Intelligence and Data Mining     | CIS | A177 | 3         |
| Introduction to the Internet of Things    | CIS | A263 | 3         |
| <b>Total Units</b>                        |     |      | <b>14</b> |

## BIOLOGY

### BIOLOGY

#### ASSOCIATE IN SCIENCE DEGREE

The Biological Associate of Science degree is intended to instill a desire in our students to learn more about the biological sciences, encourage critical thinking about how life functions in the natural world, and help students become scientifically literate citizens who can make informed decisions about biologically related issues.

#### Program Outcomes

- Use the scientific method to design, carry out, summarize & evaluate tests of biological hypotheses using modern laboratory equipment.
- Describe the biological processes that occur within or among organisms (e.g., protein synthesis, cell-to-cell communication, genetic transmission, digestion, reproduction, and nutrient flow through an ecosystem).
- Describe the variations observed in organisms and explain how populations have evolved through time.

| Course  |      |       | Units |
|---|------|-------|-------|
| <b>Core Courses - List A - Select one option from the following (9-12 units):</b> |      |       |       |
| <b>Option 1</b>   |      |       |       |
| Cell and Molecular Biology  | BIOL | A180  | 4     |
| Diversity of Organisms  | BIOL | A185  | 5     |
| <b>Option 2</b>   |      |       |       |
| Cell and Molecular Biology  | BIOL | A180  | 4     |
| Zoology   | BIOL | A182  | 3     |
| Zoology Lab   | BIOL | A182L | 1     |
| Botany  | BIOL | A183  | 3     |
| Botany Lab  | BIOL | A183L | 1     |

**Subtotal** **9-12**

#### Core Courses - List B - Select one (1) course from the following (2-5 units):

|                      |      |      |   |
|----------------------|------|------|---|
| General Microbiology | BIOL | A210 | 5 |
| Human Anatomy        | BIOL | A220 | 5 |
| Anatomy-Physiology   | BIOL | A221 | 4 |
| Human Physiology     | BIOL | A225 | 5 |
| Evolutionary Ecology | BIOL | A280 | 4 |
| Biochemistry         | BIOL | A281 | 2 |
| Molecular Biology    | BIOL | A282 | 2 |
| Genetics             | BIOL | A283 | 4 |

**Subtotal** **2-5**

*Continued on next page*

**BIOLOGY AS DEGREE (CONTINUED)**

**Restricted Electives - A minimum of five (5) units of Chemistry and four (4) units of Math:**

|   |      |              |     |
|---|------|--------------|-----|
| General Chemistry A                                       | CHEM | A180         | 5   |
| General Chemistry B                                       | CHEM | A185         | 5   |
| Organic Chemistry A                                       | CHEM | A220         | 3   |
| Organic Chemistry A Lab                                   | CHEM | A220L        | 2   |
| Organic Chemistry B                                       | CHEM | A225         | 3   |
| Organic Chemistry B Lab                                   | CHEM | A225L        | 2   |
| Calculus 1 / Honors                                       | MATH | A180 / A180H | 4   |
| Calculus 2 / Honors                                       | MATH | A185 / A185H | 4   |
| Calculus 3 / Honors                                       | MATH | A280 / A280H | 4-5 |
| Intro to Linear Algebra & Differential Equations / Honors | MATH | A285 / A285H | 4-5 |

**Subtotal** **9-10**

**Program Major Units** **20-27**

**AS General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

**BIOLOGY**

**ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

Students graduating with an Associate in Science in Biology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Biology AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This curriculum is designed to allow students to study a range of biological topics in cell and molecular biology, survey the diversity of organisms on our planet, and receive additional STEM preparation. The coursework prepares students to employ the scientific method, think critically and apply reasoning skills to analyze real world situations. All students receiving the AS-T degree in Biology should be fully prepared for transfer to a California State University and have the foundation needed to pursue a baccalaureate degree to prepare for careers as biologists in fields such as research, industry and education. The requirements for the degree include two semesters of biology courses, two semesters of chemistry, two semesters physics and one semester of mathematics. It is strongly recommended that biology majors take an additional mathematics class and two semesters of organic chemistry in addition to the degree requirements, however this cannot be included as a requirement due to unit limitations.

**Program Outcomes**

1. Use the scientific method to design, carry out, summarize, and evaluate tests of biological hypotheses using modern laboratory equipment.
2. Describe the biological processes that occur within or among organisms (e.g., protein synthesis, cell-to-cell communication, genetic transmission, digestion, reproduction, nutrient flow through an ecosystem).
3. Describe the variations observed in organisms and explain how populations have evolved through time.

4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |      |              | Units         |
|---|------|--------------|---------------|
| <b>Required Core:</b>   |      |              |               |
| Cell and Molecular Biology  | BIOL | A180         | 4             |
| Diversity of Organisms  | BIOL | A185         | 5             |
| <b>Subtotal</b>   |      |              | <b>9</b>      |
| <b>List A:</b>  |      |              |               |
| General Chemistry A   | CHEM | A180         | 5             |
| General Chemistry B   | CHEM | A185         | 5             |
| Calculus 1 / Honors   | MATH | A180 / A180H | 4             |
| Algebra Based Physics: Mechanics                                    | PHYS | A120         | 4             |
| And   |      |              |               |
| Algebra Based Physics: Electricity/Magnetism                        | PHYS | A125         | 4             |
| Or  |      |              |               |
| Calculus Based Physics: Mechanics                                   | PHYS | A185         | 4             |
| And   |      |              |               |
| Calculus Based Physics: Electricity/Magnetism                       | PHYS | A280         | 4             |
| <b>Subtotal</b>   |      |              | <b>22</b>     |
| <b>Program Major Units</b>  |      |              | <b>31</b>     |
| <b>CSU General Education Breadth or IGETC for CSU</b>               |      |              | <b>37-39</b>  |
| <b>Transferable electives as needed to satisfy unit requirement</b> |      |              | <b>Varies</b> |
| <b>Total Degree Units</b>   |      |              | <b>60</b>     |

**BUSINESS**

**BUSINESS ADMINISTRATION**

**CERTIFICATE OF ACHIEVEMENT**

The Business Administration program is designed to provide the opportunity for the transfer business major to achieve an Associate in Science degree. Students are advised to check course transferability for the school to which they intend to transfer.

**Program Outcomes**

1. Function effectively in entry-level business positions or at a four-year college business program using the skills, principles, and tools they have acquired.
2. Effectively apply and utilize the business principles and techniques they have learned in a business environment or at a four-year college business program.
3. Demonstrate effective written and/or oral skills.

| Course                                |      |      | Units |
|---------------------------------------|------|------|-------|
| Financial Accounting                  | ACCT | A101 | 4     |
| Managerial Accounting                 | ACCT | A102 | 4     |
| Introduction to Business              | BUS  | A100 | 3     |
| Business Law                          | BUS  | A110 | 3     |
| Business Communication                | BUS  | A139 | 3     |
| Introduction to Computer Info Systems | CIS  | A111 | 3     |
| Microeconomics                        | ECON | A170 | 3     |
| Macroeconomics                        | ECON | A175 | 3     |

|  |           |              |              |
|--|-----------|--------------|--------------|
| Introduction to Statistics / Stats for Behavioral Sciences | MATH/PSYC | A160         | 4            |
| Business Calculus  | MATH      | A140         | 4            |
| Or   |           |              |              |
| Calculus 1 / Honors  | MATH      | A180 / A180H | 4            |
| Or   |           |              |              |
| Honors Calculus 1 and 2                                    | MATH      | A182H        | 5            |
| <b>Total Units</b>   |           |              | <b>34-35</b> |

**Business Administration Suggested Electives:**

|                                      |      |      |   |
|--------------------------------------|------|------|---|
| Accounting with Quickbooks and Excel | ACCT | A110 | 3 |
| Business Finance                     | BUS  | A200 | 3 |
| Critical Reasoning and Writing       | PHIL | A150 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Business Administration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**BUSINESS ADMINISTRATION**

**ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

Students graduating with an Associate in Science in Business Administration for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Business Administration AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

- Function effectively in entry-level business positions or at a four-year college business program using the skills, principles, and tools they have acquired.
- Demonstrate effective written and/or oral skills.
- Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                |      |      | Units     |
|-----------------------|------|------|-----------|
| Financial Accounting  | ACCT | A101 | 4         |
| Managerial Accounting | ACCT | A102 | 4         |
| Business Law          | BUS  | A110 | 3         |
| Microeconomics        | ECON | A170 | 3         |
| Macroeconomics        | ECON | A175 | 3         |
| <b>Subtotal</b>       |      |      | <b>17</b> |

**LIST A - Select one course from the following:**

|                     |      |              |          |
|---------------------|------|--------------|----------|
| Business Calculus   | MATH | A140         | 4        |
| Finite Mathematics  | MATH | A155         | 4        |
| Statistics / Honors | MATH | A160 / A160H | 4        |
| <b>Subtotal</b>     |      |              | <b>4</b> |

**LIST B - Select two courses from the following:**

|  |     |              |          |
|--|-----|--------------|----------|
| Introduction to Business / Honors            | BUS | A100 / A100H | 3        |
| Or   |     |              |          |
| Business Communication                       | BUS | A139         | 3        |
| Introduction to Computer Information Systems | CIS | A111         | 3        |
| <b>Subtotal</b>                              |     |              | <b>6</b> |

**Program Major Units** **27**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

**ENTREPRENEURSHIP**

**CERTIFICATE OF SPECIALIZATION**

The Entrepreneurship program is designed to develop skills in starting, maintaining, and growing a small business. Courses emphasize feasibility analysis, legal considerations, financial management, marketing plans, and sales techniques. Completion of this certificate will allow students to pursue various entrepreneurial interests.

**Program Outcomes**

- Function effectively in an entrepreneurial venture and in a supporting role to an entrepreneur.
- Effectively apply and utilize the small businesses principles and techniques they have learned in a business environment or at a four-year college entrepreneur program.
- Determine the viability and net cash flows of a small business venture.

| Course                           |      |      | Units    |
|----------------------------------|------|------|----------|
| Introduction to Entrepreneurship | BUS  | A240 | 3        |
| Introduction to Marketing        | MKTG | A100 | 3        |
| Or                               |      |      |          |
| Social Media for Business        | BUS  | A101 | 3        |
| Professional Selling             | MKTG | A110 | 3        |
| Or                               |      |      |          |
| Principles of Advertising        | MKTG | A130 | 3        |
| <b>Total Units</b>               |      |      | <b>9</b> |

## FINANCE

### CERTIFICATE OF SPECIALIZATION

The Certificate of Specialization of Finance is designed to develop analytic and critical thinking skills in the financial area in businesses. Courses emphasize financial accounting, securities valuation, financial analysis, cash flow and investment management.

#### Program Outcomes

1. Function effectively in an entry-level or training position in the Finance, Treasurer or Investment Department of a small to mid-size enterprise or as an entry-level or training analyst in a investment banking or financial services firm.
2. Effectively apply and utilize the accounting and financial principles and techniques they have learned in a business environment or at a four-year college business administration program..
3. Determine the viability and net cash flows of security and capital investments.

| Course  |      |      | Units     |
|---|------|------|-----------|
| Financial Accounting<br>Or<br>Managerial Accounting | ACCT | A101 | 4         |
| Introduction to Business<br>Or<br>Business Law      | ACCT | A102 | 4         |
| Business Finance                                    | BUS  | A100 | 3         |
|   | BUS  | A110 | 3         |
|   | BUS  | A200 | 3         |
| <b>Total Units</b>                                  |      |      | <b>10</b> |

## NOT FOR PROFIT MANAGEMENT

### CERTIFICATE OF SPECIALIZATION

Through the Not-for-Profit management certificate a potential, new or mid-level professional will be prepared to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills. It will prepare these professionals to take on new roles and approaches in the areas of strategic planning, financial management, capacity building, and program creation and evaluation.

#### Program Outcomes

1. Students who complete this certificate will be equipped with the knowledge, skills, and resources to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills.

| Course                                      |      |      | Units    |
|---|------|------|----------|
| Not for Profit Recordkeeping and Compliance | ACCT | A107 | 3        |
| Not for Profit Management                   | BUS  | A186 | 3        |
| Not for Profit Marketing                    | BUS  | A187 | 3        |
| <b>Total Units</b>                          |      |      | <b>9</b> |

## CARDIOVASCULAR TECHNOLOGY

Cardiovascular technology is an allied health profession concerned with the diagnosis and treatment of patients with heart and blood vessel disease. The cardiovascular technologist performs tests at the request of a physician to obtain information about that patient's heart and blood vessel anatomy and function so the physician can make a diagnosis. The profession of cardiovascular technology includes three areas of diagnostic evaluation: 1) invasive cardiovascular technology (diagnosis of heart disease by cardiac catheterization), 2) noninvasive cardiovascular technology (diagnosis of heart disease by cardiac ultrasound, exercise, and electrocardiographic testing), and 3) noninvasive peripheral vascular study (diagnosis of blood vessel disease using ultrasound testing).

The Cardiovascular Technology program provides the necessary classroom and clinical courses to allow graduates to work as noninvasive cardiovascular technologists.

Specifically, the program objectives include:

1. Graduate qualified ECG technologists.
2. Graduate qualified noninvasive cardiovascular technologists who obtain RDCS within two years of completing the program and who are qualified in all noninvasive tests.
3. Provide an adequate number of graduates to meet the need for employees within the community.

During the first year of the program, students learn basic medical sciences and noninvasive cardiovascular tests including electrocardiography (ECG), exercise testing, Holter monitoring, pacemaker evaluation and continuous cardiac monitoring. Students may exit the program after the first year and obtain a Certificate of Achievement as an Electrocardiography Technician. With this certificate, graduates may obtain employment as an ECG technician, stress testing technician, Holter monitor technician, pacemaker technician and/or monitor (telemetry) technician.

Students wishing to complete the two-year program must complete the first year courses and the general education for the Associate in Science degree. Graduates of the Noninvasive Cardiovascular Technology program option may obtain employment as a cardiovascular technologist performing all noninvasive tests, particularly cardiac ultrasound or echocardiography. Additionally, graduates may perform limited cerebrovascular ultrasound tests.

The Cardiovascular Technology program is fully accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

#### Program Admission

Allied Health A010 course – application and orientation.

The student must complete the General Education requirements for an Associate in Science Degree and the program prerequisites prior to acceptance to the program.

## ELECTROCARDIOGRAPHY TECHNICIAN

### CERTIFICATE OF ACHIEVEMENT

Completion of this certificate will allow students to pursue career opportunities as holter monitor technicians, ECG technicians, monitor (telemetry) technicians, pacemaker technicians, and stress testing technicians.

**Program Outcomes**

1. Be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

**1. Program Prerequisites:**

|                     |      |      |            |
|---------------------|------|------|------------|
| Health Occupations  | ALH  | A010 | 5          |
| Medical Terminology | ALH  | A111 | 3          |
| Anatomy-Physiology  | BIOL | A221 | 4          |
| <b>Subtotal</b>     |      |      | <b>7.5</b> |

| Course | Units |  |  |
|--------|-------|--|--|
|--------|-------|--|--|

**FALL**

|                                     |     |      |            |
|-------------------------------------|-----|------|------------|
| Patient Care                        | ALH | A115 | 2.5        |
| Introduction to Electrocardiography | CVT | A100 | 2          |
| Advanced Electrocardiography        | CVT | A150 | 2          |
| Cardiac Anatomy & Pathophysiology   | CVT | A160 | 3          |
| <b>Subtotal</b>                     |     |      | <b>9.5</b> |

**SPRING**

|  |     |      |           |
|--|-----|------|-----------|
| Human Diseases                                 | ALH | A120 | 2         |
| Introduction to Invasive Cardiology            | CVT | A130 | 3         |
| ECG Clinical Experience                        | CVT | A170 | 5         |
| Introduction to Sonography and Imaging Physics | CVT | A190 | 3         |
| <b>Subtotal</b>                                |     |      | <b>13</b> |

**Total Units 30**

**Electrocardiography Technician Suggested Elective:**

|        |           |      |   |
|--------|-----------|------|---|
| Ethics | PHIL/RLST | A120 | 3 |
|--------|-----------|------|---|

**ECHOCARDIOGRAPHY AND VASCULAR ULTRASOUND**

**ASSOCIATE IN SCIENCE DEGREE**

Completion of this associate degree will allow students to pursue career opportunities such as noninvasive cardiovascular technologists, echocardiographer/echocardiography technologists, and cerebrovascular ultrasound technologists.

**Program Outcomes**

1. Be prepared for entry-level employment as a professional and competent Cardiovascular Technologist to meet the needs of the local health care community.

**Required Prerequisites**

Electrocardiography Technician Certificate of Achievement

**Subtotal 30**

| Course | Units |  |  |
|--------|-------|--|--|
|--------|-------|--|--|

**FALL**

|  |     |      |             |
|--|-----|------|-------------|
| Introduction to Echocardiography                 | CVT | A200 | 3           |
| Introduction to Echocardiography Lab             | CVT | A205 | 1           |
| Echocardiography Clinical Lab 1                  | CVT | A210 | 5           |
| Ultrasound Sonographic Physics & Instrumentation | CVT | A220 | 3.5         |
| <b>Subtotal</b>                                  |     |      | <b>12.5</b> |

**SPRING**

|                                       |     |      |     |
|---------------------------------------|-----|------|-----|
| Advanced Echocardiography             | CVT | A250 | 3   |
| Advanced Echocardiography Lab         | CVT | A255 | 1   |
| Cerebrovascular Peripheral Ultrasound | CVT | A260 | 2.5 |
| Echocardiography Clinical Lab 2       | CVT | A265 | 6   |

**Subtotal 12.5**

**Program Major Units 55**

**AS General Education Option 1, 2, or 3 Varies**

**Total Minimum Degree Units 70**

**Electrocardiography Technician Suggested Elective:**

|        |           |      |   |
|--------|-----------|------|---|
| Ethics | PHIL/RLST | A120 | 3 |
|--------|-----------|------|---|

**CHEMISTRY**

**CHEMISTRY**

**ASSOCIATE IN SCIENCE DEGREE**

The Chemistry Associate of Science degree is intended to instill a desire in our students to learn more about chemistry through scientific study, encourage critical thinking about how chemistry impacts the natural world, and help students become scientifically literate citizens who can make informed decisions about chemistry-related issues.

**Program Outcomes**

1. Students will be able to understand and apply the Scientific Method, including the abilities to demonstrate critical thinking skills, and to draw sound conclusions from collected data and observations.
2. Students will demonstrate content knowledge about chemistry, including knowledge of basic chemical terminology and an understanding of fundamental concepts in chemistry.
3. Students will be able to use appropriate laboratory techniques, equipment, and instruments proficiently. Skills to be mastered shall be determined by the chemistry faculty.

| Course                  | Units |       |   |
|-------------------------|-------|-------|---|
| General Chemistry A     | CHEM  | A180  | 5 |
| General Chemistry B     | CHEM  | A185  | 5 |
| Organic Chemistry A     | CHEM  | A220  | 3 |
| Organic Chemistry A Lab | CHEM  | A220L | 2 |
| Organic Chemistry B     | CHEM  | A225  | 3 |
| Organic Chemistry B Lab | CHEM  | A225L | 2 |

**Program Major Units 20**

**AS General Education Option 1, 2, or 3 Varies**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

## COMMUNICATION STUDIES

### COMMUNICATIONS STUDIES

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Communications for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Communications Studies AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Orange Coast College Associate in Arts in Communication Studies for transfer program provides students with communication skills that they can apply in personal, professional and global contexts. In these courses students will learn to improve their oral and written communication skills in the areas of critical thinking, organization, analysis, argumentation and presentation of information. Students will learn to improve their verbal and non-verbal interpersonal communication skills in the areas of listening, perception, self-concept, conflict resolution, intercultural and gender communication. These skills are developed in Communication Studies A100, A105, A110, A150, A155, A165, A170, A180, A220 and A240.

#### Program Outcomes

1. Provide students with communication skills that they can apply in personal, professional, and global contexts.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                      | Units    |
|-----------------------------|----------|
| <b>Core Courses:</b>        |          |
| Public Speaking             | 3        |
| Interpersonal Communication | 3        |
| Essentials of Argumentation | 3        |
| <b>Subtotal</b>             | <b>9</b> |

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

|                                       |          |
|---------------------------------------|----------|
| Readers Theatre & Oral Interpretation | 3        |
| Forensics Workshop                    | 3        |
| Intercultural Communication           | 3        |
| Introduction to Mass Communications   | 3        |
| <b>Subtotal</b>                       | <b>6</b> |

#### List B - Complete three (3) units by choosing from a course not yet chosen from the above category or by choosing from the courses below:

|                               |           |      |   |
|-------------------------------|-----------|------|---|
| Intrapersonal Communication   | CMST      | A105 | 3 |
| Men, Women, and Communication | CMST/GNDR | A165 | 3 |
| Nonverbal Communication       | CMST      | A170 | 3 |
| Media Literacy                | CMST      | A240 | 3 |
| Newswriting and Reporting     | JOUR      | A110 | 3 |

|                             |              |
|-----------------------------|--------------|
| <b>Subtotal</b>             | <b>3</b>     |
| <b>Total Major Units</b>    | <b>18</b>    |
| <b>CSU or IGETC for CSU</b> | <b>37-39</b> |

Transferable electives as needed to satisfy unit requirement **Varies**

**Total Degree Units 60**

## MASS COMMUNICATIONS/MEDIA STUDIES

#### ASSOCIATE IN ARTS DEGREE

The Orange Coast College Associate in Arts in Mass Communication/Media Studies provides students with skills to understand the role of media institutions, analyze and create media texts, and evaluate the mass media landscape from a cultural, economic, and rhetorical perspective.

#### Program Outcomes

1. Students will be able to access, analyze, evaluate and create media texts.
2. Students will be able to understand the historical, economic, cultural, and aesthetic influences on media industries and media institutions.

| Course                              | Units    |
|-------------------------------------|----------|
| <b>Core Courses:</b>                |          |
| Introduction to Mass Communications | 3        |
| Media Literacy                      | 3        |
| News Writing and Reporting          | 3        |
| <b>Subtotal</b>                     | <b>9</b> |

#### Restricted Electives - Complete three (3) courses from the following:

|                                      |             |
|--------------------------------------|-------------|
| Public Relations                     | 3           |
| Film as Literature / Honors          | 3           |
| Newspaper Production Level 1         | 4           |
| Multi-Media Reporting and Producing  | 3           |
| Photojournalism                      | 3           |
| Principles of Advertising            | 3           |
| Introduction to Photography / Honors | 3           |
| Or                                   |             |
| Introduction to Digital Photography  | 3           |
| <b>Subtotal</b>                      | <b>9-10</b> |

**Program Major Units 18-19**

**AA General Education Option 1, 2, or 3 Varies**

Transferable electives as needed to satisfy unit requirement **Varies**

**Total Degree Units 60**

## SOCIAL MEDIA STRATEGIST

### CERTIFICATE OF ACHIEVEMENT

The Social Media Strategist Certificate of Achievement is intended to prepare students for careers in which they will use social media to promote products, individuals, and organizations. Courses emphasize the skills and tools necessary to analyze, create, implement and evaluate social media. A "C" or better is required.

#### Program Outcomes

1. Students will be able to function effectively in an entry-level social media strategist position using the skills, principles, and tools acquired.

| Course  | Units           |
|---|-----------------|
| <b>Core Courses:</b>                          |                 |
| Social Media Strategies                       | CMST A109 3     |
| Directed Practice for Social Media Strategist | CMST A236 2     |
| Public Relations                              | CMST/BUS A185 3 |
| Or  |                 |
| Media, Events, and Promotions                 | FASH A225 3     |
| Writing for Social Media                      | ENGL A123 3     |
| Introduction to Marketing                     | MKTG A100 3     |
| Business Multimedia and Graphics              | CIS A132 2      |
| <b>Subtotal</b>                               | <b>16</b>       |

## COMPUTER INFORMATION SYSTEMS

The goal of the CIS program is to provide students with the technical skills and systems perspective necessary for entry-level positions in the computer and information industry. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

## BUSINESS INFORMATION WORKER

### CERTIFICATE OF SPECIALIZATION

Completion of this certificate, issued through the Business and Computing Division, will prepare students for entry-level employment in business environments using Microsoft Office Applications. All courses must be completed at Orange Coast College.

#### Program Outcomes

1. Use a computer operating system and computer applications for word processing, electronic spreadsheet creation, database management, multimedia presentations, and electronic personal management with competence.
2. Achieve personal development and responsibility for entering the job market.

| Course                                | Units          |
|---------------------------------------|----------------|
| Business English                      | BUS A138 3     |
| Beginning Computer Keyboarding 1      | CIS A090 1.5   |
| Keyboarding Speed and Accuracy        | CIS A091 1.5   |
| Beginning Computer Keyboarding 2      | CIS A092 1.5   |
| Introduction to Computer Applications | CIS A100 3     |
| Excel 1                               | CIS/BUS A134 2 |
| Microsoft Outlook                     | CIS A137 2     |
| Office Procedures                     | CIS A149 2     |
| <b>Total Units</b>                    | <b>16.5</b>    |

## COMPUTER INFORMATION SYSTEMS

### CERTIFICATE OF ACHIEVEMENT

This program will meet major requirements for the Associate in Science degree but has not been articulated with any particular four-year institution. Students should not expect that they will necessarily meet the lower-division requirements at specific colleges or universities. Students should consult a counselor for specific transfer information.

This option provides the student with the lower-division transfer courses for some of the business oriented majors. Students are advised to check course transferability with an Orange Coast College counselor prior to enrolling in CIS courses.

#### Program Outcomes

1. Students will be prepared for employment in entry-level positions in the computer and information systems industries.

| Course                                | Units       |
|---------------------------------------|-------------|
| Financial Accounting                  | ACCT A101 4 |
| Managerial Accounting                 | ACCT A102 4 |
| Business Law                          | BUS A110 3  |
| Introduction to Computer Info Systems | CIS A111 3  |
| Microeconomics                        | ECON A170 3 |
| Macroeconomics                        | ECON A175 3 |
| Business Calculus                     | MATH A140 4 |
| Or                                    |             |
| Calculus 1                            | MATH A180 4 |

#### Select one (1) course from the following:

|                                     |           |
|-------------------------------------|-----------|
| Python Programming I                | CS A131 4 |
| Introduction to C# .NET Programming | CS A140 4 |
| Introduction to VB .NET Programming | CS A142 4 |
| C++ Programming Language 1          | CS A150 4 |
| Java Programming 1                  | CS A170 4 |

**Total Units 28**

### ASSOCIATE IN SCIENCE DEGREE

Complete the Computer Information Systems Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## WEB DESIGN

### CERTIFICATE OF SPECIALIZATION

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in designing for the World Wide Web.

#### Program Outcome

1. Students who receive the Web Design Certificate of Specialization will be able to create dynamic web pages.

| Course   |     |      | Units        |
|--|-----|------|--------------|
| <b>Complete five (5) courses from this list:</b> |     |      |              |
| Web Page Design 1                                | CIS | A123 | 2            |
| Introduction to Dreamweaver                      | CIS | A128 | 2            |
| Web Page Design 2                                | CIS | A129 | 2            |
| Business Multimedia and Graphics                 | CIS | A132 | 2            |
| Introduction to JavaScript                       | CIS | A171 | 2            |
| Front-End Development 1                          | CIS | A223 | 2            |
| Front-End Development 2                          | CIS | A227 | 2            |
| Digital & Video for Business: Adobe Premiere Pro | CIS | A232 | 3            |
| <b>Total Units</b>                               |     |      | <b>10-11</b> |

## INFORMATION AND COMMUNICATIONS TECHNOLOGIES CERTIFICATES

Completion of these certificates will enable students to acquire the skills needed by professionals in information and communication technologies to support and/or manage the converged network that carries voice, data, image, and video traffic. This career is an emerging IT-related career that sees high demand and growth. All courses must be completed at Orange Coast College for these certificates.

## ENTERPRISE ROUTING

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

1. Students who receive the Enterprise Routing Certificate of Specialization will be able to design and implement a converged network.

| Course                                     |    |      | Units    |
|--|----|------|----------|
| Introduction to Networking (Cisco 1)       | IT | A197 | 3        |
| Routing and Switching Essentials (Cisco 2) | IT | A198 | 3        |
| Enterprise Router Configurations 1         | IT | A265 | 3        |
| <b>Total Units</b>                         |    |      | <b>9</b> |

## NETWORK ADMINISTRATION AND OPERATIONS

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

1. Students who receive the Network Administration and Operations Certificate of Specialization will be able to design and implement a small to medium network environment.
2. Students will be prepared for industry-standard certification from CompTIA and Microsoft.

| Course   |    |      | Units        |
|--|----|------|--------------|
| PC Concepts: A+Cert Prep                         | IT | A110 | 4            |
| Network and Communication Technologies           | IT | A191 | 4            |
| Network Systems Administration                   | IT | A192 | 4            |
| <b>Select one (1) course from the following:</b> |    |      |              |
| Database Design and Data Warehousing             | IT | A176 | 4            |
| Business Intelligence and Data Mining            | IT | A177 | 4            |
| Network Infrastructure Administration            | IT | A193 | 3            |
| Network Directory Services Administration        | IT | A194 | 3            |
| Network Enterprise Administration                | IT | A196 | 4            |
| <b>Total Units</b>                               |    |      | <b>15-16</b> |

## NETWORK ADMINISTRATION – LINUX

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

1. Students who complete the Network Administration – Linux Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Linux environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.

| Course                                   |    |      | Units    |
|--|----|------|----------|
| Introduction to Linux: LPI Certification | IT | A106 | 3        |
| Windows Desktop Administration           | IT | A163 | 3        |
| <b>Total Units</b>                       |    |      | <b>6</b> |

## NETWORK ADMINISTRATION – WINDOWS

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

1. Students who complete the Network Administration – Windows Certificate of Specialization will be capable of deploying, building, designing, optimizing, and operating a Windows Server and Desktop environment and they will be able to make the design and technology decisions necessary to ensure successful technology implementation projects.
2. Students will be prepared for industry-standard certification tests from CompTIA and Microsoft.



| Course                                    |    |      | Units     |
|---|----|------|-----------|
| Windows Desktop Administration            | IT | A163 | 3         |
| Network Systems Administration            | IT | A192 | 4         |
| Network Infrastructure Administration     | IT | A193 | 3         |
| Network Directory Services Administration | IT | A194 | 3         |
| Network Enterprise Administration         | IT | A196 | 4         |
| <b>Total Units</b>                        |    |      | <b>17</b> |

## NETWORK INFRASTRUCTURE

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Network Infrastructure Certificate of Specialization will be able to design and implement a converged network.

| Course                                     |    |      | Units     |
|--|----|------|-----------|
| Introduction to Networking (Cisco 1)       | IT | A197 | 3         |
| Routing and Switching Essentials (Cisco 2) | IT | A198 | 3         |
| Scaling Networks (Cisco 3)                 | IT | A267 | 3         |
| Connecting Networks (Cisco 4)              | IT | A268 | 3         |
| <b>Total Units</b>                         |    |      | <b>12</b> |

## NETWORK PROFESSIONAL

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Network Professional Certificate of Specialization will be able to design and implement a converged network.

#### Required Prerequisites:

Network Technician Certificate of Specialization

**Subtotal** **8**

| Course  |      |      | Units     |
|---|------|------|-----------|
| Small Office / Home Office Case Study 1               | IT   | A290 | 3         |
| Interpersonal Communication                           | CMST | A100 | 3         |
| Applied Management for Public & Private Organizations | MGMT | A100 | 3         |
| <b>Total Units</b>                                    |      |      | <b>17</b> |

## NETWORK SECURITY

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Network Security Certificate of Specialization will be able to design and implement a converged network.

| Course                               |    |      | Units    |
|--------------------------------------|----|------|----------|
| Fundamentals of Information Security | IT | A162 | 3        |
| Ethical Hacking and Network Defense  | IT | A282 | 3        |
| <b>Total Units</b>                   |    |      | <b>6</b> |

## NETWORK SERVICES AND APPLICATIONS

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Network Services and Applications Certificate of Specialization will be able to design and implement a converged network.

| Course                                  |    |      | Units    |
|---|----|------|----------|
| Fundamentals of Wireless Networking     | IT | A261 | 3        |
| Fundamentals of Voice Over IP Protocols | IT | A262 | 3        |
| Introduction to the Internet of Things  | IT | A263 | 3        |
| <b>Total Units</b>                      |    |      | <b>9</b> |

## NETWORK TECHNICIAN

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Network Technician Certificate of Specialization will be able to design and implement a converged network.

| Course                                     |    |      | Units    |
|--|----|------|----------|
| PC Concepts: A+ Certification Preparation  | IT | A110 | 4        |
| Networking and Communications Technologies | IT | A191 | 4        |
| <b>Total Units</b>                         |    |      | <b>8</b> |

## VIRTUALIZATION AND CLOUD COMPUTING

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Students who receive the Virtualization and Cloud Computing Certificate of Specialization will be able to design and implement a converged network.

| Course  |    |      | Units     |
|---|----|------|-----------|
| Information and Storage Management                    | IT | A280 | 3         |
| Cloud Infrastructure and Services                     | IT | A281 | 3         |
| VMware View: Installation/Configuration/Management    | IT | A285 | 3         |
| VMware vSphere: Installation/Configuration/Management | IT | A286 | 3         |
| <b>Total Units</b>                                    |    |      | <b>12</b> |

## COMPUTER SCIENCE

### COMPUTER SCIENCE

#### ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Students graduating with an Associate in Science in Computer Science for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Computer Science AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

##### Program Outcomes

1. Design and implement, test and debug small-scale programs that use fundamental programming constructs and object-oriented programming concepts.
2. Demonstrate understanding of fundamental data structures and their application to programming.
3. Write small programs in Assembly and/or Machine languages showing an understanding of the internal organization of a computer system.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |      |              | Units |
|---|------|--------------|-------|
| Programming Concepts and Methodology 1        | CS   | A122         | 3     |
| Programming Concepts and Methodology 2        | CS   | A132         | 4     |
| Computer Organization and Assembly Language   | CS   | A242         | 3     |
| Discrete Structures                           | CS   | A262         | 3     |
| Calculus 1 / Honors                           | MATH | A180 / A180H | 4     |
| Calculus 2 / Honors                           | MATH | A185 / A185H | 4     |
| Calculus-Based Physics: Mechanics             | PHYS | A185         | 4     |
| Calculus-Based Physics: Electricity/Magnetism | PHYS | A280         | 4     |

**Program Major Units** **29**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## COMPUTER SCIENCE

#### CERTIFICATE OF ACHIEVEMENT

This certificate is designed to provide the student with comprehensive grounding in the theory and practice of modern computer programming. Based on the recommendations of the Association of Computing Machinery, the Computer Programming Certificate prepares students to work as entry-level programmers. Students should not expect that they will necessarily meet the lower division requirements at specific colleges or universities. Students should consult the Transfer Information section of this catalog for specific transfer information.

#### Program Outcome

1. Based on the recommendations of the Association for Computing Machinery, The Computer Programming Certificate prepares students to work as entry-level programmers, or used to fulfill some of the requirements for transfer to a Computer Science program at a four-year university.

| Course             |    |      | Units |
|--------------------|----|------|-------|
| C++ Programming 1  | CS | A150 | 4     |
| Java Programming 1 | CS | A170 | 4     |
| C++ Programming 2  | CS | A250 | 4     |

##### Select one (1) course from the following:

|                     |    |      |   |
|---------------------|----|------|---|
| Data Structures     | CS | A200 | 4 |
| Or                  |    |      |   |
| Discrete Structures | CS | A262 | 3 |

##### Select one (1) course from the following:

|                         |      |              |   |
|-------------------------|------|--------------|---|
| Calculus 1 / Honors     | MATH | A180 / A180H | 4 |
| Or                      |      |              |   |
| Calculus 1 and 2 Honors | MATH | A182H        | 5 |
| Or                      |      |              |   |
| Calculus 2 / Honors     | MATH | A185 / A185H | 4 |

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

#### ASSOCIATE IN SCIENCE DEGREE

Complete the Computer Science Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## C ++ PROGRAMMING

#### CERTIFICATE OF SPECIALIZATION

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in C++ programming. All courses must be completed at Orange Coast College.

#### Program Outcome

1. Program completers will be able to write programs in C++ using classes, flow-of-control and fundamental data structure.

| Course            |    |      | Units |
|-------------------|----|------|-------|
| C++ Programming 1 | CS | A150 | 4     |
| Data Structures   | CS | A200 | 4     |
| C++ Programming 2 | CS | A250 | 4     |

**Total Units** **12**

## JAVA PROGRAMMING

#### CERTIFICATE OF SPECIALIZATION

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in Java programming. In addition, students will also have the opportunity to earn industry credentials as an Oracle Certified Java Associate. A grade of "C" or better is required in all courses. All courses must be completed at Orange Coast College.

**Program Outcomes**

1. Program achievers will be able to write programs in Java using classes, flow-of-control and fundamental data structures. In addition, achievers will also be able to develop mobile applications using the Android framework for both tablet and phone devices.

| Course                                    |    |      | Units     |
|---|----|------|-----------|
| Java Programming 1                        | CS | A170 | 4         |
| Java Programming 2                        | CS | A272 | 4         |
| Mobile Application Development in Android | CS | A273 | 4         |
| <b>Total Units</b>                        |    |      | <b>12</b> |

**PYTHON PROGRAMMING**

**CERTIFICATE OF SPECIALIZATION**

Completion of this certificate, issued through the Business and Computing Division, will enable students to apply for entry-level positions in Python programming. All courses must be completed at Orange Coast College.

**Program Outcome**

1. Program completers will be able to write programs in Python using classes, flow-of-control and fundamental data structure.

| Course               |    |      | Units |
|----------------------|----|------|-------|
| Python Programming 1 | CS | A131 | 4     |
| Python Programming 2 | CS | A231 | 4     |
| <b>Total Units</b>   |    |      |       |

**CONSTRUCTION TECHNOLOGY**

The Construction Technology program has courses that can be divided into two major areas of emphasis: Residential Trades and Construction Management. Due to the vast diversity of occupations and areas of specialization within the construction industry and recognizing that individual student needs will be as diverse, a Certificate of Achievement can be designed that satisfies those specific needs. Completion of a certificate program satisfies the major requirement for the Associate in Science degree. Certificates of Achievement and Specialization can be completed in one to two semesters.

**CARPENTRY**

**CERTIFICATE OF SPECIALIZATION**

Labor market data shows a great need for skilled professionals with carpentry skills. Completion of this program will prepare individuals for entry-level positions in maintenance and construction fields.

**Program Outcomes**

1. Students who successfully complete this program will be able to install windows and doors in a building.
2. Students who successfully complete this program will be able to install interior and exterior finishes in a building.

| Course             |      |      | Units     |
|--------------------|------|------|-----------|
| Specialty Trades   | CNST | A240 | 5         |
| Finish Carpentry   | CNST | A241 | 5         |
| <b>Total Units</b> |      |      | <b>10</b> |

**CONCRETE & MASONRY**

**CERTIFICATE OF SPECIALIZATION**

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

| Course                |      |      | Units     |
|-----------------------|------|------|-----------|
| Building Code and Law | CNST | A195 | 3         |
| Concrete Construction | CNST | A210 | 5         |
| Masonry Construction  | CNST | A260 | 5         |
| <b>Total Units</b>    |      |      | <b>13</b> |

**FINE WOODWORKING**

**CERTIFICATE OF SPECIALIZATION**

The southern California region is home to more than 100 businesses that have fine woodworking and design, construction, repair, sales and instrument tuning as the primary focus of the business. Labor market data shows a clear need for competent new professional makers, designers, repair staff, and sales professionals to fill staffing positions created as small companies grow and medium to large companies expand.

**Program Outcomes**

1. Be prepared for a position or career in the fine woodworking and affiliated trade.

| Course  |      |      | Units    |
|---|------|------|----------|
| <b>Required Courses - eight (8) units from the following:</b> |      |      |          |
| Cabinet Making  | CNST | A114 | 4        |
| Or  |      |      |          |
| Furniture Making and Design                                   | CNST | A116 | 4        |
| Steel String Guitar Making & Design                           | CNST | A126 | 4        |
| <b>Subtotal</b>   |      |      | <b>8</b> |

**Select nine (9) units from the following:**

|                                   |      |      |           |
|-----------------------------------|------|------|-----------|
| Color and Design: Two Dimensional | ART  | A110 | 3         |
| Sculpture 1                       | ART  | A141 | 3         |
| Introduction to Entrepreneurship  | BUS  | A240 | 2         |
| Steel String Guitar Making 2      | CNST | A127 | 4         |
| Interior Design Studio 1          | ID   | A105 | 3         |
| <b>Subtotal</b>                   |      |      | <b>9</b>  |
| <b>Total Units</b>                |      |      | <b>17</b> |

## PLUMBING

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople

| Course                         |      |      | Units     |
|--------------------------------|------|------|-----------|
| Blueprint Reading and Drafting | CNST | A190 | 4         |
| Plumbing 1                     | CNST | A265 | 4         |
| Plumbing 2                     | CNST | A266 | 4         |
| <b>Total Units</b>             |      |      | <b>12</b> |

## RESIDENTIAL ELECTRICAL

### CERTIFICATE OF SPECIALIZATION

This certificate prepares students for entry level employment in residential electrical related trades. The student will be able to wire electrical systems, understand code requirements, and interpret electrical blueprints.

#### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople

| Course                         |      |      | Units          |
|--------------------------------|------|------|----------------|
| Construction Safety/CAL OSHA   | CNST | A165 | 3              |
| Blueprint Reading and Drafting | CNST | A190 | 4              |
| Residential Electrical Wiring  | CNST | A275 | 5              |
| First Aid and CPR              | KIN  | A203 | 2              |
| Or                             |      |      |                |
| Emergency Medical Responder    | EMS  | A100 | 4              |
| Or                             |      |      |                |
| Current CPR Certification      |      |      | 0              |
| <b>Total Units</b>             |      |      | <b>12 - 16</b> |

#### Residential Electrical Suggested Electives:

|   |      |      |   |
|---|------|------|---|
| Electronics for Electricians                    | CNST | A150 | 4 |
| Structured Wiring Installation                  | CNST | A155 | 2 |
| National Electrical Code                        | CNST | A156 | 2 |
| Photovoltaic System Installation                | CNST | A157 | 4 |
| Photovoltaic System Installation 2              | CNST | A158 | 4 |
| Introduction to Construction                    | CNST | A170 | 3 |
| Construction Supervision and Project Management | CNST | A250 | 3 |
| Technical Math                                  | TECH | A040 | 3 |

## CONSTRUCTION TECHNOLOGY

### CERTIFICATE OF ACHIEVEMENT

Construction Technology A165, Construction Safety/CAL-OSHA, is required for any first earned Certificate of Achievement. It is recommended that all beginning, full-time students enroll in the following courses leading to a Certificate of Achievement.

#### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, and hands-on skilled tradespeople.

| Course                         |      |      | Units     |
|--------------------------------|------|------|-----------|
| Construction Safety/CAL-OSHA   | CNST | A165 | 3         |
| Building Construction          | CNST | A180 | 5         |
| Building Construction 2        | CNST | A185 | 5         |
| Blueprint Reading and Drafting | CNST | A190 | 4         |
| Building Code and Law          | CNST | A195 | 3         |
| Specialty Trades               | CNST | A240 | 5         |
| <b>Total Units</b>             |      |      | <b>25</b> |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Construction Technology Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## MASTER CONSTRUCTION SPECIALIST

### CERTIFICATE OF ACHIEVEMENT

The terms "Master" and "Specialist" imply a very broad knowledge in several of the construction trades and management disciplines. Students who complete this program will have their names displayed on a perpetual "Award of Excellence" listing in the Construction Department.

#### Program Outcomes

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

| Course                                |      |      | Units |
|---------------------------------------|------|------|-------|
| <b>Core Courses:</b>                  |      |      |       |
| Introduction to Computer Applications | CIS  | A100 | 3     |
| Or                                    |      |      |       |
| Computer Use in Technology            | CHT  | A100 | 3     |
| Cabinet Making                        | CNST | A114 | 4     |
| Construction Safety/CAL OSHA          | CNST | A165 | 3     |
| Building Construction 1               | CNST | A180 | 5     |
| Blueprint Reading and Drafting        | CNST | A190 | 4     |
| Building Code and Law                 | CNST | A195 | 3     |
| Concrete Construction                 | CNST | A210 | 5     |
| Specialty Trades                      | CNST | A240 | 5     |

|                                    |      |      |   |
|------------------------------------|------|------|---|
| Plumbing 1<br>Or<br>Plumbing 2     | CNST | A265 | 4 |
| Residential Electrical Wiring      | CNST | A275 | 5 |
| Res Light Steel Frame Construction | CNST | A285 | 5 |
| Building Construction 2            | CNST | A185 | 5 |
| Masonry Construction               | CNST | A260 | 5 |

**Subtotal 56**

**Restricted Electives - Select three (3) units from the following:**

|   |      |      |   |
|---|------|------|---|
| Construction Estimating                         | CNST | A220 | 3 |
| Construction Inspection                         | CNST | A230 | 3 |
| Construction Supervision and Project Management | CNST | A250 | 3 |

**Total Units 59**

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Master Construction Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires a minimum of 77 units for completion.**

**RESIDENTIAL CONSTRUCTION DEVELOPMENT FIRST AWARD**

**CERTIFICATE OF ACHIEVEMENT**

Students may select any combination of courses that total eighteen (18) or more units from the following list. Note: Construction Technology A165 and Construction Technology A195 are required for any first earned Certificate of Achievement. No course may be applied to more than one Residential Construction Development certificate.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

| Course                                 | Units |      |          |
|--|-------|------|----------|
| <b>Required for First Certificate:</b> |       |      |          |
| Construction Safety/CAL-OSHA           | CNST  | A165 | 3        |
| Building Code and Law                  | CNST  | A195 | 3        |
| <b>Subtotal</b>                        |       |      | <b>6</b> |

**Select twelve (12) units from the following list (no course may be applied to more than one certificate):**

|                                |           |      |     |
|--------------------------------|-----------|------|-----|
| Green Building Codes           | ARCH/CNST | A196 | 1.5 |
| California Energy Code         | ARCH/CNST | A197 | 1.5 |
| Principles of Construction     | CNST      | A100 | 1.5 |
| Stair Framing                  | CNST      | A112 | 2.5 |
| Cabinet Making                 | CNST      | A114 | 4   |
| Additions and Remodeling       | CNST      | A125 | 5   |
| Residential Drywall and Taping | CNST      | A154 | 1.5 |
| Introduction to Construction   | CNST      | A170 | 3   |
| Building Construction          | CNST      | A180 | 5   |
| Building Construction 2        | CNST      | A185 | 5   |
| Blueprint Reading and Drafting | CNST      | A190 | 4   |
| Energy Audit                   | CNST      | A198 | 3   |
| Concrete Flatwork              | CNST      | A209 | 2.5 |
| Concrete Construction          | CNST      | A210 | 5   |
| Decorative Concrete            | CNST      | A211 | 3   |
| Construction Estimating        | CNST      | A220 | 3   |

|   |      |      |     |
|---|------|------|-----|
| Land and Building Development                   | CNST | A225 | 3   |
| Construction Inspection                         | CNST | A230 | 3   |
| Contractor's Business Practice                  | CNST | A235 | 3   |
| Specialty Trades                                | CNST | A240 | 5   |
| Finish Carpentry                                | CNST | A241 | 5   |
| Construction Supervision and Project Management | CNST | A250 | 3   |
| Business Law for Contractors                    | CNST | A252 | 1.5 |
| Masonry Construction                            | CNST | A260 | 5   |
| Masonry Construction II                         | CNST | A261 | 5   |
| Plumbing 1                                      | CNST | A265 | 4   |
| Plumbing 2                                      | CNST | A266 | 4   |
| Contractor's License Law                        | CNST | A270 | 1.5 |
| Residential Electrical Wiring                   | CNST | A275 | 5   |
| Residential Light Steel Frame Construction      | CNST | A285 | 5   |

**Subtotal 6**

**Total Units 18**

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Residential Construction Development First Award Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**RESIDENTIAL CONSTRUCTION DEVELOPMENT SECOND AWARD**

**CERTIFICATE OF ACHIEVEMENT**

Students may earn a second award of the certificate by completing eighteen (18) or more units from the following list, however, no course may be applied to more than one Residential Construction Development certificate.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

**Required Prerequisites:**

Residential Construction Development First Award Certificate of Achievement

**Subtotal 18**

| Course   | Units     |      |     |
|--|-----------|------|-----|
| <b>Select eighteen (18) units from the following list (no course may be applied to more than one certificate):</b> |           |      |     |
| Green Building Codes   | ARCH/CNST | A196 | 1.5 |
| California Energy Code   | ARCH/CNST | A197 | 1.5 |
| Principles of Construction   | CNST      | A100 | 1.5 |
| Stair Framing  | CNST      | A112 | 2.5 |
| Cabinet Making   | CNST      | A114 | 4   |
| Additions and Remodeling   | CNST      | A125 | 5   |
| Residential Drywall and Taping   | CNST      | A154 | 1.5 |
| Introduction to Construction   | CNST      | A170 | 3   |
| Building Construction  | CNST      | A180 | 5   |
| Building Construction 2  | CNST      | A185 | 5   |
| Blueprint Reading and Drafting   | CNST      | A190 | 4   |
| Energy Audit   | CNST      | A198 | 3   |
| Concrete Flatwork  | CNST      | A209 | 2.5 |
| Concrete Construction  | CNST      | A210 | 5   |
| Decorative Concrete  | CNST      | A211 | 3   |
| Construction Estimating  | CNST      | A220 | 3   |
| Land and Building Development  | CNST      | A225 | 3   |
| Construction Inspection  | CNST      | A230 | 3   |
| Contractor's Business Practice   | CNST      | A235 | 3   |

*Continued on next page*

**RESIDENTIAL CONSTRUCTION DEVELOPMENT  
SECOND AWARD CERTIFICATE (CONTINUED)**

|   |      |      |           |
|---|------|------|-----------|
| Specialty Trades                                | CNST | A240 | 5         |
| Finish Carpentry                                | CNST | A241 | 5         |
| Construction Supervision and Project Management | CNST | A250 | 3         |
| Business Law for Contractors                    | CNST | A252 | 1.5       |
| Masonry Construction                            | CNST | A260 | 5         |
| Masonry Construction II                         | CNST | A261 | 5         |
| Plumbing 1                                      | CNST | A265 | 4         |
| Plumbing 2                                      | CNST | A266 | 4         |
| Contractor's License Law                        | CNST | A270 | 1.5       |
| Residential Electrical Wiring                   | CNST | A275 | 5         |
| Residential Light Steel Frame Construction      | CNST | A285 | 5         |
| <b>Total Units</b>                              |      |      | <b>36</b> |

**RESIDENTIAL CONSTRUCTION  
DEVELOPMENT THIRD AWARD**

**CERTIFICATE OF ACHIEVEMENT**

Students may earn a third award of the certificate by completing eighteen (18) or more units from the following list, however, no course may be applied to more than one Residential Construction Development certificate.

**Program Outcomes**

1. Demonstrate the knowledge, skills and experience to identify, assess, and participate in many entry-level construction trades.
2. Be prepared to work in the construction field in positions including, but not limited to work areas such as inspection, management, and as hands-on skilled tradespeople.

**Required Prerequisites:**

|  |           |
|--|-----------|
| Residential Construction Development First Award Certificate of Achievement  | 18        |
| Residential Construction Development Second Award Certificate of Achievement | 18        |
| <b>Subtotal</b>  | <b>36</b> |

| Course | Units |
|--------|-------|
|--------|-------|

Select eighteen (18) units from the following list (no course may be applied to more than one certificate):

|   |           |      |     |
|---|-----------|------|-----|
| Green Building Codes                            | ARCH/CNST | A196 | 1.5 |
| California Energy Code                          | ARCH/CNST | A197 | 1.5 |
| Principles of Construction                      | CNST      | A100 | 1.5 |
| Stair Framing                                   | CNST      | A112 | 2.5 |
| Cabinet Making                                  | CNST      | A114 | 4   |
| Additions and Remodeling                        | CNST      | A125 | 5   |
| Residential Drywall and Taping                  | CNST      | A154 | 1.5 |
| Introduction to Construction                    | CNST      | A170 | 3   |
| Building Construction                           | CNST      | A180 | 5   |
| Building Construction 2                         | CNST      | A185 | 5   |
| Blueprint Reading and Drafting                  | CNST      | A190 | 4   |
| Energy Audit                                    | CNST      | A198 | 3   |
| Concrete Flatwork                               | CNST      | A209 | 2.5 |
| Concrete Construction                           | CNST      | A210 | 5   |
| Decorative Concrete                             | CNST      | A211 | 3   |
| Construction Estimating                         | CNST      | A220 | 3   |
| Land and Building Development                   | CNST      | A225 | 3   |
| Construction Inspection                         | CNST      | A230 | 3   |
| Contractor's Business Practice                  | CNST      | A235 | 3   |
| Specialty Trades                                | CNST      | A240 | 5   |
| Finish Carpentry                                | CNST      | A241 | 5   |
| Construction Supervision and Project Management | CNST      | A250 | 3   |
| Business Law for Contractors                    | CNST      | A252 | 1.5 |
| Masonry Construction                            | CNST      | A260 | 5   |
| Masonry Construction II                         | CNST      | A261 | 5   |
| Plumbing 1                                      | CNST      | A265 | 4   |

|  |      |      |           |
|--|------|------|-----------|
| Plumbing 2                                 | CNST | A266 | 4         |
| Contractor's License Law                   | CNST | A270 | 1.5       |
| Residential Electrical Wiring              | CNST | A275 | 5         |
| Residential Light Steel Frame Construction | CNST | A285 | 5         |
| <b>Total Units</b>                         |      |      | <b>54</b> |

**CULINARY ARTS**

**BAKING AND PASTRY – BASIC**

**CERTIFICATE OF SPECIALIZATION**

The requirements for the Certificate of Specialization in Baking and Pastry Arts provide students with the fundamental knowledge of baking science required of bakers and pastry cooks. Students will gain hand-on knowledge of classic and contemporary patisserie and baking processes. Course work is designed for students that desire a career as a baker or pastry cook.

**Program Outcome**

1. Students will be prepared for entry-level employment as professional and competent bakers, pastry cooks, or pastry entrepreneurs and meet the needs of retail and wholesale baking and pastry establishments.

**Required Prerequisite:**

|                       |     |      |          |
|-----------------------|-----|------|----------|
| Sanitation and Safety | FSM | A160 | 3        |
| <b>Subtotal</b>       |     |      | <b>3</b> |

| Course | Units |
|--------|-------|
|--------|-------|

**FALL**

|                                    |     |      |            |
|------------------------------------|-----|------|------------|
| Principles of Baking 1             | CA  | A124 | 2          |
| Introduction to Nutrition Concepts | FN  | A140 | 2          |
| Or                                 |     |      |            |
| Nutrition                          | FN  | A170 | 3          |
| Food Service Math/Accounting       | FSM | A240 | 4          |
| <b>Subtotal</b>                    |     |      | <b>8-9</b> |

**SPRING**

|                        |    |      |          |
|------------------------|----|------|----------|
| Principles of Baking 2 | CA | A126 | 2        |
| <b>Subtotal</b>        |    |      | <b>2</b> |

**Total Units 13-14**

**Baking and Pastry - Basic Suggested Electives:**

|                                   |     |      |   |
|-----------------------------------|-----|------|---|
| Color and Design: Two-Dimensional | ART | A110 | 3 |
| Freehand Drawing                  | ART | A120 | 3 |

**ADVANCED BAKING AND PASTRY**

**CERTIFICATE OF ACHIEVEMENT**

The requirements for the Certificate of Achievement in Advanced Baking and Pastry includes courses which lead to students gaining a solid foundational knowledge of the baking and pastry industry. Courses are designed for students who desire a career as an entrepreneur in the baking/pastry industry, or in the following positions found at restaurants, hotels, resorts, clubs, and bakeries; head baker, assistant pastry chef, pastry chef, and executive pastry chef.

**Program Outcome**

- Students will be prepared for employment as professional and competent bakers, pastry cooks, or pastry entrepreneurs of retail and wholesale baking and pastry establishments.

| Course                               |     |      | Units        |
|--------------------------------------|-----|------|--------------|
| <b>FALL SEMESTER</b>                 |     |      |              |
| Introduction to Hospitality Industry | CA  | A100 | 3            |
| Culinary Principles 1                | CA  | A120 | 3            |
| Principles of Baking 1               | CA  | A124 | 2            |
| Introduction to Nutrition Concepts   | FN  | A140 | 2            |
| Or                                   |     |      |              |
| Nutrition                            | FN  | A170 | 3            |
| Sanitation and Safety                | FSM | A160 | 3            |
| <b>Subtotal</b>                      |     |      | <b>13-14</b> |

**SPRING SEMESTER**

|   |     |      |           |
|---|-----|------|-----------|
| Principles of Baking 2                    | CA  | A126 | 2         |
| Principles of Artisan Bread               | CA  | A131 | 3         |
| Pantry                                    | CA  | A149 | 2         |
| Directed Practice for Baking and Pastry 1 | CA  | A236 | 2         |
| Food Service Math/Accounting              | FSM | A240 | 4         |
| <b>Subtotal</b>                           |     |      | <b>13</b> |

**FALL SEMESTER**

|   |     |      |           |
|---|-----|------|-----------|
| Principles of Pastry Arts                 | CA  | A226 | 3         |
| Directed Practice for Baking and Pastry 2 | CA  | A237 | 2         |
| Food Production Management                | FSM | A151 | 2         |
| Menu Planning and Purchasing              | FSM | A250 | 3         |
| Supervision and Training Techniques       | FSM | A260 | 3         |
| <b>Subtotal</b>                           |     |      | <b>13</b> |

**Total Units 39-40**

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Advanced Baking and Pastry Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**CULINARY ARTS – BASIC**

**CERTIFICATE OF ACHIEVEMENT**

The requirements for the Certificate of Achievement in Basic Culinary Arts provide students with the basics in the methods and chemistry of cooking. Instruction and practice covering the fundamental techniques of cooking. Program elements include practical application of lecture theory in a commercial kitchen environment. Safe and proper use of culinary tools and equipment elements of professionalism and sanitary work habits are covered in detail throughout the program.

The Culinary Arts Department provides students with Associates Degrees in Culinary Arts, Occupational Certificates, and career and technical education. The department serves the economic and workforce development needs of the local community and is committed to student success.

**Program Outcome**

- Students will be prepared for entry-level employment in a commercial kitchen

| Course                               |     |      | Units     |
|--------------------------------------|-----|------|-----------|
| <b>FIRST SEMESTER</b>                |     |      |           |
| Introduction to Hospitality Industry | CA  | A100 | 3         |
| Culinary Principles 1                | CA  | A120 | 3         |
| Principles of Baking 1               | CA  | A124 | 2         |
| Pantry                               | CA  | A149 | 2         |
| Introduction to Nutrition Concepts   | FN  | A140 | 2         |
| Sanitation & Safety                  | FSM | A160 | 3         |
| <b>Subtotal</b>                      |     |      | <b>15</b> |

**SECOND SEMESTER**

|                                      |     |      |              |
|--------------------------------------|-----|------|--------------|
| Culinary Principles 2                | CA  | A122 | 3            |
| Directed Practice in Culinary Arts 1 | CA  | A210 | 2            |
| Or                                   |     |      |              |
| Culinary Team Competition            | CA  | A170 | 1-4          |
| Food Production Management           | FSM | A151 | 2            |
| Dining Room Service                  | FSM | A190 | 2            |
| Food Service Math/Accounting         | FSM | A240 | 4            |
| <b>Subtotal</b>                      |     |      | <b>12-15</b> |
| <b>Total Units</b>                   |     |      | <b>27-30</b> |

**ADVANCED CULINARY ARTS**

**CERTIFICATE OF ACHIEVEMENT**

This program is accredited by the American Culinary Federation Accrediting Commission. The requirements for the Certificate of Achievement in Advanced Culinary Arts include coursework covering a solid foundational knowledge of the restaurant and hospitality industry. Students will prepare food for dining guests in the school's Captain's Table Restaurant. The coursework will help to prepare students who are interested in a professional career in the Culinary Arts.

**Program Outcome**

- Students will be prepared for employment as professional and competent culinarians.

**Required Prerequisites:**

Culinary Arts (BASIC) Certificate of Achievement

**Subtotal 27-30**

| Course                              |     |      | Units     |
|-------------------------------------|-----|------|-----------|
| <b>FALL</b>                         |     |      |           |
| Garde Manger 1                      | CA  | A200 | 2         |
| Culinary Principles 3               | CA  | A245 | 3         |
| Menu Planning and Purchasing        | FSM | A250 | 3         |
| Supervision and Training Techniques | FSM | A260 | 3         |
| Bar Management                      | FSM | A275 | 2         |
| <b>Subtotal</b>                     |     |      | <b>13</b> |

**SPRING**

|                                       |     |      |           |
|---------------------------------------|-----|------|-----------|
| Principles of Baking 2                | CA  | A126 | 2         |
| Directed Practice in Culinary Arts II | CA  | A215 | 2         |
| Garde Manger 2                        | CA  | A255 | 2         |
| Ala Minute Continental Cooking        | CA  | A265 | 2         |
| Restaurant Management                 | FSM | A285 | 3         |
| <b>Subtotal</b>                       |     |      | <b>11</b> |

**Total Units 51-54**

*Continued on next page*

**ADVANCED CULINARY ARTS CERTIFICATE (CONTINUED)**

**Advanced Culinary Arts Suggested Electives:**

|                           |     |      |   |
|---------------------------|-----|------|---|
| Principles of Pastry Arts | CA  | A226 | 3 |
| Ice Carving               | CA  | A270 | 1 |
| Catering                  | FSM | A284 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Culinary Arts Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires 69-72 units for completion.**

**CULINOLOGY® AND FOOD SCIENCE**

Culinology®, as defined by the Research Chefs' Association, is the blending of the culinary arts and the science of food. Students completing this certificate will have career opportunities in food manufacturing, chain restaurants, hotels, ingredient supply houses, consulting and academia, new product development, sales, marketing, manufacturing, distribution, and the media.

The corporate headquarters of several restaurant chains as well as large and small food manufacturers are located in the southern California area. Opportunities exist for persons trained in culinary arts and food science to find interesting and rewarding careers with these companies.

**LEVEL 1 – CULINARY FOOD SCIENCE ASSISTANT**

**CERTIFICATE OF ACHIEVEMENT**

Orange Coast College's Culinary and Food Sciences Assistant program is designed for students who are interested in working as assistants in the following fields: food research and development, product development, recipe development, product duplication, quality assurance, sensory, or flavor chemistry.

**Program Outcomes**

1. Graduates will be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community and be able to communicate and work effectively with Chefs, Food Scientist and clientele.
2. Communicate and work effectively with Chefs, Food Scientists, and clientele.

**Required Prerequisites:**

|                                   |       |      |          |
|-----------------------------------|-------|------|----------|
| Careers in Dietetics/Food Science | FN/NC | A100 | 1        |
| Nutrition                         | FN    | A170 | 3        |
| Sanitation and Safety             | FSM   | A160 | 3        |
| <b>Subtotal</b>                   |       |      | <b>7</b> |

| Course   |           |      | Units     |
|--|-----------|------|-----------|
| <b>FIRST SEMESTER</b>                                    |           |      |           |
| Culinary Principles 1                                    | CA        | A120 | 3         |
| Principles of Baking                                     | CA        | A124 | 2         |
| Food Science   | FN        | A195 | 4         |
| Intro to Statistics / Statistics for Behavioral Sciences | MATH/PSYC | A160 | 4         |
| <b>Subtotal</b>  |           |      | <b>13</b> |
| <b>SECOND SEMESTER</b>                                   |           |      |           |
| Pantry   | CA        | A149 | 2         |
| Preparatory General Chemistry                            | CHEM      | A130 | 4         |
| Cultural Foods   | FN        | A185 | 2         |
| Directed Practice Culinology/Food Science                | FN        | A286 | 2         |
| <b>Subtotal</b>  |           |      | <b>10</b> |
| <b>Total Units</b>                                       |           |      | <b>30</b> |

**LEVEL 2 CULINOLOGY® – PROFESSIONAL LEVEL**

**ASSOCIATE IN SCIENCE DEGREE**

This Culinology® Level 2 option is articulated with the Food Science and Technology, Culinology® track in the Department of Human Nutrition and Food Science at Cal Poly Pomona. The coursework has received approval from the Research Chefs' Association. Students must complete both Level 1 and 2 and meet the Associate in Science degree requirements. Students should certify their General Education coursework before transfer.

The Research Chefs' Association suggests that students take additional Culinary Arts courses such as CA 255, Advanced Garde Manger and CA 265 Ala Minute Continental Cooking to enhance their culinary skills.

**Program Outcomes**

1. Be competent entry-level Culinary and Food Science assistants meeting the employment needs of the community.
2. Communicate and work effectively with Chefs, Food Scientists, and clientele.
3. Be able to transfer to selected colleges in Culinology®.
4. Culinology® students should obtain materials from the Transfer Center for complete details on transferable courses.

**Required Prerequisites:**

Level 1 Culinary Food Science Assistant Certificate of Achievement

| <b>Subtotal</b>              |      |      | <b>30</b> |
|------------------------------|------|------|-----------|
| Course                       |      |      | Units     |
| <b>FIRST SEMESTER</b>        |      |      |           |
| Culinary Principles 2        | CA   | A122 | 3         |
| General Chemistry A          | CHEM | A180 | 5         |
| Menu Planning and Purchasing | FSM  | A250 | 3         |
| Trigonometry                 | MATH | A120 | 3         |
| <b>Subtotal</b>              |      |      | <b>14</b> |



**SECOND SEMESTER**

|                              |      |      |   |
|------------------------------|------|------|---|
| Cell & Molecular Biology     | BIOL | A180 | 4 |
| General Microbiology         | BIOL | A210 | 5 |
| Food Science Quality Control | FN   | A196 | 4 |

**Subtotal** 13

**Program Major Units** 57

**AS General Education Option 1, 2, or 3** Varies

**Total Minimum Degree Units** 69

Culinology® is the registered trademark of the Research Chef's Association.

## DANCE

### PILATES INSTRUCTOR

#### CERTIFICATE OF ACHIEVEMENT

The Pilates/Dance Conditioning Instructor Certificate of Achievement prepares the student to teach in a privately owned dance, fitness or Pilates studio, recreational facility, or health club. The student takes theory and technique courses on Pilates apparatus taught by Pilates certified specialists and learns methods to determine appropriate conditioning programs for people of all ages and physical conditions. To prepare the student for employment, instruction uses both classroom work with a variety of instructional methods (lecture, lab/demonstration, independent and group projects), and internship experiences in dance and fitness facilities.

#### Program Outcomes

1. Demonstrate and/or identify beginning through advanced Pilates exercises for mat and apparatus.
2. Describe the basic principles of Pilates and explain their relevance to a Pilates program.
3. Design a lesson plan for a Pilates mat and apparatus class.
4. Teach a Pilates class using appropriate cueing and demonstration.
5. Identify common alignment problems and describe proper modifications and/or solutions.

**Program prerequisite: Current First Aid/CPR certification**

| Course                               |      |      | Units       |
|--------------------------------------|------|------|-------------|
| <b>Core Courses:</b>                 |      |      |             |
| Pilates Mat Work                     | DANC | A108 | 1           |
| Kinesiology for Dance                | DANC | A119 | 3           |
| Pilates Methodology                  | DANC | A129 | 3           |
| Pilates as a Profession              | DANC | A151 | 1           |
| Pilates Apparatus & Mat Work Level 1 | DANC | A152 | 2           |
| Pilates Apparatus & Mat Work Level 2 | DANC | A153 | 2           |
| Pilates 3-4                          | DANC | A208 | 1.5         |
| Pilates Internship 1                 | DANC | A215 | 1           |
| Pilates Internship 2                 | DANC | A217 | 1           |
| <b>Subtotal</b>                      |      |      | <u>15.5</u> |

**Select three (3) units from the following:**

|                                     |      |      |      |
|-------------------------------------|------|------|------|
| Strength and Stretch                | DANC | A106 | 1-2  |
| Conditioning for Dance              | DANC | A107 | .5-2 |
| Yoga for Dancers                    | DANC | A115 | .5-2 |
| Dance Workout for the Maturing Body | DANC | A118 | 1-2  |
| Gyrokinesis®                        | DANC | A139 | .5-2 |

**Subtotal** 3

**Total Units** 18.5

## DANCE INSTRUCTOR

### CERTIFICATE OF ACHIEVEMENT

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors with an emphasis in one of the following: ballet, modern, jazz, tap and world dance forms in private studios, recreation or other community dance programs. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree. Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

#### Program Outcomes

1. Demonstrate knowledge of proper alignment, use of turnout and ability to apply alignment corrections in a teaching situation.
2. Communicate effectively through movement and words.
3. Successfully design and write a lesson plan appropriate to the level and age of the target students.
4. Construct and teach a dance phrase in a particular style: modern dance, ballet, tap, jazz, hip hop or world dance.
5. Incorporate three learning modes and an exercise "progression" in teaching methodology.
6. Correctly count and set tempo in duple and triple meter for a live dance accompanist or for recorded music.
7. Teach a technique or creative movement dance class for children or adults.

| Course                             |      |      | Units |
|------------------------------------|------|------|-------|
| <b>Core Courses:</b>               |      |      |       |
| Kinesiology for Dance              | DANC | A119 | 3     |
| Pilates Apparatus/Mat Work Level 1 | DANC | A152 | 2     |
| Or                                 |      |      |       |
| Pilates Apparatus/Mat Work Level 2 | DANC | A153 | 2     |
| Dance Improvisation 1              | DANC | A150 | 1     |
| Or                                 |      |      |       |
| Dance Improvisation 2              | DANC | A250 | 1     |
| Dance Composition/Choreography 1   | DANC | A160 | 3     |
| Or                                 |      |      |       |
| Dance Composition/Choreography 2   | DANC | A162 | 3     |
| Or                                 |      |      |       |
| Dance Composition/Choreography 3   | DANC | A262 | 3     |
| Music for Dancers                  | DANC | A170 | 2     |
| Appreciation of Dance              | DANC | A200 | 3     |

*Continued on next page*

**DANCE INSTRUCTOR CERTIFICATE (CONTINUED)**

|                                |      |      |   |
|--------------------------------|------|------|---|
| Rehearsal and Performance      | DANC | A201 | 1 |
| Or                             |      |      |   |
| Rehearsal and Performance 2    | DANC | A202 | 1 |
| Dance as a Profession Seminar  | DANC | A205 | 2 |
| Dance Methodology              | DANC | A210 | 3 |
| Repertoire 1                   | DANC | A211 | 2 |
| Or                             |      |      |   |
| Repertoire 2                   | DANC | A212 | 2 |
| Dance Internship 1             | DANC | A220 | 1 |
| Dance Internship 2             | DANC | A221 | 1 |
| Jazz 3                         | DANC | A143 | 2 |
| Or                             |      |      |   |
| Jazz 4                         | DANC | A243 | 2 |
| Or                             |      |      |   |
| Prep for Audition - Jazz       | DANC | A253 | 2 |
| Ballet 3                       | DANC | A144 | 2 |
| Or                             |      |      |   |
| Ballet 4                       | DANC | A244 | 2 |
| Or                             |      |      |   |
| Prep for Audition - Ballet     | DANC | A254 | 2 |
| Modern Dance 3                 | DANC | A145 | 2 |
| Or                             |      |      |   |
| Modern 4                       | DANC | A245 |   |
| Or                             |      |      |   |
| Prep for Audition - Modern     | DANC | A255 | 2 |
| Tap 1                          | DANC | A125 | 1 |
| Or                             |      |      |   |
| Tap 2                          | DANC | A126 | 1 |
| Or                             |      |      |   |
| Tap 3                          | DANC | A146 | 1 |
| Or                             |      |      |   |
| Tap 4                          | DANC | A246 | 1 |
| Or                             |      |      |   |
| Preparation for Audition - Tap | DANC | A256 | 1 |

**Subtotal** **31**

**Select three (3) units of dance technique from at least two (2) different dance styles:**

|                              |      |      |      |
|------------------------------|------|------|------|
| African Dance and Drumming 1 | DANC | A138 | .5-2 |
| African Dance and Drumming 2 | DANC | A158 | 1    |
| Flamenco Dance 1             | DANC | A135 | .5-2 |
| Flamenco Dance 2             | DANC | A147 | .5-2 |
| Classical Dance of India     | DANC | A137 | .5-2 |
| Latin Dance Styles 1         | DANC | A116 | .5-2 |
| Latin Dance Styles 2         | DANC | A155 | 1    |
| Mid-Eastern Dance 1          | DANC | A130 | .5-2 |
| Mid-Eastern Dance 2          | DANC | A148 | .5-2 |
| Introduction to World Dance  | DANC | A133 | .5-2 |

**Subtotal** **3**

**Total Units** **34**

**Dance Instructor Suggested Electives:**

|                              |           |      |   |
|------------------------------|-----------|------|---|
| Anatomy-Physiology           | BIOL      | A221 | 4 |
| Introduction to Business     | BUS       | A100 | 3 |
| Personal Financial Success   | BUS       | A120 | 3 |
| Interpersonal Communication  | CMST      | A100 | 3 |
| Pilates Methodology          | DANC      | A129 | 3 |
| Creativity for Children      | EC        | A131 | 3 |
| Personal Health              | HLED/PUBH | A100 | 3 |
| Fitness and Health           | HLED/KIN  | A270 | 3 |
| Child Growth and Development | HMDV      | A180 | 3 |
| Introduction to Psychology   | PSYC      | A100 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Dance Instructor Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**WORLD DANCE**

**CERTIFICATE OF ACHIEVEMENT**

The Dance certificate program trains students for positions in the commercial and artistic areas of dance. Graduates of the program would be qualified as instructors in private studios, recreation or other community dance programs, and act as consultants, lecturers, or performers with an emphasis on the world dance forms, primarily Mid-Eastern, Flamenco, Spanish Classical, East Indian, or African. The Dance Department also recommends that students complete their General Education Requirements for an Associate Degree.

Students are able to apply principles of movement and creativity to all forms of dance, demonstrate skills of instructing dance to communicate through movement and words, and apply information learned in other disciplines to the art form of dance.

Instruction will utilize both classroom work, using a variety of instructional methods (lecture, lab/demonstration, independent and group projects) and internship experiences in business/industry to prepare the student for job requirements.

**Program Outcomes**

1. Demonstrate effective movement principles and the elements of space, shape, energy and rhythm/time.
2. Perform at least one of the following world dance forms with appropriate vocabulary skills and styling at an intermediate/advanced level: Flamenco, Classical Indian Dance, African Dance, Middle Eastern Dance, and Latin Dance.
3. Demonstrate proficiency in vocabulary, traditions, and cultural knowledge for three or more World Dance forms studied at OCC.
4. Communicate effectively through movement and words.
5. Demonstrate skills required to work in commercial or artistic areas of world dance.

| Course                     | Units         |
|----------------------------|---------------|
| <b>Core Courses:</b>       |               |
| Flamenco Dance 2           | DANC A147 1-2 |
| Mid-Eastern Dance 2        | DANC A148 1-2 |
| Latin Dance Styles 2       | DANC A155 1   |
| African Dance & Drumming 2 | DANC A158 1-2 |
| Music for Dancers          | DANC A170 2   |
| Dance Profession Seminar   | DANC A205 2   |
| Dance Methodology          | DANC A210 3   |
| World Dance Internship 1   | DANC A218 1   |
| World Dance Internship 2   | DANC A219 1   |
| World Dance and Culture    | DANC A230 3   |
| Or                         |               |
| World Religion             | RLST A110 3   |
| <b>Subtotal</b>            | <b>16-19</b>  |

**Select three (3) units:**

|                             |      |      |          |
|-----------------------------|------|------|----------|
| Rehearsal & Performance 1   | DANC | A201 | 1        |
| And                         |      |      |          |
| Repertoire 1                | DANC | A211 | 2        |
| Or                          |      |      |          |
| Performing Dance Ensemble 1 | DANC | A203 | 3        |
| <b>Subtotal</b>             |      |      | <b>3</b> |

**Select six (6) units of dance technique from at least two (2) different styles:**

|                              |      |      |     |
|------------------------------|------|------|-----|
| African Dance and Drumming 1 | DANC | A138 | 1-2 |
| Ballet I                     | DANC | A110 | 1-2 |
| Ballet II                    | DANC | A111 | 1-2 |
| Ballet III                   | DANC | A144 | 1-2 |
| Flamenco Dance 1             | DANC | A135 | 1-2 |
| Folk Dance                   | DANC | A142 | 1-2 |
| Classical Dance of India     | DANC | A137 | 1-2 |
| Latin Dance Styles 1         | DANC | A116 | 1-2 |
| Latin Dance Styles 2         | DANC | A155 | 1   |
| Latin Dance Styles 3         | DANC | A165 | 1   |
| Mid-Eastern Dance 1          | DANC | A130 | 1-2 |
| Tap 1                        | DANC | A125 | 1-2 |
| Tap II                       | DANC | A126 | 1-2 |
| Tap III                      | DANC | A146 | 1-2 |
| Introduction to World Dance  | DANC | A133 | 1-2 |

**Subtotal** 6

**Total Units** 25-28

**ASSOCIATE IN ARTS DEGREE**

Complete the World Dance Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**DANCE**

**ASSOCIATE IN ARTS DEGREE**

The degree provides students with a foundation in the theory, technique, and the aesthetics of the art of dance. This is fulfilled through a comprehensive program of dance study in areas of core techniques, contemporary and commercial styles, choreography, performance, and world dance forms. Students will demonstrate proficiency through accurate technical execution, performance skills, research papers, essays, and choreographic works.. Program assessment is measured by public performances, program completion, transferability, and periodic program review. Students qualify to pursue a variety of dance-related careers and advanced degree options.

**Program Outcome**

1. Develop an understanding and appreciation of the art of dance and its relevance to the multicultural world we live in.
2. Acquire the dance technical skills necessary to transfer to a university program or similar advanced dance study program.
3. Implement critical thinking skills and kinesthetic awareness in their observation, analysis, and interpretation of dance performances on stage or in media.
4. Develop dance composition and performance skills necessary to successfully transfer to a university program or similar advanced dance study program.

| Course   |      |      | Units     |
|--|------|------|-----------|
| <b>Core Courses:</b>   |      |      |           |
| Dance Improvisation 1  | DANC | A150 | 1         |
| Dance Improvisation 2  | DANC | A250 | 1         |
| Music for Dancers  | DANC | A170 | 2         |
| Jazz 3   | DANC | A143 | 2         |
| Or   |      |      |           |
| Jazz 4   | DANC | A243 | 2         |
| Or   |      |      |           |
| Prep for Audition - Jazz   | DANC | A253 | 2         |
| Ballet 3   | DANC | A144 | 2         |
| Or   |      |      |           |
| Ballet 4   | DANC | A244 | 2         |
| Or   |      |      |           |
| Prep for Audition - Ballet   | DANC | A254 | 2         |
| Dance Composition/Choreography 1   | DANC | A160 | 3         |
| Or   |      |      |           |
| Dance Composition/Choreography 2   | DANC | A162 | 3         |
| Or   |      |      |           |
| Dance Composition/Choreography 3   | DANC | A262 | 3         |
| Rehearsal and Performance  | DANC | A201 | 1         |
| Or   |      |      |           |
| Rehearsal and Performance 2  | DANC | A202 | 1         |
| Or   |      |      |           |
| Rehearsal and Performance 3  | DANC | A204 | 1         |
| Or   |      |      |           |
| Rehearsal and Performance 4  | DANC | A207 | 1         |
| Repertoire 1   | DANC | A211 | 2         |
| Or   |      |      |           |
| Repertoire 2   | DANC | A212 | 2         |
| Or   |      |      |           |
| Repertoire 3   | DANC | A213 | 2         |
| <b>Subtotal</b>  |      |      | <b>14</b> |
| <b>Restricted Electives - Select at least four (4) units from the following courses:</b> |      |      |           |
| Modern Dance 1   | DANC | A101 | 0.5-2     |
| Modern Dance 2   | DANC | A102 | 0.5-2     |
| Ballet 1   | DANC | A110 | 0.5-2     |
| Ballet 2   | DANC | A111 | 0.5-2     |
| Pointe Work  | DANC | A113 | 1-2       |
| Yoga for Dancers   | DANC | A115 | 0.5-2     |
| Latin Dance Styles 1   | DANC | A116 | 0.5-2     |
| American Social Dance Styles   | DANC | A117 | 0.5-2     |
| Kinesiology for Dance  | DANC | A119 | 3         |
| Jazz Dance 1   | DANC | A120 | 0.5-2     |
| Jazz Dance 2   | DANC | A121 | 0.5-2     |
| Tap 1  | DANC | A125 | 0.5-2     |
| Tap 2  | DANC | A126 | 0.5-2     |
| Mid-Eastern Dance 1  | DANC | A130 | 0.5-2     |
| Flamenco Dance 1   | DANC | A135 | 0.5-2     |
| Classical Dance of India   | DANC | A137 | 0.5-2     |
| African Dance and Drumming 1   | DANC | A138 | 0.5-2     |
| Tap 3  | DANC | A146 | 1         |
| Flamenco Dance 2   | DANC | A147 | 0.5-2     |
| Mid-Eastern Dance 2  | DANC | A148 | 0.5-2     |
| Hip-Hop Dance 1  | DANC | A149 | 0.5-2     |
| Pilates Apparatus/Mat Work Level 1   | DANC | A152 | 1-2       |
| Pilates Apparatus/Mat Work Level 2   | DANC | A153 | 1-2       |
| Latin Dance Styles 2   | DANC | A155 | 1         |
| African Dance & Drumming 2   | DANC | A158 | 1         |
| Hip-Hop Dance 2  | DANC | A159 | 1         |
| Latin Dance Styles 3   | DANC | A165 | 1         |
| African Dance & Drumming 3   | DANC | A168 | 1         |
| Modern Dance Basics  | DANC | A171 | 2         |
| Ballet Dance Basics  | DANC | A172 | 2         |
| Jazz Dance Basics  | DANC | A173 | 2         |
| Tap Dance Basics   | DANC | A174 | 1         |
| Classical Technique and Variation Workshop   | DANC | A191 | 1-2       |

*Continued on next page*

**DANCE AA DEGREE (CONTINUED)**

|                                |      |      |   |
|--------------------------------|------|------|---|
| Appreciation of Dance          | DANC | A200 | 3 |
| Appreciation of Dance          | DANC | A203 | 3 |
| Dance as a Profession Seminar  | DANC | A205 | 2 |
| Dance Methodology              | DANC | A210 | 3 |
| Performing Dance Ensemble 3    | DANC | A223 | 3 |
| World Dance and Culture        | DANC | A230 | 3 |
| Performing Dance Ensemble 3    | DANC | A233 | 3 |
| Tap 4                          | DANC | A246 | 1 |
| Preparation for Audition - Tap | DANC | A256 | 1 |

**Subtotal** 4

**Program Major Units** 18

**AA General Education Option 1, 2, or 3** Varies

**Transferable electives as needed to satisfy unit requirement** Varies

**Total Degree Units** 60

## DENTAL ASSISTING

### DENTAL ASSISTING - REGISTERED

**CERTIFICATE OF ACHIEVEMENT**

Dental assisting is a challenging field requiring skills in chairside assisting, which includes manual dexterity, dental radiology, preventive therapy, patient management, receptionist duties, expanded functions and office management.

Qualified dental assistants find employment opportunities in a variety of settings such as private dental offices, specialty practices, federal or state dental programs and dental schools.

The Dental Assisting program is accredited by the Commission on Dental Accreditation and has been granted the accreditation status of approval. The commission is a specialized accrediting body recognized by the United States Department of Education.

The Commission on Dental Accreditation can be contacted at (312) 440-4653 or at 211 East Chicago Avenue, Chicago, IL 60611. The program is also approved by the State of California Department of Consumer Affairs, Dental Board of California, 2005 Evergreen Street, Suite 1550, Sacramento, CA 95815.

RDA functions are taught to laboratory competency and clinical competency where applicable. A list of laboratory and clinical competencies are available upon request.

Program application process is accomplished by taking program prerequisite, Allied Health A010. This short-term course is mandatory for all prospective program applicants. See current class schedule for specific course meeting times. The Dental Assisting Registered program starts only in the fall semester of every school year.

This program is a sequential program. All fall semester courses must be taken concurrently in the fall semester. All spring semester courses must be taken concurrently in the spring semester.

**Program Outcomes**

- The outcome of the program is to meet the needs of the local health care community by preparing students for employment as a professional and competent registered dental assistant.

**Required Prerequisites:**

|                     |     |      |     |
|---------------------|-----|------|-----|
| Health Occupations  | ALH | A010 | 0.5 |
| Medical Terminology | ALH | A111 | 3   |

**Subtotal** 3.5

| Course                             | Units |      |     |
|------------------------------------|-------|------|-----|
| <b>FALL</b>                        |       |      |     |
| Patient Care                       | ALH   | A115 | 2.5 |
| Dental Anatomy                     | DA    | A100 | 2   |
| Chairside Techniques 1             | DA    | A110 | 3   |
| Dental Materials                   | DA    | A120 | 3   |
| Preventive and Community Dentistry | DA    | A130 | 1   |
| Dental Radiography 1               | DA    | A140 | 3   |
| Clinical Experience 1              | DA    | A160 | 1   |

**Subtotal** 15.5

**SPRING**

|  |    |      |     |
|--|----|------|-----|
| Chairside Techniques 2                         | DA | A115 | 2   |
| Expanded Functions                             | DA | A125 | 2   |
| Specialized Practices                          | DA | A145 | 2   |
| Biomedical Sciences                            | DA | A150 | 2   |
| Clinical Experience 2                          | DA | A163 | 1   |
| Clinical Experience 3                          | DA | A165 | 2.5 |
| Clinical Experience 4                          | DA | A168 | 1   |
| Principles of Business and Practice Management | DA | A175 | 1.5 |

**Subtotal** 14

**Total Units** 33

**Dental Assisting — Registered Suggested Electives:**

|                                       |           |      |   |
|---------------------------------------|-----------|------|---|
| Introduction to Computer Applications | CIS       | A100 | 3 |
| Interpersonal Communication           | CMST      | A100 | 3 |
| Public Speaking                       | CMST      | A110 | 3 |
| Strategies for College Success        | COUN      | A105 | 2 |
| Freshman Composition                  | ENGL      | A100 | 3 |
| Ethics                                | PHIL/RLST | A120 | 3 |
| Introduction to Psychology            | PSYC      | A100 | 3 |

Program approved by the American Dental Association. Graduates are eligible to take the California Registered Dental Assistant Exam and the National Certification Exam upon program completion and qualify for their State radiation license and coronal polishing, pit and fissure sealant and ultrasonic scaling for cement removal certificates.

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Dental Assisting - Registered Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## DIAGNOSTIC MEDICAL SONOGRAPHY

### DIAGNOSTIC MEDICAL SONOGRAPHY

#### ASSOCIATE IN SCIENCE DEGREE

Diagnostic Medical Sonography (DMS) is a medical imaging modality using high-frequency sound waves to create images of specific areas of the body for which pathology may be diagnosed. A competent Sonographer must have a thorough knowledge of cross-sectional anatomy and pathology, as well as the skills to manipulate a wide variety of sophisticated instruments. The DMS Program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). In addition to completion of the prerequisite and required courses below, this program requires completion of the Associate in Science General Education as listed in the catalog. Also, the completion of MATH A030 or higher college-level mathematics course is required by the CAAHEP and Joint Review Committee on Education in Diagnostic Medical Sonography (JRC-DMS). ALH A120 Human Diseases may be taken prior to program start. A "C" grade is required in all program courses.

#### Program Admission

Allied Health 010 course – application and orientation.

Students must complete Associate in Science degree graduation requirements and the program prerequisites prior to acceptance to the program.

#### Program Outcomes

- The outcome of the program is to prepare students as competent Diagnostic Medical Sonographers for employment in the imaging field as professionals to meet community needs, and apply the concept of life-long learning through professional growth activities.

#### Recommended Preparation:

|                                |      |      |   |
|--------------------------------|------|------|---|
| Strategies for College Success | COUN | A105 | 3 |
|--------------------------------|------|------|---|

#### Required Prerequisites:

|                            |      |      |     |
|----------------------------|------|------|-----|
| Health Occupations         | ALH  | A010 | 0.5 |
| Medical Terminology        | ALH  | A111 | 3   |
| Anatomy-Physiology         | BIOL | A221 | 4   |
| Introduction to Sonography | DMS  | A110 | 1.5 |
| Radiologic Physics         | RADT | A100 | 2   |

**Subtotal** **11**

| Course |  |  |  | Units |
|--------|--|--|--|-------|
|--------|--|--|--|-------|

#### FALL

|   |     |      |     |
|---|-----|------|-----|
| Patient Care                            | ALH | A115 | 2.5 |
| Human Diseases                          | ALH | A120 | 2   |
| Sectional Anatomy for Medical Imaging   | DMS | A123 | 4   |
| Sonographic Physics and Instrumentation | DMS | A150 | 3.5 |

**Subtotal** **12**

#### SPRING

|   |     |      |     |
|---|-----|------|-----|
| OB/GYN Sonography                                   | DMS | A126 | 4   |
| Introduction to Vascular Ultrasound                 | DMS | A155 | 2.5 |
| Pathophysiology                                     | DMS | A161 | 3   |
| Introduction to Scanning Practice                   | DMS | A165 | 3   |
| Diagnostic Medical Sonography Clinical Experience 1 | DMS | A166 | 2   |

**Subtotal** **14.5**

#### SUMMER

|   |     |      |   |
|---|-----|------|---|
| Diagnostic Medical Sonography Clinical Experience 2 | DMS | A167 | 5 |
|---|-----|------|---|

**Subtotal** **5**

#### FALL

|   |     |      |     |
|---|-----|------|-----|
| Advanced Vascular Ultrasound                        | DMS | A255 | 2.5 |
| Diagnostic Medical Sonography Clinical Experience 3 | DMS | A271 | 7   |
| Abdominal Sonography                                | DMS | A274 | 3   |
| Diagnostic Medical Sonography Clinical Experience 4 | DMS | A276 | 2   |

**Subtotal** **14.5**

#### SPRING

|   |     |      |   |
|---|-----|------|---|
| Sonographic Review                                  | DMS | A275 | 3 |
| Diagnostic Medical Sonography Clinical Experience 5 | DMS | A281 | 9 |

**Subtotal** **12**

**Program Major Units** **69**

**AS General Education Option 1, 2, or 3** **Varies**

**Total Minimum Degree Units** **84**

#### Diagnostic Medical Sonography Suggested Elective:

|        |           |      |   |
|--------|-----------|------|---|
| Ethics | PHIL/RLST | A120 | 3 |
|--------|-----------|------|---|

## DIGITAL MEDIA ARTS AND DESIGN

### ANIMATION

#### CERTIFICATE OF ACHIEVEMENT

Students in this program will explore animation concepts and gain hands-on experience using industry-standard hardware and software and motion capture systems. Animation is widely used in broadcast media, gaming and simulation, motion graphics, web design, and VR/AR. Students will employ techniques in storytelling and character development for both 2-dimensional and 3-dimensional animation. Computer and drawing skills are very important in this field. Students will leave with an animation portfolio representative of the material and techniques studied, suitable for employment or transfer to another institution.

#### Program Outcomes

- Communicate ideas, emotion and intent effectively in visual, oral and written forms.
- Create 2D and 3D characters and environments that reflect the integration of graphic clarity, design principles, performance principles and theoretical constructs.
- Design layouts and backgrounds that incorporate principles of composition, perspective and color, with speed, accuracy and dexterity, using a variety of media.
- Incorporate technology effectively in the development of animation projects.

*Continued on next page*

**ANIMATION CERTIFICATE (CONTINUED)**

| Course                                     |      |      | Units     |
|--|------|------|-----------|
| <b>FIRST SEMESTER</b>                      |      |      |           |
| Color and Design: Two-Dimensional          | ART  | A110 | 3         |
| Beginning Drawing                          | ART  | A120 | 3         |
| Introduction to Computer Graphics          | DMAD | A181 | 3         |
| Editing 1                                  | FILM | A194 | 3         |
| <b>Subtotal</b>                            |      |      | <b>12</b> |
| <b>SECOND SEMESTER</b>                     |      |      |           |
| Life Drawing 1                             | ART  | A121 | 3         |
| Digital Painting                           | ART  | A135 | 3         |
| Illustration and Graphics with Illustrator | DMAD | A190 | 3         |
| Intro to Visual Effects                    | FILM | A196 | 3         |
| <b>Subtotal</b>                            |      |      | <b>12</b> |
| <b>THIRD SEMESTER</b>                      |      |      |           |
| Character Design                           | ART  | A251 | 3         |
| 2D Animation                               | DMAD | A280 | 3         |
| Restricted Elective                        |      |      | 3         |
| <b>Subtotal</b>                            |      |      | <b>6</b>  |
| <b>FOURTH SEMESTER</b>                     |      |      |           |
| 3D Computer Graphics Animation             | DMAD | A281 | 3         |
| Restricted Elective                        |      |      | 6         |
| <b>Subtotal</b>                            |      |      | <b>9</b>  |
| <b>Total Units</b>                         |      |      | <b>42</b> |

**Animation Restricted Electives - Select nine (9) units from the following:**

|  |      |      |   |
|--|------|------|---|
| Color and Design: Three-Dimensional                            | ART  | A111 | 3 |
| Story Illustration Techniques                                  | ART  | A143 | 3 |
| Figure Composition   | ART  | A220 | 3 |
| Cartooning 1   | ART  | A269 | 3 |
| Cartooning 2   | ART  | A270 | 3 |
| Rapid Illustration Techniques                                  | DMAD | A117 | 3 |
| Studio Internship  | DMAD | A202 | 3 |
| Digital Portfolio Development                                  | DMAD | A288 | 3 |
| Motion Graphics and Video Compositing with Adobe After Effects | DMAD | A263 | 3 |
| Introduction to Media Writing                                  | FILM | A106 | 3 |
| Sound Design for Film & Television                             | FILM | A193 | 3 |
| Introduction to Virtual Reality (VR)                           | FILM | A220 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Animation Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**GRAPHIC DESIGN**

**CERTIFICATE OF ACHIEVEMENT**

This program presents a concentrated course of study in the field of digital media arts and design. Concept development and the generation of a portfolio suitable for job applications or transfer to a degree program is a major focus in each of the core courses.

Courses emphasize the process and problem-solving in conjunction with visual design issues. DMAD graphic design courses provide broad-based entry level training for a variety of graphic design industries. Students are introduced to a broad range of media, including branding, publications, posters, print advertisements, website graphics, billboards and product packaging, as well as strategies and the techniques required to incorporate these areas into print and online.

**Program Outcomes**

1. Apply the principles of color, composition, hierarchy, typography as they relate in the various design media utilizing industry standard graphics software.
2. Apply critical thinking and aesthetic judgment to demonstrate the ability to analyze, synthesize, and develop probable graphic design solutions.
3. Develop an original, innovative and articulate body of graphic design work for a professional portfolio for the purpose of gaining employment and/or acceptance to an Art College or University.

| Course   |      |      | Units          |
|--|------|------|----------------|
| <b>FIRST SEMESTER</b>                          |      |      |                |
| Color and Design: Two-Dimensional              | ART  | A110 | 3              |
| Rapid Illustration Techniques                  | DMAD | A117 | 3              |
| History of Graphic Design                      | DMAD | A151 | 3              |
| Introduction to Computer Graphics              | DMAD | A181 | 3              |
| <b>Subtotal</b>                                |      |      | <b>12</b>      |
| <b>SECOND SEMESTER</b>                         |      |      |                |
| Screen Process Printing 1                      | ART  | A175 | 3              |
| Typography 1                                   | DMAD | A115 | 3              |
| Illustration and Graphics with Illustrator     | DMAD | A190 | 3              |
| Image Manipulation and Graphics with Photoshop | DMAD | A193 | 3              |
| <b>Subtotal</b>                                |      |      | <b>12</b>      |
| <b>THIRD SEMESTER</b>                          |      |      |                |
| Typography 2                                   | DMAD | A116 | 3              |
| Graphic Design                                 | DMAD | A182 | 3              |
| <b>Subtotal</b>                                |      |      | <b>6</b>       |
| <b>FOURTH SEMESTER</b>                         |      |      |                |
| Professional Studies                           | ART  | A180 | 2.5            |
| Or   |      |      |                |
| Studio Internship                              | DMAD | A202 | 2              |
| Designing for Print                            | DMAD | A183 | 3              |
| Digital Portfolio Development                  | DMAD | A288 | 3              |
| <b>Subtotal</b>                                |      |      | <b>8-8.5</b>   |
| <b>Total Units</b>                             |      |      | <b>38-38.5</b> |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Graphic Design Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**UX DESIGN**

**CERTIFICATE OF ACHIEVEMENT**

The UX Design Certificate is designed to prepare the student for an entry level position in the UX/UI Design Industry. Students will gain the knowledge and skills needed to create original digital art used to integrate user research, psychology, as well as, text, images, animation, video, and other content into effective user interface design. Students will create prototypes that explore, demonstrate, and verify the effectiveness of their design solutions for the Web, Apps, Watches, and/or other Interactive Design Products. Digital Media Arts and Design is an important sector of the economy and industry is eager to find qualified candidates who not only understand practical knowledge of UX/UI design principles, but also know how to collaborate with fellow designers, stakeholders, clients.

**Program Outcomes**

1. Demonstrate skill in design utilizing industry standard user experience design and visual design software.
2. Design and create website and mobile app projects and prototypes, that demonstrate knowledge of design for different screens, user interface design, and best practices in typography, design and navigation.
3. Create a portfolio utilizing a variety of design techniques for the purpose of gaining employment and/or acceptance to an Art College or University.

| Courses  |      |      | Units          |
|--|------|------|----------------|
| <b>FIRST SEMESTER</b>                          |      |      |                |
| Color and Design: Two-Dimensional              | ART  | A110 | 3              |
| Rapid Illustration Techniques                  | DMAD | A117 | 3              |
| History of Graphic Design                      | DMAD | A151 | 3              |
| Introduction to Computer Graphics              | DMAD | A181 | 3              |
| <b>Subtotal</b>                                |      |      | <b>12</b>      |
| <b>SECOND SEMESTER</b>                         |      |      |                |
| Typography 1                                   | DMAD | A115 | 3              |
| Graphic Design                                 | DMAD | A182 | 3              |
| Illustration and Graphics with Illustrator     | DMAD | A190 | 3              |
| Image Manipulation and Graphics with Photoshop | DMAD | A193 | 3              |
| <b>Subtotal</b>                                |      |      | <b>12</b>      |
| <b>THIRD SEMESTER</b>                          |      |      |                |
| Designing for the Web                          | DMAD | A200 | 3              |
| Interaction Design                             | DMAD | A203 | 3              |
| <b>Subtotal</b>                                |      |      | <b>6</b>       |
| <b>FOURTH SEMESTER</b>                         |      |      |                |
| Professional Studies                           | ART  | A180 | 2.5            |
| Or   |      |      |                |
| Studio Internship                              | DMAD | A202 | 2              |
| Digital Portfolio Development                  | DMAD | A288 | 3              |
| <b>Subtotal</b>                                |      |      | <b>5-5.5</b>   |
| <b>Total Units</b>                             |      |      | <b>35-35.5</b> |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the UX Design Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**ECONOMICS**

**ECONOMICS**

**ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Economics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Economics AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate Arts in Economics for Transfer (AA-T) focuses on fundamental principles and models in both microeconomics and macroeconomics. In Microeconomics, students examine the nature of optimal producer and consumer decisions, the structure of markets, and the application of optimal decision making to classic problems in microeconomics. This may include tax incidence, market failures, international trade, price controls, and market efficiency. In Macroeconomics, students examine economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. Additionally, students who choose the Associate in Arts in Economics for Transfer (AA-T) degree become literate in the language of economics: calculus and statistics. Crucial concepts of differentiation, integration, optimization, probability, and statistical inference are learned. These mathematical tools serve as the foundation for upper division economic analysis.

**Program Outcome**

1. Explain the concepts of scarcity, opportunity cost, rational behavior, and economic efficiency.
2. Use economic models to evaluate situations in the micro and macro economy, to evaluate government policies, and to explain the responses of consumers and producers to changes in market conditions.
3. Develop the foundational skills in quantitative and computing methods to be eligible for admission (SB 1440 and Education Code 66746) to California State University system schools with similar degrees.

| Course                              |      |              | Units     |
|-------------------------------------|------|--------------|-----------|
| <b>Core Courses:</b>                |      |              |           |
| Microeconomics                      | ECON | A170         | 3         |
| Macroeconomics                      | ECON | A175         | 3         |
| Introduction to Statistics / Honors | MATH | A160 / A160H | 4         |
| Or                                  |      |              |           |
| Statistics for Behavioral Sciences  | PSYC | A160         | 4         |
| Business Calculus                   | MATH | A140         | 4         |
| Or                                  |      |              |           |
| Calculus 1 / Honors                 | MATH | A180 / A180H | 4         |
| <b>Subtotal</b>                     |      |              | <b>14</b> |

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

|  |      |      |            |
|--|------|------|------------|
| Financial Accounting                         | ACCT | A101 | 4          |
| Managerial Accounting                        | ACCT | A102 | 4          |
| Business Communication                       | BUS  | A139 | 3          |
| Introduction to Computer Information Systems | CIS  | A111 | 3          |
| Finite Mathematics with Applications         | MATH | A155 | 4          |
| <b>Subtotal</b>                              |      |      | <b>3-4</b> |

**LIST B - Select any course not previously taken from List A or one course below:**

|                             |      |      |          |
|-----------------------------|------|------|----------|
| Economics: General Concepts | ECON | A100 | 3        |
| Consumer Economics          | ECON | A110 | 3        |
| <b>Subtotal</b>             |      |      | <b>3</b> |

**Program Major Units** **20-21**

**CSU or IGETC for CSU** **37-39**

**Transferable electives to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## EDUCATION

### **EARLY CHILDHOOD EDUCATION AND ADMINISTRATION**

Coursework in the Early Childhood Education Department emphasizes the theoretical and practical knowledge needed for working with culturally diverse children birth through age eight. The department offers a variety of certificates and degrees depending on age groups and needs of children. The various certificate and degree programs provide developmentally-based courses designed to teach students how to provide competent care and interactions for children.

### **EARLY CHILDHOOD EDUCATION**

#### **ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

Students graduating with an Associate in Science in Early Childhood Education for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Early Childhood Education AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Mission of this program is to grant students an AS-T degree in Early Childhood Education with 24 units in the major and prepares students to transfer to a CSU. This degree gives students priority admission to a local CSU campus, in a similar major, with junior status. Students are encouraged to also complete additional units to earn an ECE Certificate of Achievement.

#### **Program Outcome**

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course   |      |      | Units |
|--|------|------|-------|
| Teaching in a Diverse Society                        | EC   | A126 | 3     |
| Health, Safety, and Nutrition                        | EC   | A127 | 3     |
| Principles and Practices for Teaching Young Children | EC   | A155 | 3     |
| Observing and Recording Child Behavior               | EC   | A165 | 3     |
| Early Childhood Programs - The Curriculum            | EC   | A200 | 3     |
| Early Childhood Practicum - Field Experience         | EC   | A201 | 3     |
| Child Growth and Development                         | HMDV | A180 | 3     |
| Family, School, and Community Partnerships           | HMDV | A190 | 3     |

**Program Major Units** **24**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## INFANT AND TODDLER TEACHER

### **CERTIFICATE OF ACHIEVEMENT**

A certificate is earned by students who have developed skills necessary to work as teachers of infants and toddlers in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children birth to 2 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

#### **Program Outcome**

1. The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent infant/toddler teacher.

| Course  |      |      | Units     |
|---|------|------|-----------|
| Teaching in a Diverse Society                       | EC   | A126 | 3         |
| Or  |      |      |           |
| Health, Safety, and Nutrition                       | EC   | A127 | 3         |
| Language Arts for Children                          | EC   | A130 | 3         |
| Or  |      |      |           |
| Creativity for Children                             | EC   | A131 | 3         |
| Principles and Practices of Teaching Young Children | EC   | A155 | 3         |
| Early Childhood Laboratory                          | EC   | A156 | 2         |
| Guidance for Young Children                         | EC   | A157 | 3         |
| Observing and Recording Child Behavior              | EC   | A165 | 3         |
| Infant & Toddler Programs                           | EC   | A220 | 3         |
| Infant & Toddler Field Experience                   | EC   | A221 | 3         |
| Child Growth and Development                        | HMDV | A180 | 3         |
| Infant Development and Relationships                | HMDV | A184 | 3         |
| Family, School, and Community Partnerships          | HMDV | A190 | 3         |
| <b>Subtotal</b>                                     |      |      | <b>32</b> |

#### **Select one (1) course from the following:**

|   |     |      |              |
|---|-----|------|--------------|
| Current Issues in Early Childhood       | EC  | A199 | 0.5-2        |
| Inclusion of Children with Disabilities | EC  | A240 | 1            |
| Learning Title 22                       | EC  | A261 | 0.5          |
| Disaster Preparedness for Child Care    | EC  | A262 | 0.5          |
| Child Abuse I.D. & Referral             | EC  | A263 | 0.5          |
| Emergency Medical Care-Children         | EMT | A145 | 1            |
| <b>Subtotal</b>                         |     |      | <b>0.5-2</b> |

**Total Units** **32.5-34**

### **ASSOCIATE IN SCIENCE DEGREE**

Complete the Infant and Toddler Teacher Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## ASSOCIATE PRESCHOOL TEACHER

### **CERTIFICATE OF ACHIEVEMENT**

A certificate is earned by students who have developed skills necessary to work as associate teachers of preschool children in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children 2-5 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.



**Program Outcomes**

- The successful student in the program will be able to be employed as a professional and competent Associate Preschool Teacher.

| Course  |      |      | Units          |
|---|------|------|----------------|
| Creativity for Children                             | EC   | A131 | 3              |
| Principles and Practices of Teaching Young Children | EC   | A155 | 3              |
| Early Childhood Laboratory                          | EC   | A156 | 2              |
| Guidance for Young Children                         | EC   | A157 | 3              |
| Current Issues in Early Childhood                   | EC   | A199 | 5-2            |
| Early Childhood Programs- The Curriculum            | EC   | A200 | 3              |
| Child Growth and Development                        | HMDV | A180 | 3              |
| Family, School, and Community Partnerships          | HMDV | A190 | 3              |
| <b>Subtotal</b>                                     |      |      | <b>20.5-22</b> |

**Select one (1) course from the following:**

|                                     |    |      |                |
|-------------------------------------|----|------|----------------|
| Language Arts for Children          | EC | A130 | 3              |
| Science and Math for Young Children | EC | A132 | 3              |
| <b>Subtotal</b>                     |    |      | <b>3</b>       |
| <b>Total Units</b>                  |    |      | <b>23.5-25</b> |

## PRESCHOOL TEACHER

### CERTIFICATE OF ACHIEVEMENT

A certificate is earned by students who have developed skills necessary to work as teachers of preschool children in early childhood settings. Courses emphasize strong theoretical and practical skills needed to work with children 2-5 years. Courses fulfill Title 22 licensing requirements and Title 5 early childhood education course requirements for the Child Development Permit at the teacher level.

**Program Outcomes**

- The objective of the program is to meet the needs of the local child care programs by preparing students for entry level employment as a professional and competent preschool teacher.

| Course  |      |      | Units     |
|---|------|------|-----------|
| Language Arts for Children                          | EC   | A130 | 3         |
| Creativity for Children                             | EC   | A131 | 3         |
| Science for Young Children                          | EC   | A132 | 3         |
| Principles and Practices of Teaching Young Children | EC   | A155 | 3         |
| Early Childhood Laboratory                          | EC   | A156 | 2         |
| Guidance for Young Children                         | EC   | A157 | 3         |
| Observing and Recording Child Behavior              | EC   | A165 | 3         |
| Early Childhood Programs- The Curriculum            | EC   | A200 | 3         |
| Early Childhood Practicum - Field Experience        | EC   | A201 | 3         |
| Child Growth and Development                        | HMDV | A180 | 3         |
| Family, School, and Community Partnerships          | HMDV | A190 | 3         |
| <b>Subtotal</b>                                     |      |      | <b>32</b> |

**Select one (1) course from the following:**

|                                       |      |      |          |
|---------------------------------------|------|------|----------|
| Teaching in a Diverse Society         | EC   | A126 | 3        |
| Health, Safety, and Nutrition         | EC   | A127 | 3        |
| Introduction to The Exceptional Child | HMDV | A210 | 3        |
| <b>Subtotal</b>                       |      |      | <b>3</b> |

**Select two (2) courses from the following:**

|   |    |      |              |
|---|----|------|--------------|
| Current Issues in Early Childhood Learning Title 22 | EC | A199 | 0.5-2        |
| Disaster Preparedness for Child Care                | EC | A262 | 0.5          |
| Child Abuse I.D. & Referral                         | EC | A263 | 0.5          |
| Adult Supervision in Early Childhood Programs       | EC | A277 | 2            |
| <b>Subtotal</b>                                     |    |      | <b>1-2.5</b> |

**Total Units 36-37.5**

### ASSOCIATE IN SCIENCE DEGREE

Complete the Preschool Teacher Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## EARLY CHILDHOOD ADMINISTRATION

### CERTIFICATE OF ACHIEVEMENT

Students who already have Early Childhood certificates may qualify to become directors or administrators of early childhood centers by earning this Early Childhood Administration certificate.

**Program Outcome**

- The objective of the program is to meet the needs of the local child care programs by preparing students for entry-level employment as a professional and competent child care director.

**Required Prerequisites:**

Early Childhood Education Certificate of Achievement Infant/Toddler Teacher  
Or  
Early Childhood Education Certificate of Achievement Preschool Teacher

**Subtotal 32.5-37**

| Course  |      |      | Units        |
|---|------|------|--------------|
| Teaching in a Diverse Society                 | EC   | A126 | 3            |
| Health, Safety, and Nutrition                 | EC   | A127 | 3            |
| Early Childhood Administration-Program        | EC   | A275 | 3            |
| Early Childhood Management                    | EC   | A276 | 3            |
| Adult Supervision in Early Childhood Programs | EC   | A277 | 2            |
| Or  |      |      |              |
| Human Relations and Supervision               | MGMT | A115 | 3            |
| <b>Subtotal</b>                               |      |      | <b>14-15</b> |

**Select 1.5 units from the following:**

|   |     |      |            |
|---|-----|------|------------|
| Current Issues in Early Childhood       | EC  | A199 | 5-1        |
| Inclusion of Children with Disabilities | EC  | A240 | 1          |
| Learning Title 22                       | EC  | A261 | .5         |
| Disaster Preparedness for Child Care    | EC  | A262 | .5         |
| Child Abuse I.D. & Referral             | EC  | A263 | .5         |
| Emergency Medical Care-Children         | EMT | A145 | 1          |
| <b>Subtotal</b>                         |     |      | <b>1.5</b> |

**Total Units 48-52.5**

### ASSOCIATE IN SCIENCE DEGREE

Complete the Early Childhood Administration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires 63-67.5 units for completion.**

## ELEMENTARY EDUCATION

### ELEMENTARY TEACHER EDUCATION

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Elementary Teacher Education for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Elementary Teacher Education AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts degree for Transfer (AA-T) In Elementary Teacher Education is designed for prospective California State University (CSU) transfer students who are preparing for careers as Elementary School Teachers. Completion of a Bachelor's degree In Liberal Studies prepares students to apply to approved teacher education programs leading to a credential to teach in elementary, self-contained classrooms. The Liberal Studies major and aligned AA-T Elementary Teacher Education curriculum provides depth and breadth of subject matter content typically taught in Kindergarten through sixth grade classroom settings in California. Students who plan to enter a California Commission on Teacher Credentialing (CCTC) approved program leading to a preliminary Multiple Subject Credential are required to demonstrate subject matter competency.

#### Program Outcome

- Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course   | Units                |
|--|----------------------|
| <b>Core Courses:</b>                                     |                      |
| Introduction to Biology                                  | BIOL A100 4          |
| Introduction to Chemistry                                | CHEM A110 5          |
| Conceptual Physics AND Introductory Physics Lab          | PHYS A110 & A111 4   |
| Public Speaking  | CMST A110 3          |
| The Teaching Profession                                  | EDUC A200 3          |
| Freshman Composition                                     | ENGL A100 3          |
| Critical Thinking, Reading, Writing: Literature / Honors | ENGL A101 / A101H 4  |
| World Regional Geography / Honors                        | GEOG A100 / A100H 3  |
| General Geology / Honors                                 | GEOL A105 / A105H 3  |
| General Geology Lab / Honors                             | GEOL A105L / A105M 1 |
| World History 1 / Honors                                 | HIST A161 / A161H 3  |
| History of the United States to 1876 / Honors            | HIST A170 / A170H 3  |
| Child Growth and Development                             | HMDV A180 3          |
| Mathematics for Elementary Teachers                      | MATH A104 3          |
| American Government / Honors                             | PSCI A180 / A180H 3  |
| <b>Subtotal</b>  | <b>48</b>            |

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

|   |                     |
|---|---------------------|
| Essentials of Argumentation                               | CMST A220 3         |
| Critical Reasoning, Reading, Writing: Nonfiction / Honors | ENGL A102 / A102H 3 |
| Critical Reasoning and Writing                            | PHIL A150 3         |
| <b>Subtotal</b>   | <b>3</b>            |

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

|   |                    |
|---|--------------------|
| Survey of Western Art: Pre-History to Gothic / Honors | ART A100 / A100H 3 |
| Appreciation of Dance                                 | DANC A200 3        |
| Introduction to Humanities                            | HUM A100 3         |
| History and Appreciation of Music                     | MUS A100 3         |
| Introduction to Theatre                               | THEA A100 3        |

|  |              |
|--|--------------|
| <b>Subtotal</b>  | <b>3</b>     |
| <b>Program Major Units</b>   | <b>54</b>    |
| <b>CSU or IGETC for CSU</b>  | <b>37-41</b> |
| <b>Transferable electives as needed to satisfy unit requirement Varies</b> |              |
| <b>Total Degree Units</b>  | <b>60</b>    |
| <b>Subtotal 11</b>   |              |
| <b>Total Units</b>   | <b>45-46</b> |

## EMERGENCY MEDICAL SERVICES

### EMERGENCY MEDICAL SERVICES

#### CERTIFICATE OF SPECIALIZATION

EMS certification is required to work for an ambulance service or in an emergency department and may be required for lifeguards, ski patrol and fire fighters. The EMS provides the care necessary to preserve life and to prevent disability among the acutely ill and the seriously injured and assist and communicate with other healthcare providers with a higher scope of practice.

The EMS must have basic knowledge of anatomy and physiology, medical terminology and sterile techniques. The course of study emphasizes treating traumatic injuries and medical emergencies, as well as treating minor disorders and emotional problems. Specialized areas include obstetrical and pediatric emergencies and extricating entrapped persons. Special emphasis is placed on proper patient moving techniques and transport to definitive and appropriate medical care.

Successful completion of the EMS course qualifies the student to sit for the National Registry of Emergency Medical Technicians' certifying examination, and therefore obtain EMS certification in any California County.

#### Program Outcomes

- The graduate of the Emergency Medical Services program 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.
- The EMS certification course is a prerequisite for paramedic training. Job opportunities are good.

#### Program Recommended Preparation:

|                             |            |
|-----------------------------|------------|
| Emergency Medical Responder | EMS A100 3 |
|-----------------------------|------------|

#### Required Prerequisites:

|  |                   |
|--|-------------------|
| Valid American Heart Association Healthcare Provider CPR |                   |
| Fundamentals of Composition / Composition & Reading      | ENGL / ESL A099 3 |
| <b>Subtotal</b>  | <b>3</b>          |

| Course                         |     |       | Units     |
|--------------------------------|-----|-------|-----------|
| Emergency Medical Services     | EMS | A150  | 10        |
| Emergency Medical Services lab | EMS | A150L | 1         |
| *EMS Clinical Internship       | EMS | A151  | 1         |
| <b>Subtotal</b>                |     |       | <b>12</b> |
| <b>Total Units</b>             |     |       | <b>15</b> |

**Emergency Medical Services Suggested Electives:**

|                             |      |      |   |
|-----------------------------|------|------|---|
| Medical Terminology         | ALH  | A111 | 3 |
| Anatomy-Physiology          | BIOL | A221 | 4 |
| Interpersonal Communication | CMST | A100 | 3 |

\*Note: American Heart Association Healthcare Provider CPR or successful completion of EMS A100 within the last fourteen (14) months is a prerequisite for EMS A150. Concurrent enrollment in EMS A151 is required. The ability to read, write and comprehend English at the English A100 level is highly desirable and will help the student succeed. English A099 is a prerequisite for EMS A150.

## ENGINEERING

### ENGINEERING

#### ASSOCIATE IN SCIENCE DEGREE

Engineers apply mathematics and scientific laws to invent and design products and services that are used in everyday life. This Engineering Associate of Science degree is meant to provide students with a strong foundation of engineering and design skills. Theoretical concepts are combined with practical experiences to expose students to real-world engineering problems.

While the core courses are necessary to develop and strengthen the necessary mathematics and physics knowledge an engineer must possess, the elective courses allow for different routes, ranging from additional transferable courses in several engineering majors, to hands-on courses that confer readily employable skills as engineering technicians.

**Program Outcomes**

1. An ability to apply engineering, science and mathematics knowledge utilizing the critical thinking and the problem solving skills to find solutions to problems of engineering nature and design.
2. Skills to use the state of the art laboratory equipment and simulation tools for engineering and engineering related practices and research.
3. An understanding of the ethical and professional role and responsibility as a member of the society in finding the ways for the betterment of the environment and all humanity and life.
4. Knowledge and skills to explain the response of systems and changes in the behavior and properties of the systems and materials due to external influences and stimuli.

| Course  |      |       | Units |
|---|------|-------|-------|
| Introduction to Engineering and Design                  | ENGR | A110  | 3     |
| Or  |      |       |       |
| Introduction to Engineering and Design Honors           | ENGR | A110H | 3     |
| Engineering Graphics                                    | ENGR | A180  | 4     |
| Statics   | ENGR | A280  | 3     |
| Calculus-Based Physics: Mechanics                       | PHYS | A185  | 4     |
| Or  |      |       |       |
| Calculus-Based Physics: Mechanics Honors                | PHYS | A185H | 4     |
| Calculus-Based Physics: Electricity and Magnetism       | PHYS | A280  | 4     |
| Calculus 2  | MATH | A185  | 4     |
| Or  |      |       |       |
| Calculus 2 Honors                                       | MATH | A185H | 4     |
| Calculus 3  | MATH | A280  | 4     |
| Or  |      |       |       |
| Calculus 3 Honors                                       | MATH | A280H | 5     |
| Intro to Linear Algebra & Differential Equations        | MATH | A285  | 4     |
| Or  |      |       |       |
| Intro to Linear Algebra & Differential Equations Honors | MATH | A285H | 5     |

**Subtotal 30-32**

**Select two (2) courses from the following:**

|  |      |      |   |
|--|------|------|---|
| General Electricity - FAA                        | AMT  | A151 | 3 |
| General Airframe & Powerplant Fuel Systems - FAA | AMT  | A152 | 2 |
| Introduction to Unmanned Aircraft Systems        | APT  | A131 | 3 |
| Design Fabrication 1                             | ARCH | A171 | 2 |
| Design Fabrication 2                             | ARCH | A172 | 2 |
| Introduction to Astrophysics                     | ASTR | A200 | 3 |
| Introduction to Biology                          | BIOL | A100 | 4 |
| Basic Microbiology                               | BIOL | A114 | 2 |
| Human Biology                                    | BIOL | A125 | 3 |
| Biochemistry                                     | BIOL | A281 | 2 |
| General Chemistry A                              | CHEM | A180 | 5 |
| General Chemistry B                              | CHEM | A185 | 5 |
| Organic Chemistry A                              | CHEM | A220 | 3 |
| Organic Chemistry B                              | CHEM | A225 | 3 |
| Furniture Making and Design                      | CNST | A116 | 3 |
| Structured Wiring Installation                   | CNST | A155 | 2 |
| Photovoltaic System Installation                 | CNST | A157 | 4 |
| C++ Programming Language 1                       | CS   | A150 | 4 |
| Java Programming Language 1                      | CS   | A170 | 4 |
| Data Structures                                  | CS   | A200 | 4 |
| Software Engineering                             | CS   | A220 | 4 |
| D.C. Circuits                                    | ELEC | A150 | 3 |
| Engineering Materials                            | ENGR | A210 | 3 |
| Programming and Problem-Solving in MATLAB        | ENGR | A220 | 4 |
| Dynamics   | ENGR | A230 | 3 |
| Strength of Materials                            | ENGR | A240 | 3 |
| Engineering Circuits                             | ENGR | A285 | 4 |
| General Geology                                  | GEOL | A105 | 3 |
| Physical Geology                                 | GEOL | A110 | 4 |
| Air Conditioning and Refrigeration Principles    | HVAC | A100 | 3 |
| Introduction to Machine Shop                     | MACH | A100 | 3 |
| Arc & Oxy-acetylene Welding                      | WELD | A100 | 3 |

**Subtotal 6-10**

**Program Major Units 36-42**

**AS General Education Option 1, 2, or 3 Varies**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

## ENGLISH

### ENGLISH

#### ASSOCIATE IN ARTS DEGREE

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

##### Program Outcome

1. Students will analyze, evaluate, and create their own fiction and/or non-fiction texts.
2. Students will critically analyze and compare literature from various cultures demonstrating an understanding of how life functions in the literary, social, and moral worlds.

| Course   | Units               |
|--|---------------------|
| <b>Required Core - Complete ENGL A101 or A101H and two (2) additional courses for a total of ten (10) units:</b>                           |                     |
| Critical Thinking, Reading, Writing: Literature / Honors   | ENGL A101 / A101H 4 |
| American Literature Before the 20th Century / Honors   | ENGL A150 / A150H 3 |
| American Literature in the 20th Century / Honors   | ENGL A151 / A151H 3 |
| World Literature Through Renaissance / Honors  | ENGL A160 / A160H 3 |
| World Literature Since Renaissance / Honors  | ENGL A161 / A161H 3 |
| Survey of British Literature Before 1800 / Honors  | ENGL A270 / A270H 3 |
| Survey of British Literature After 1800 / Honors   | ENGL A275 / A275H 3 |
| <b>Subtotal</b>  | <b>10</b>           |
| <b>Restricted Electives - Complete a minimum of nine (9) units from Required Core courses not already used or from the following list:</b> |                     |
| Narrative Journalism   | ENGL A117 3         |
| Introduction to Creative Writing   | ENGL A119 3         |
| Short Story Writing  | ENGL A121 3         |
| The Bible as Literature / Honors   | ENGL A141 / A141H 3 |
| Children's Literature / Honors   | ENGL A143 / A143H 3 |
| Introduction to Science Fiction / Honors   | ENGL A147 / A147H 3 |
| Film as Literature / Honors  | ENGL A148 / A148H 3 |
| Race, Culture, And Identity in Literature / Honors   | ENGL A152 / A152H 3 |
| California Literature / Honors   | ENGL A156 / A156H 3 |
| Introduction to Irish Literature   | ENGL A165 3         |
| Popular Fiction  | ENGL A168 3         |
| Modern and Post-Modern Literature / Honors   | ENGL A170 / A170H 3 |
| Women Writers / Honors   | ENGL A173 / A173H 3 |
| World Mythology / Honors   | ENGL A176 / A176H 3 |
| Shakespeare / Honors   | ENGL A181 / A181H 3 |
| Introduction to Literary Theory / Honors   | ENGL A187 / A187H 3 |
| <b>Subtotal</b>  | <b>9</b>            |
| <b>Minimum Program Major Units</b>   | <b>19</b>           |
| <b>AA General Education Option 1, 2, or 3</b>  | <b>Varies</b>       |
| <b>Transferable electives as needed to satisfy unit requirement</b>  | <b>Varies</b>       |
| <b>Total Degree Units</b>  | <b>60</b>           |

## ENGLISH

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in English for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the English AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The English program provides a core curriculum that instills critical thinking tools (including literary theories and terminology) for both practicing and studying writing, knowledge of historical and aesthetic contexts, and appreciation of geographic and cultural diversity. This background serves all English majors whether their emphasis at the CSU level will ultimately be the study of literature, rhetoric and non-fiction writing, or creative writing. The English program recognizes that all these areas of the major inform one another.

All the required courses in the program foster strong writing skills and are crucial in developing the proficiency and knowledge necessary for students who will ultimately use the major for teaching at the K-12 or community college level, literary scholarship at the graduate level, entering the legal professions, for creative writing, or for non-fiction essay writing in literary, business, and scientific journals.

##### Program Outcome

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  | Units               |
|---|---------------------|
| <b>Required Core</b>  |                     |
| Critical Thinking, Reading, Writing: Literature / Honors  | ENGL A101 / A101H 4 |
| <b>Subtotal</b>   | <b>4</b>            |
| <b>List A - Complete six (6) units from the following list:</b>   |                     |
| American Literature Before the 20th Century / Honors  | ENGL A150 / A150H 3 |
| American Literature in the 20th Century / Honors  | ENGL A151 / A151H 3 |
| World Literature Through Renaissance / Honors   | ENGL A160 / A160H 3 |
| World Literature Since Renaissance / Honors   | ENGL A161 / A161H 3 |
| British Literature Before 1800 / Honors   | ENGL A270 / A270H 3 |
| British Literature After 1800 / Honors  | ENGL A275 / A275H 3 |
| <b>Subtotal</b>   | <b>6</b>            |
| <b>List B - Complete six (6) units from List A not already used, or choose from the following list:</b> |                     |
| Introduction to Creative Writing  | ENGL A119 3         |
| The Bible as Literature / Honors  | ENGL A141 / A141H 3 |
| Children's Literature / Honors  | ENGL A143 / A143H 3 |
| Race, Culture, and Identity in Literature / Honors  | ENGL A152 / A152H 3 |
| Women Writers / Honors  | ENGL A173 / A173H 3 |
| World Mythology / Honors  | ENGL A176 / A176H 3 |
| Shakespeare / Honors  | ENGL A181 / A181H 3 |
| <b>Subtotal</b>   | <b>6</b>            |

**List C - Complete three (3) units from List A or B not already used, or choose from the following list:**

|  |      |              |   |
|--|------|--------------|---|
| Short Story Writing                                  | ENGL | A121         | 3 |
| Novel Writing 1                                      | ENGL | A122         | 3 |
| Scriptwriting 1                                      | ENGL | A127         | 3 |
| Introduction to Science Fiction / Honors             | ENGL | A147 / A147H | 3 |
| Film as Literature / Honors                          | ENGL | A148 / A148H | 3 |
| California Literature / Honors                       | ENGL | A156 / A156H | 3 |
| Introduction to Irish Literature                     | ENGL | A165         | 3 |
| Modern and Post-Modern Literature / Honors           | ENGL | A170 / A170H | 3 |
| Introduction to Literary Theory / Honors             | ENGL | A187 / A187H | 3 |
| Gender and Sexuality in Literature and Film / Honors | ENGL | A179 / A179H | 3 |
| Unique Topics in Literature                          | ENGL | A172         | 3 |

**Subtotal** **3**

**Program Major Units** **19**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## FASHION

Five Certificate of Achievement and Associate in Science options are available through the Fashion Department: 1) Apparel Construction, 2) Design, 3) Display and Visual Presentation, 4) Fashion Merchandising, and 5) Production/Product Development. Completion of these programs prepares students for careers in the fashion industry and in related businesses. Students may also transfer to programs at four-year colleges. Additionally, the department offers a Certificate of Specialization in Industrial Sewing.

## INDUSTRIAL SEWING

### CERTIFICATE OF SPECIALIZATION

The courses in this certificate provide short-term training in the areas of clothing construction and the use of high-speed industrial sewing equipment. The certificate can be completed in one to two semesters. The program offers a self-paced open entry, open exit lab that allows for enrollment throughout the semester. Employment possibilities include apparel construction and textile product assembly careers.

#### Program Outcomes

- The outcome of the program is to prepare students for entry-level employment as a competent professional in the field of clothing construction and the use of high-speed sewing equipment and meet the needs of the local fashion industry.

| Course  |      |      | Units          |
|---|------|------|----------------|
| Sewing Lab  | FASH | A050 | 0.5-2          |
| Beginning Clothing Techniques                     | FASH | A100 | 3              |
| Industrial Sewing Techniques                      | FASH | A102 | 2              |
| Fundamental Principles of Clothing Construction 1 | FASH | A180 | 3              |
| Fundamental Principles of Clothing Construction 2 | FASH | A183 | 3              |
| <b>Total Units</b>                                |      |      | <b>11.5-13</b> |

#### Industrial Sewing Suggested Electives:

|                            |      |      |     |
|----------------------------|------|------|-----|
| Alterations                | FASH | A137 | 2   |
| Internship Academy-Level 2 | ITRN | A392 | 1-4 |

## APPAREL CONSTRUCTION

### CERTIFICATE OF ACHIEVEMENT

Completion of the Apparel Construction certificate program prepares students for careers in the fashion industry and in related businesses.

#### Program Outcomes

- The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of garment construction, alterations, patternmaking, tailoring, alterations, and dressmaking and meet the needs of the local fashion industry.

| Course  |      |      | Units     |
|---|------|------|-----------|
| Beginning Clothing Techniques                     | FASH | A100 | 3         |
| Industrial Sewing Techniques                      | FASH | A102 | 2         |
| Applied Textiles and Design                       | FASH | A110 | 3         |
| Introduction to the Fashion Industry              | FASH | A115 | 3         |
| History of Fashion                                | FASH | A120 | 1.5       |
| Street Style                                      | FASH | A121 | 1.5       |
| Tailoring   | FASH | A130 | 1.5       |
| Alterations                                       | FASH | A137 | 2         |
| Flat Pattern Techniques                           | FASH | A150 | 3         |
| Tech-Packs  | FASH | A155 | 2.5       |
| Clothing Design and Selection                     | FASH | A170 | 3         |
| Fashion Merchandising Concepts                    | FASH | A177 | 3         |
| Fundamental Principles of Clothing Construction 1 | FASH | A180 | 3         |
| Fashion Internship                                | FASH | A181 | 2         |
| Professional Practices                            | FASH | A182 | 2         |
| Fundamental Principles of Clothing Construction 2 | FASH | A183 | 3         |
| Fashion Internship Lecture                        | FASH | A200 | 1         |
| Couture Techniques                                | FASH | A233 | 2         |
| Draping   | FASH | A235 | 2         |
| <b>Total Units</b>                                |      |      | <b>44</b> |

#### Apparel Construction Suggested Electives:

|               |      |      |   |
|---------------|------|------|---|
| Retail Buying | MKTG | A220 | 3 |
|---------------|------|------|---|

Note: Experienced sewers may demonstrate competency in techniques listed under Fashion A100 by taking Fashion A105.

### ASSOCIATE IN SCIENCE DEGREE

Complete the Fashion Apparel Construction Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires 62 units for completion.**

## APPAREL INDUSTRY SUSTAINABILITY

### CERTIFICATE OF SPECIALIZATION

This program focuses on sustainability in the apparel industry including, the study of responsible business, with a focus on environmental sustainability, responsible decision making, social impacts, corporate social responsibility, regulatory compliance, certifications, and other emerging technologies. Students will examine current topics, concepts, trends, and rules that are driving the sustainability and responsible business movement and will develop the skills to compete in the global fashion industry. Completion of the Apparel Industry Sustainability certificate program prepares students for careers in the fashion industry and in related businesses.

*Continued on next page*

**APPAREL INDUSTRY SUSTAINABILITY CERTIFICATE  
(CONTINUED)**

**Program Outcomes**

- The outcome of the program is to prepare students for entry-level employment as a competent professional in the fields of sustainable apparel design, merchandising, compliance, product development, production, sales and marketing and meet the needs of the local fashion industry.

| Course  |      |      | Units    |
|---|------|------|----------|
| <b>FALL</b>   |      |      |          |
| Apparel Industry Sustainability:<br>The Environment, Ethical Business Practices & the Law | FASH | A190 | 3        |
| <b>Subtotal</b>   |      |      | <b>3</b> |
| <b>SPRING</b>   |      |      |          |
| Sustainability & Responsibility in Fashion Design,<br>Manufacturing and Branding          | FASH | A191 | 3        |
| <b>Subtotal</b>   |      |      | <b>3</b> |
| <b>FALL</b>   |      |      |          |
| Research & Development for<br>Apparel Industry Sustainability                             | FASH | A192 | 3        |
| <b>Subtotal</b>   |      |      | <b>3</b> |
| <b>Total Units</b>  |      |      | <b>9</b> |

**DESIGN**

**CERTIFICATE OF ACHIEVEMENT**

Completion of the Design certificate program prepares students for careers in the fashion industry and in related businesses.

**Program Outcome**

- The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion designer in the fields of designing, technical designing, and merchandising and meet the needs of the local fashion industry.

| Course   |      |      | Units       |
|--|------|------|-------------|
| Color and Design: Two-Dimensional<br>Or<br>Applied Color and Design Theory | ART  | A110 | 3           |
| Beginning Clothing Techniques  | FASH | A100 | 3           |
| Industrial Sewing Techniques   | FASH | A102 | 2           |
| Applied Textiles and Design  | FASH | A110 | 3           |
| Introduction to Fashion Industry   | FASH | A115 | 3           |
| Trend Forecasting  | FASH | A118 | 3           |
| History of Fashion   | FASH | A120 | 1.5         |
| Street Style   | FASH | A121 | 1.5         |
| Design in Everyday Life  | FASH | A135 | 2           |
| Flat Pattern Techniques  | FASH | A150 | 3           |
| Tech-Packs   | FASH | A155 | 2.5         |
| Clothing Design and Selection  | FASH | A170 | 3           |
| Fashion Merchandising Concepts   | FASH | A177 | 3           |
| Fashion Internship   | FASH | A181 | 2           |
| Professional Practices   | FASH | A182 | 2           |
| Fashion Internship Lecture   | FASH | A200 | 1           |
| Fashion Illustrating Techniques 1  | FASH | A255 | 3           |
| Fashion Illustrating Techniques 2  | FASH | A256 | 3           |
| <b>Total Units</b>   |      |      | <b>44.5</b> |

**Design Suggested Electives:**

|   |      |              |   |
|---|------|--------------|---|
| Introduction to Art                             | ART  | A107         | 3 |
| Color and Design: Three-Dimensional             | ART  | A111         | 3 |
| Introduction to International Business / Honors | BUS  | A118 / A118H | 3 |
| Draping   | FASH | A235         | 2 |
| Retail Buying                                   | MKTG | A220         | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Fashion Design Certificate of Achievement and the Associate in Science Graduation Requirements as outlined in the graduation requirements section of the catalog. **Note: this AS degree may require 62.5 units for completion, depending on course selection in the major.**

**DISPLAY AND VISUAL PRESENTATION**

**CERTIFICATE OF ACHIEVEMENT**

This certificate is designed to prepare students seeking careers as display and exhibit designers and covers interior, industrial, thematic, and promotional displays. The training program includes consideration of the total visual presentation design and production, including store planning, service promotion mix applied to retailers, wholesalers (trade show), corporate display, visual identity, and exhibits in cultural institutions (museums and galleries). Students are encouraged to work toward an Associate in Science degree.

**Program Outcomes**

- Produce a digital presentation of a specific retail venue, illustrating continuity of theme through physical appearance, room settings, signage, merchandise, and website presentation.
- Create the packaging for a product that will include product graphics and design, the merchandising concept for the retail venue, and an initial event or promotion to launch the product.

| Course   |          |      | Units     |
|--|----------|------|-----------|
| <b>FALL</b>  |          |      |           |
| Color & Design: Two-Dimensional<br>Or<br>Applied Color and Design Theory | ART      | A110 | 3         |
| Exhibition Design 1  | ART      | A145 | 3         |
| Introduction to Display and Visual Presentation                          | DVP      | A180 | 3         |
| Fashion Illustrating Techniques  | FASH     | A255 | 3         |
| Principles of Advertising  | MKTG     | A130 | 3         |
| <b>Subtotal</b>  |          |      | <b>15</b> |
| <b>SPRING</b>  |          |      |           |
| Color and Design: Three-Dimensional                                      | ART      | A111 | 3         |
| Furniture Making & Design  | ART/CNST | A116 | 4         |
| Fashion Internship   | FASH     | A181 | 2         |
| Fashion Internship Lecture   | FASH     | A200 | 1         |
| Introduction to Photography<br>Or<br>Introduction to Digital Photography | PHOT     | A120 | 3         |
| <b>Subtotal</b>  |          |      | <b>13</b> |
| <b>Total Units</b>   |          |      | <b>28</b> |

**Display and Visual Presentation Suggested Electives:**

|                                       |      |      |   |
|---------------------------------------|------|------|---|
| Survey of Modern and Contemporary Art | ART  | A102 | 3 |
| Rapid Illustration Techniques         | DMAD | A117 | 3 |
| Space Planning                        | ID   | A170 | 3 |
| Fundamentals of Lighting              | ID   | A210 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Display and Visual Presentation Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**FASHION MERCHANDISING**

**CERTIFICATE OF ACHIEVEMENT**

Completion of the Fashion Merchandising certificate program prepares students for careers in the fashion industry and in related businesses.

**Program Outcomes**

- The outcome of the program is to prepare students for entry-level employment as a professional and competent fashion merchandiser in the fields of retail management, retail buying, special events and promotions, visual merchandising, image/fashion consulting, and public relations.

| Course   |      |      | Units     |
|--|------|------|-----------|
| Color & Design: Two Dimensional<br>Or<br>Applied Color and Design Theory | ART  | A110 | 3         |
| Excel 1  | CIS  | A134 | 2         |
| Introduction to Display and Visual Presentation                          | DVP  | A180 | 3         |
| Applied Textiles and Design  | FASH | A110 | 3         |
| Introduction to Fashion Industry   | FASH | A115 | 3         |
| Trend Forecasting  | FASH | A118 | 3         |
| History of Fashion   | FASH | A120 | 1.5       |
| Street Style   | FASH | A121 | 1.5       |
| Clothing Design and Selection  | FASH | A170 | 3         |
| Fashion Merchandising Concepts   | FASH | A177 | 3         |
| Fashion Internship   | FASH | A181 | 2         |
| Professional Practices   | FASH | A182 | 2         |
| Fashion Internship Lecture   | FASH | A200 | 1         |
| Media, Events, and Promotions  | FASH | A225 | 3         |
| Fashion Illustration Techniques 1  | FASH | A255 | 3         |
| Professional Selling<br>Or<br>Retail E-Commerce                          | MKTG | A110 | 3         |
| Retail Buying  | MKTG | A220 | 3         |
| <b>Total Units</b>   |      |      | <b>43</b> |

**Fashion Merchandising Suggested Electives:**

|   |          |              |     |
|---|----------|--------------|-----|
| Introduction to International Business / Honors | BUS      | A118 / A118H | 3   |
| Professional Communication                      | BUS/MKTG | A239         | 3   |
| Business Multimedia and Graphics                | CIS      | A132         | 2   |
| Introduction to Computer Graphics               | DMAD     | A181         | 3   |
| Introduction to Entrepreneurship                | BUS      | A240         | 3   |
| Direct Marketing                                | MKTG     | A142         | 1.5 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Fashion Merchandising Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree may require 61 units for completion, depending on course selection in the major.**

**PRODUCTION/PRODUCT DEVELOPMENT**

**CERTIFICATE OF ACHIEVEMENT**

**Program Outcomes**

- The outcome of the program is to prepare students for entry-level employment in the fields of patternmaking, sample-making, technical design, sourcing management, production management, quality control supervising, grading, marker making, costing/spec production, pre-production merchandising and meet the needs of the local fashion industry.

| Course  |      |      | Units       |
|---|------|------|-------------|
| Excel 1   | CIS  | A134 | 2           |
| Beginning Clothing Techniques                     | FASH | A100 | 3           |
| Industrial Sewing Techniques                      | FASH | A102 | 2           |
| Applied Textiles and Design                       | FASH | A110 | 3           |
| Introduction to Fashion Industry                  | FASH | A115 | 3           |
| History of Fashion                                | FASH | A120 | 1.5         |
| Street Style                                      | FASH | A121 | 1.5         |
| Flat Pattern Techniques                           | FASH | A150 | 3           |
| Tech-Packs  | FASH | A155 | 2.5         |
| Clothing Design and Selection                     | FASH | A170 | 3           |
| Fashion Merchandising Concepts                    | FASH | A177 | 3           |
| Fashion Internship                                | FASH | A181 | 2           |
| Fundamental Principles of Clothing Construction 1 | FASH | A180 | 3           |
| Professional Practices                            | FASH | A182 | 2           |
| Fundamental Principles of Clothing Construction 2 | FASH | A183 | 3           |
| Fashion Internship Lecture                        | FASH | A200 | 1           |
| Fashion Illustrating Techniques 1                 | FASH | A255 | 3           |
| Computerized Pattern System                       | FASH | A266 | 2           |
| <b>Total Units</b>                                |      |      | <b>43.5</b> |

**Production/Product Development Suggested Electives:**

|   |      |              |   |
|---|------|--------------|---|
| Introduction to International Business / Honors | BUS  | A118 / A118H | 3 |
| Business English                                | BUS  | A138         | 3 |
| Introduction to Info Sys & Applications         | CIS  | A100         | 3 |
| International Marketing / Honors                | MKTG | A150 / A150H | 3 |
| Retail Buying                                   | MKTG | A220         | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Production/Product Development Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires 61.5 units for completion.**

**FILM & TELEVISION**

**FILM & TELEVISION**

**CERTIFICATE OF ACHIEVEMENT**

The Film & Television program at OCC is designed to give the student two years of extensive theory and technical experience training in the basic skills required for employment in the film & television industries.

*Continued on next page*

**FILM & TELEVISION CERTIFICATE (CONTINUED)**

**Program Outcomes**

1. The Film & Television program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment in the film, video, television, multi-media and entertainment industries in the areas of producing, directing, camera operation, lighting, sound and editing.

| Course                                |      |      | Units     |
|---------------------------------------|------|------|-----------|
| <b>SEMESTER 1</b>                     |      |      |           |
| Film Production 1                     | FILM | A110 | 3         |
| Editing 1                             | FILM | A194 | 3         |
| <b>Subtotal</b>                       |      |      | <b>6</b>  |
| <b>SEMESTER 2</b>                     |      |      |           |
| Television Production 1               | FILM | A155 | 3         |
| Film Production 2                     | FILM | A240 | 3         |
| <b>Subtotal</b>                       |      |      | <b>6</b>  |
| <b>SEMESTER 3</b>                     |      |      |           |
| History & Appreciation of the Cinema* | FILM | A100 | 3         |
| Or                                    |      |      |           |
| History of Radio & Television*        | FILM | A150 | 3         |
| <b>Subtotal</b>                       |      |      | <b>3</b>  |
| <b>SEMESTER 4</b>                     |      |      |           |
| Field Production and the Documentary* | FILM | A265 | 4         |
| Or                                    |      |      |           |
| Film Production 3*                    | FILM | A270 | 4         |
| <b>Subtotal</b>                       |      |      | <b>4</b>  |
| <b>Restricted Electives</b>           |      |      | <b>10</b> |
| <b>Total Units</b>                    |      |      | <b>29</b> |

Note: Courses noted with (\*) may fulfill restricted elective credit if the alternative course has been taken as a required course.

**Film & Television Restricted Electives - Select ten (10) units from the following:**

|   |      |      |   |
|---|------|------|---|
| Broadcast Journalism                                | BRCT | A105 | 3 |
| Remote Broadcasting                                 | BRCT | A205 | 3 |
| Motion Graphics & Video Compositing w/After Effects | DMAD | A263 | 3 |
| Scriptwriting                                       | ENGL | A127 | 3 |
| Film as Literature                                  | ENGL | A148 | 3 |
| History & Appreciation of the Cinema*               | FILM | A100 | 3 |
| The Business of Film and Television                 | FILM | A102 | 3 |
| Great Directors of Cinema                           | FILM | A104 | 3 |
| Introduction to Media Writing                       | FILM | A106 | 3 |
| History of Video Games                              | FILM | A107 | 3 |
| Project Development and the Pitch                   | FILM | A112 | 3 |
| Event Productions                                   | FILM | A120 | 3 |
| History of Radio & Television*                      | FILM | A150 | 3 |
| Sound Design for Film & Television                  | FILM | A193 | 3 |
| Editing 2   | FILM | A195 | 3 |
| Introduction to Visual Effects                      | FILM | A196 | 3 |
| Production Management                               | FILM | A210 | 3 |
| Social Media Marketing                              | FILM | A215 | 3 |
| Introduction Virtual Reality Production (VR)        | FILM | A220 | 3 |

|                                       |      |      |   |
|---------------------------------------|------|------|---|
| Directing Theory                      | FILM | A253 | 3 |
| Television Production 2               | FILM | A255 | 3 |
| Special Projects                      | FILM | A260 | 2 |
| Television Studio Operations          | FILM | A261 | 2 |
| Cinematography                        | FILM | A262 | 3 |
| Editing 3                             | FILM | A264 | 3 |
| Field Production and the Documentary* | FILM | A265 | 4 |
| Film Production 3*                    | FILM | A270 | 4 |
| Portfolio Development                 | FILM | A271 | 3 |
| Introduction to Photography           | PHOT | A120 | 3 |
| Introduction to Digital Photography   | PHOT | A123 | 3 |
| Directing                             | THEA | A275 | 3 |

**ASSOCIATE IN ARTS DEGREE**

Complete the Film & Television Certificate of Achievement and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**FILM, TELEVISION AND ELECTRONIC MEDIA**

**ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

The Film, Television, and Electronic Media Associate in Science Degree for Transfer (AS-T), is designed to give the student extensive theory and technical experience training in the basic skills required to enter a baccalaureate degree program in a similar major within the California State University system.

Students graduating with an Associate in Science in Film, Television and Electronic Media for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Film, Television and Electronic Media AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Students will have the skills and knowledge necessary for film, video, and television production, direction, camera operation, lighting, sound, and editing.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |      |      | Units    |
|---|------|------|----------|
| <b>Required Core - Select two courses from the following list for a total of six (6) units:</b> |      |      |          |
| Introduction to Mass Communications   | CMST | A180 | 3        |
| History & Appreciation of the Cinema  | FILM | A100 | 3        |
| Introduction to Media Writing   | FILM | A106 | 3        |
| <b>Subtotal</b>   |      |      | <b>6</b> |
| <b>List A - Complete six (6) units from the following list:</b>                                 |      |      |          |
| Sound Design for Film & Television  | FILM | A193 | 3        |
| Film Production 1   | FILM | A110 | 3        |
| Or  |      |      |          |
| Television Production 1   | FILM | A155 | 3        |
| <b>Subtotal</b>   |      |      | <b>6</b> |



**List B - Complete three (3) units:**

|                                |      |      |          |
|--------------------------------|------|------|----------|
| History of Radio & Television* | FILM | A150 | 3        |
| <b>Subtotal</b>                |      |      | <b>3</b> |

**List C - Complete three (3) units from the following list:**

|                                     |      |      |   |
|-------------------------------------|------|------|---|
| Introduction to Computer Graphics   | DMAD | A181 | 3 |
| History of Media Arts               | DMAD | A150 | 3 |
| Editing 1                           | FILM | A194 | 3 |
| Film Production 2                   | FILM | A240 | 3 |
| Cinematography                      | FILM | A262 | 3 |
| Introduction to Digital Photography | PHOT | A123 | 3 |

**Subtotal** **3**

**Program Major Units** **18**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**IMMERSIVE MEDIA (VR/AR)**

**CERTIFICATE OF ACHIEVEMENT**

This certificate is designed to be a comprehensive 2-year study in both Virtual and Augmented Reality within the growing field of Immersive Media, including targeted courses in the related specializations necessary for a well-rounded base of knowledge and practice. Transitioning from simple 360-degree video and audio capture through computer graphic-based 3D Modeling and Video Game Development principles will gradually add higher level skill and increased immersion into the course content. An Advanced Development Lab will be offered at the summit to allow students ample access to the specialized technology needed to create portfolio-level VR and AR projects with the intent of using these works to obtain gainful employment and/or internships in this rapidly growing field.

**Program Outcomes**

1. The Immersive Media program offers a Certificate of Achievement that, when completed, gives the student the basic skills required for entry-level employment and/or internships in Virtual Reality (VR), Augmented Reality (AR), Multimedia and Game-related industries in the areas of 360 video, 360 Audio, VR/AR Development & Content Creation, Immersive Game Design & 3D Modeling, and Drone Imagery for Immersive Media.

| Course   | Units |      |           |
|--|-------|------|-----------|
| <b>FIRST SEMESTER</b>                          |       |      |           |
| Introduction to Virtual Reality (VR)           | FILM  | A220 | 3         |
| Introduction to Augmented Reality (AR)         | FILM  | A221 | 3         |
| Introduction to Performance Capture            | FILM  | A222 | 3         |
| Immersive Video Game Development 1             | FILM  | A223 | 3         |
| 360 Spatial Audio for Immersive Media          | FILM  | A225 | 2         |
| Coding Basics for Immersive Media Applications | FILM  | A226 | 3         |
| Immersive Media Development Lab 1              | FILM  | A231 | 2         |
| 3D Computer Graphics Animation                 | DMAD  | A281 | 3         |
| <b>Subtotal</b>                                |       |      | <b>22</b> |

**Restricted Electives - Select nine (9) units from the following list:**

|   |      |      |   |
|---|------|------|---|
| Digital Painting                          | ART  | A135 | 3 |
| Story Illustration Techniques             | ART  | A143 | 3 |
| Introduction to C#.NET Programming        | CS   | A140 | 4 |
| Mobile Application Development in Android | CS   | A273 | 4 |
| History of Video Games                    | FILM | A107 | 3 |
| Sound Design for Film & Television        | FILM | A193 | 3 |
| Editing 1                                 | FILM | A194 | 3 |
| Intro to Visual Effects                   | FILM | A196 | 3 |
| Drone Imaging for Immersive Media         | FILM | A227 | 3 |
| The Business of Immersive Media (VR/AR)   | FILM | A229 | 2 |
| Cinematography                            | FILM | A262 | 3 |
| Field Production and the Documentary      | FILM | A265 | 4 |

**Subtotal** **9**

**Total Units** **31**

**MEDIA ARTS AND CREATIVE ENTERTAINMENT**

**CERTIFICATE OF ACHIEVEMENT**

The Media Arts and Creative Entertainment Certificate program is a Career Technical Education specialty, designed for the student who wants a concentrated course of study in the field of acting/directing coupled with film and television production. It has been designed to introduce students to the skills necessary to create their own recorded media projects or prepare students for entry-level employment in the entertainment industry. Completion of this certificate will foster an understanding and appreciation of the various artistic and technical aspects of camera and narrative production. Students will be educated in performing, directing, storytelling, camera operation, event documentation, lighting, sound, post-production, and business practices. The required 12 units give the student a strong foundation, while the 5 elective units allow students to concentrate on their particular area of interest within this collaborative field.

**Program Outcomes**

1. Students will be able to demonstrate competence as directors, performers, actors and technicians and possess a critical understanding of visual storytelling coupled with current and effective performance and directing techniques.

| Course                      | Units |      |          |
|-----------------------------|-------|------|----------|
| <b>FIRST SEMESTER</b>       |       |      |          |
| Film Production 1           | FILM  | A110 | 3        |
| Acting Fundamentals         | THEA  | A106 | 3        |
| Or                          |       |      |          |
| Acting for Camera and Stage | THEA  | A115 | 3        |
| <b>Subtotal</b>             |       |      | <b>6</b> |
| <b>SECOND SEMESTER</b>      |       |      |          |
| Film Production 2           | FILM  | A240 | 3        |
| Directing                   | THEA  | A275 | 3        |
| <b>Subtotal</b>             |       |      | <b>6</b> |

*Continued on next page*

**MEDIA ARTS AND CREATIVE ENTERTAINMENT  
CERTIFICATE (CONTINUED)**

Select five (5) units from the following:

|                                   |      |      |           |
|-----------------------------------|------|------|-----------|
| Broadcast Journalism              | BRCT | A105 | 3         |
| The Business of Film & Television | FILM | A102 | 3         |
| Television Production 1           | FILM | A155 | 3         |
| Editing 1                         | FILM | A194 | 3         |
| Social Media Marketing            | FILM | A215 | 3         |
| Film Production 3                 | FILM | A270 | 4         |
| Acting 2                          | THEA | A107 | 3         |
| Theatre Laboratory Level 1        | THEA | A110 | 2         |
| Theatre Laboratory Level 2        | THEA | A111 | 2         |
| Theatre Laboratory Level 3        | THEA | A112 | 2         |
| Theatre Laboratory Level 4        | THEA | A113 | 2         |
| OCC Theatre Repertory 1           | THEA | A131 | 3         |
| Make-Up                           | THEA | A177 | 3         |
| Body Movement for the Actor       | THEA | A188 | 3         |
| Stage Combat                      | THEA | A189 | 2         |
| Voice and Articulation            | THEA | A200 | 3         |
| <b>Subtotal</b>                   |      |      | <b>5</b>  |
| <b>Total Units</b>                |      |      | <b>17</b> |

**FOOD SERVICE MANAGEMENT —  
COMMERCIAL**

**CATERING**

**CERTIFICATE OF ACHIEVEMENT**

Students who complete the Catering certificate will be trained to operate a catering business, whether it is a business conducted on premises or off premises. Those enrolling in this program will learn about organization and management, menu pricing, selling, advertising and promotion, and preparing and serving food, as well as cost accountability, a most important factor in operating a catering service successfully. Students will be employable in the catering departments of hotels and restaurants and will be knowledgeable enough to reasonably decide about opening their own catering business. Opportunities for employment in this field are excellent.

**Program Outcome**

- The outcome of the program is to prepare students for professional positions within the industry and to provide the foundation skills for owning and operating their own catering business. Meets the needs of the local catering community.

| Course                             |     |      | Units     |
|------------------------------------|-----|------|-----------|
| Garde Manger                       | CA  | A200 | 2         |
| Or                                 |     |      |           |
| Food Production Management         | FSM | A151 | 2         |
| Introduction to Nutrition Concepts | FN  | A140 | 2         |
| Sanitation and Safety              | FSM | A160 | 3         |
| Menu Planning and Purchasing       | FSM | A250 | 3         |
| Catering                           | FSM | A284 | 3         |
| <b>Subtotal</b>                    |     |      | <b>13</b> |

Select four (4) units from the following:

|                            |     |      |              |
|----------------------------|-----|------|--------------|
| Culinary Principles 1      | CA  | A120 | 3            |
| Culinary Principles 2      | CA  | A122 | 3            |
| Pantry                     | CA  | A149 | 2            |
| Principles of Baking 1     | CA  | A124 | 2            |
| Or                         |     |      |              |
| Quantity Foods Preparation | FSM | A150 | 4            |
| <b>Subtotal</b>            |     |      | <b>4-6</b>   |
| <b>Total Units</b>         |     |      | <b>17-19</b> |

**Catering Suggested Electives:**

|                                     |     |      |   |
|-------------------------------------|-----|------|---|
| Introduction to Entrepreneurship    | BUS | A240 | 3 |
| Principles of Baking 1              | CA  | A124 | 2 |
| Ice Carving                         | CA  | A270 | 1 |
| Food Service Math/Accounting        | FSM | A240 | 4 |
| Supervision and Training Techniques | FSM | A260 | 3 |
| Hospitality and Tourism Marketing   | HTT | A240 | 3 |

**QUICK SERVICE**

**CERTIFICATE OF SPECIALIZATION**

The Quick Service Certificate requirements have been carefully planned for those students interested in following a career in this booming segment of the industry. The Quick Service area is not only demanding but also filled with the excitement that comes from operating a thriving business. This career choice provides unlimited potential for advancement and employment opportunities.

**Program Outcome**

- The outcome of the program is to prepare students for entry-level supervisory employment as a Quick Service professional, thereby meeting the needs of the local Quick Service (Fast Food) community.

| Course   |     |      | Units     |
|--|-----|------|-----------|
| Sanitation and Safety                          | FSM | A160 | 3         |
| Food Service Math/Accounting                   | FSM | A240 | 4         |
| Supervision and Training Techniques            | FSM | A260 | 3         |
| Restaurant Management                          | FSM | A285 | 3         |
| Directed Practice in Food Service Management 1 | FSM | A283 | 2         |
| <b>Total Units</b>                             |     |      | <b>15</b> |

**RESTAURANT SUPERVISION**

**CERTIFICATE OF ACHIEVEMENT**

Students completing this certificate are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

**Program Outcome**

- Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

| Course   |     |      | Units     |
|--|-----|------|-----------|
| <b>FIRST SEMESTER</b>                          |     |      |           |
| Introduction to the Hospitality Industry       | FSM | A100 | 3         |
| Principles of Quantity Foods Preparation       | FSM | A150 | 4         |
| Sanitation and Safety                          | FSM | A160 | 3         |
| Dining Room Service                            | FSM | A190 | 2         |
| <b>Subtotal</b>                                |     |      | <b>12</b> |
| <b>SECOND SEMESTER</b>                         |     |      |           |
| Food Production Management                     | FSM | A151 | 2         |
| Dining Room Management                         | FSM | A210 | 3         |
| Food Service Math/Accounting                   | FSM | A240 | 4         |
| Supervision and Training Tech                  | FSM | A260 | 3         |
| Directed Practice in Food Service Management 1 | FSM | A283 | 2         |
| <b>Subtotal</b>                                |     |      | <b>14</b> |
| <b>Total Units</b>                             |     |      | <b>26</b> |

## RESTAURANT

### ASSOCIATE IN SCIENCE DEGREE

Students completing this degree are qualified to manage food service operations in commercial establishments, such as restaurants and hotels. Restaurant management is an attractive profession which has been described a number of ways by those who are active in it, including such accolades as glamorous, well-paying, creative, challenging, and filled with excitement. One employment estimate shows a need for more than 250,000 additional employees annually. The future of restaurant management holds promise for individuals willing to devote their talents to this lively career.

#### Program Outcomes

1. Prepare students for entry-level employment as competent Food Service supervisors and meet the needs of the local hospitality/food-service industry.

#### Recommended Preparation:

|                                       |     |      |   |
|---------------------------------------|-----|------|---|
| Introduction to Computer Applications | CIS | A100 | 3 |
|---------------------------------------|-----|------|---|

#### Required Prerequisites:

Restaurant Supervision Certificate of Achievement

| Course  |      |              | Units        |
|---|------|--------------|--------------|
| <b>THIRD SEMESTER</b>                                 |      |              |              |
| Introduction to Nutrition Concepts<br>Or<br>Nutrition | FN   | A140         | 2            |
| Menu Planning and Purchasing                          | FSM  | A250         | 3            |
| Bar Management  | FSM  | A275         | 2            |
| Directed Practice in Food Service Management 2        | FSM  | A286         | 2            |
| Hospitality Operations                                | HTT  | A285         | 3            |
| <b>Subtotal</b>                                       |      |              | <b>12-13</b> |
| <b>FOURTH SEMESTER</b>                                |      |              |              |
| Catering  | FSM  | A284         | 3            |
| Restaurant Management                                 | FSM  | A285         | 3            |
| Introduction to Psychology / Honors                   | PSYC | A100 / A100H | 3            |

|   |               |
|---|---------------|
| <b>Subtotal</b>                               | <b>9</b>      |
| <b>Program Major Units</b>                    | <b>47-48</b>  |
| <b>AS General Education Option 1, 2, or 3</b> | <b>Varies</b> |
| <b>Total Minimum Degree Units</b>             | <b>62-63</b>  |

#### Food Service Management Commercial Suggested Electives:

|                                  |     |      |     |
|----------------------------------|-----|------|-----|
| Beginning Computer Keyboarding 1 | CIS | A090 | 1.5 |
| Emergency Medical Responder      | EMS | A100 | 4   |
| Or<br>First Aid & CPR            | KIN | A203 | 2   |

## FOOD SERVICE MANAGEMENT — INSTITUTIONAL

Students completing these programs are qualified to manage food service operations in institutional settings, such as corporations, healthcare facilities, detention facilities, and schools.

## DIETETIC SERVICE SUPERVISOR

### CERTIFICATE OF ACHIEVEMENT

Dietary Service Supervisors plan and supervise employees engaged in a variety of food service activities in a medical facility. Responsibilities include assisting the professional staff in auditing patient menus, visiting patients to discuss dietary problems, and coordinating work of food production personnel with other departments.

#### Program Outcomes

1. The program will prepare students for successful employment as entry-level Food Service Supervisors to meet the needs of Acute and Long-term Healthcare Facilities.

| Course                                    |     |      | Units       |
|---|-----|------|-------------|
| Nutrition                                 | FN  | A170 | 3           |
| Quantity Foods Preparation                | FSM | A150 | 4           |
| Food Production Management                | FSM | A151 | 2           |
| Sanitation and Safety                     | FSM | A160 | 3           |
| Supervision and Training Techniques       | FSM | A260 | 3           |
| Health Care Field Experience              | NC  | A175 | 3.5         |
| Introduction to Medical Nutrition Therapy | NC  | A180 | 3           |
| <b>Total Units</b>                        |     |      | <b>21.5</b> |

Upon successful completion of the certificate, student meets California Department of Health Licensing Requirements for Dietetic Service Supervisor.

## DIETETIC SERVICE MANAGER

### CERTIFICATE OF ACHIEVEMENT

Dietetic Service Managers work in hospitals, nursing homes, rehabilitation facilities, long-term care, schools, correctional facilities, and many other settings. Responsibilities may include directing and controlling the following: menu planning, food purchasing, food production and service, financial management, employee recruitment, training, and supervision, and, in some settings, nutritional assessment and clinical care.

#### Program Outcomes

1. For professional employment as entry level Food Service supervisors.
2. To advance to positions with greater management responsibilities to meet the needs of acute and long-term healthcare facilities.

#### Required Prerequisites:

Completion of all courses for Dietetic Service Supervisor Certificate of Achievement with a grade of "C" or better

| Course                            | Units      | Subtotal           | 21.5        |
|-----------------------------------|------------|--------------------|-------------|
| Patient Care                      | ALH A115   | 2.5                |             |
| Interpersonal Communication       | CMST A100  | 3                  |             |
| Careers in Dietetics/Food Science | FN/NC A100 | 1                  |             |
| Applied Nutrition                 | FN A171    | 2                  |             |
| Food Service Math/Accounting      | FSM A240   | 4                  |             |
| Menu Planning and Purchasing      | FSM A250   | 3                  |             |
| Catering                          | FSM A284   | 3                  |             |
|                                   |            | <b>Subtotal</b>    | <b>18.5</b> |
|                                   |            | <b>Total Units</b> | <b>40</b>   |

Upon successful completion of the certificate, students meet Dietary Managers' Association criteria for certification and are eligible to take the National Certification Examination.

## FOREIGN LANGUAGES

### FOREIGN LANGUAGES

#### ASSOCIATE IN ARTS DEGREE

The Associate in Arts in Foreign Languages Degree is an excellent way to develop communicative skills in multiple languages other than English as well as global and critical thinking. It can provide a basis for understanding cultures, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Foreign Language Degree can develop careers in areas such as: education, diplomatic services, anthropology, business, economics, fashion, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student's listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of non-English speaking civilizations and cultures.

#### Program Outcomes

1. Recognize and produce the target language(s) in the four primary areas of communication: listening, speaking, reading, and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the target language(s) by comparing and contrasting them with the student's own culture(s).
3. Use current technologies to further develop language and cultural competencies.

| Course   | Units     | Subtotal        | 18-20        |
|--|-----------|-----------------|--------------|
| <b>Complete four (4) semesters of one language - French, German, Italian, Japanese, or Vietnamese:</b> |           |                 |              |
| Elementary French 1  | FREN A180 | 5               |              |
| Elementary French 2  | FREN A185 | 5               |              |
| Intermediate French 1  | FREN A280 | 4               |              |
| Intermediate French 2  | FREN A285 | 4               |              |
| Or   |           |                 |              |
| Elementary German 1  | GRMN A180 | 5               |              |
| Elementary German 2  | GRMN A185 | 5               |              |
| Intermediate German 1  | GRMN A280 | 4               |              |
| Intermediate German 2  | GRMN A285 | 4               |              |
| Or   |           |                 |              |
| Elementary Italian 1   | ITAL A180 | 5               |              |
| Elementary Italian 2   | ITAL A185 | 5               |              |
| Intermediate Italian 1   | ITAL A280 | 5               |              |
| Intermediate Italian 2   | ITAL A285 | 5               |              |
| Or   |           |                 |              |
| Elementary Japanese 1  | JAPN A180 | 5               |              |
| Elementary Japanese 2  | JAPN A185 | 5               |              |
| Intermediate Japanese 1  | JAPN A280 | 5               |              |
| Intermediate Japanese 2  | JAPN A285 | 5               |              |
| Or   |           |                 |              |
| Elementary Vietnamese 1  | VIET A180 | 5               |              |
| Elementary Vietnamese 2  | VIET A185 | 5               |              |
| Intermediate Vietnamese 1  | VIET A280 | 5               |              |
| Intermediate Vietnamese 2  | VIET A285 | 5               |              |
|  |           | <b>Subtotal</b> | <b>18-20</b> |

Select at least one (1) course from an additional language. Students may choose from the list below or from a language not used to complete the core courses above:

|                                 |                   |   |
|---------------------------------|-------------------|---|
| Elementary Chinese 1            | CHIN A180         | 5 |
| Elementary Chinese 2            | CHIN A185         | 5 |
| Elementary Portuguese 1         | PORT A180         | 5 |
| Elementary Portuguese 2         | PORT A185         | 5 |
| Elementary Spanish 1 / Honors   | SPAN A180 / A180H | 5 |
| Elementary Spanish 2 / Honors   | SPAN A185 / A185H | 5 |
| Spanish Conversation 1          | SPAN A190         | 3 |
| Intermediate Spanish 1 / Honors | SPAN A280 / A280H | 5 |
| Intermediate Spanish 2          | SPAN A285         | 5 |

**Subtotal** **3-5**

**Program Major Units** **21-25**

**AA General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

**Foreign Languages AA Degree Suggested Electives:**

|   |      |              |   |
|---|------|--------------|---|
| Introduction to Linguistics                     | ANTH | A190         | 3 |
| International Business Law                      | BUS  | A117         | 3 |
| Introduction to International Business / Honors | BUS  | A118 / A118H | 3 |
| Intercultural Communications                    | CMST | A185         | 3 |
| Fashion Merchandising Concepts                  | FASH | A177         | 3 |
| Destination the Americas                        | HTT  | A125         | 3 |
| Destination Europe                              | HTT  | A127         | 3 |
| Cultural Tourism                                | HTT  | A132         | 3 |
| International Relations                         | PSCI | A110         | 3 |

**SPANISH**

**ASSOCIATE IN ARTS DEGREE FOR  
TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Spanish for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Spanish AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Spanish for Transfer degree is an excellent way to develop communicative skills as well as analytical and critical thinking. It can provide a basis for understanding culture, and therefore, prepare graduates for many careers in a multicultural world. The ability to communicate and interact with others is more and more vital with growing global interdependence and technological connectivity. Students in the Associate in Arts in Spanish for Transfer Degree (AA-T) can develop careers in areas such as: education, diplomatic services, anthropology, economics, political science, literature, sociology, and linguistics. While teaching has traditionally been the principal area of employment, other careers, such as interpreting, translating, research, public relations, international commerce, tourism, and publishing are possible.

The department offers courses from the beginning to intermediate levels. All courses are designed to develop the student's listening comprehension, speaking, reading and writing skills, as well as to provide a general overview of Spanish-speaking civilizations and cultures.

**Program Outcomes**

1. Recognize and produce the Spanish language in the four primary areas of communication: listening, speaking, reading, and writing.
2. Demonstrate a better understanding and appreciation of the cultures related to the Spanish language by comparing and contrasting them with the student's own culture(s).
3. Use current technologies to further develop language and cultural competencies.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                          |      |              | Units     |
|---------------------------------|------|--------------|-----------|
| <b>Core Courses:</b>            |      |              |           |
| Elementary Spanish 1 / Honors   | SPAN | A180 / A180H | 5         |
| Elementary Spanish 2 / Honors   | SPAN | A185 / A185H | 5         |
| Intermediate Spanish 1 / Honors | SPAN | A280 / A280H | 5         |
| Intermediate Spanish 2          | SPAN | A285         | 5         |
| <b>Subtotal</b>                 |      |              | <b>20</b> |

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

|                      |      |      |   |
|----------------------|------|------|---|
| History of Mexico    | HIST | A145 | 3 |
| Elementary French 1  | FREN | A180 | 5 |
| Elementary Italian 1 | ITAL | A180 | 5 |

|   |               |
|---|---------------|
| <b>Subtotal</b>   | <b>3-5</b>    |
| <hr/>   |               |
| <b>Program Major Units</b>  | <b>23-25</b>  |
| <hr/>   |               |
| <b>CSU or IGETC for CSU</b>   | <b>37-39</b>  |
| <hr/>   |               |
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b> |
| <hr/>   |               |
| <b>Total Degree Units</b>   | <b>60</b>     |

**GEOGRAPHY**

**GEOGRAPHY**

**ASSOCIATE IN ARTS DEGREE**

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

| Course                              |      |              | Units |
|-------------------------------------|------|--------------|-------|
| Cultural Anthropology / Honors      | ANTH | A100 / A100H | 3     |
| World Regional Geography / Honors   | GEOG | A100 / A100H | 3     |
| Introduction to Weather and Climate | GEOG | A130         | 3     |
| California Geography                | GEOG | A150         | 3     |
| Physical Geography / Honors         | GEOG | A180 / A180H | 3     |
| Physical Geography Lab              | GEOG | A180L        | 1     |
| Cultural Geography                  | GEOG | A185         | 3     |
| Introduction to Geographic Systems  | GEOG | A190         | 2     |
| Regional Field Studies in Geography | GEOG | A198         | 2     |
| Physical Geology                    | GEOL | A110         | 4     |

|   |               |
|---|---------------|
| <b>Minimum Program Major Units</b>                                  | <b>18</b>     |
| <hr/>   |               |
| <b>AA General Education Option 1, 2, or 3</b>                       | <b>Varies</b> |
| <hr/>   |               |
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b> |
| <hr/>   |               |
| <b>Total Degree Units</b>   | <b>60</b>     |

**GEOGRAPHY**

**ASSOCIATE IN ARTS DEGREE FOR  
TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Geography for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Geography AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

*Continued on next page*

**GEOGRAPHY AA-T DEGREE (CONTINUED)**

The Geography Department at Orange Coast College is a comprehensive program that facilitates the success of general education students and geography majors by offering lower-division geography courses. The Geography Program offers students a variety of courses in physical, cultural, regional and applied geography. Students gain the ability to analyze geographical issues, read and interpret maps, and develop the skills to communicate local, national, and international geographic phenomena to others.

**Program Outcome**

1. Prepare students to understand the world geographically, acquire a geographic framework for the contemporary world, and utilize and unique spatial perspective.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                      | Units              |
|-----------------------------|--------------------|
| <b>Core Courses:</b>        |                    |
| Physical Geography / Honors | GEOG A180/ A180H 3 |
| Physical Geography Lab      | GEOG A180L 1       |
| Cultural Geography          | GEOG A185 3        |

**Subtotal 7**

**List A - Complete at least six (6) units from the following (if not already used above):**

|  |                     |
|--|---------------------|
| World Regional Geography / Honors                | GEOG A100 / A100H 3 |
| Introduction to Weather and Climate              | GEOG A130 3         |
| California Geography                             | GEOG A150 3         |
| Introduction to Geographical Information Systems | GEOG A190 2         |
| Regional Field Studies                           | GEOG A198 2         |

**Subtotal 6-8**

**List B - Complete at least six (6) units from the following (if not already used above):**

|  |                     |
|--|---------------------|
| Cultural Anthropology                            | ANTH A100 3         |
| Introduction to Biology                          | BIOL A100 4         |
| General Chemistry A                              | CHEM A180 5         |
| Java Programming 1                               | CS A170 4           |
| World Regional Geography / Honors                | GEOG A100 / A100H 3 |
| Introduction to Weather and Climate              | GEOG A130 3         |
| California Geography                             | GEOG A150 3         |
| Introduction to Geographical Information Systems | GEOG A190 2         |
| Regional Field Studies                           | GEOG A198 2         |
| Physical Geology                                 | GEOL A110 4         |
| Introduction to Statistics / Honors              | MATH A160 / A160H 4 |
| Calculus 1 / Honors                              | MATH A180 / A180H 4 |
| American Government / Honors                     | PSCI A180 / A180H 3 |

**Subtotal 6-9**

**Program Major Units 19-24**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**GEOLOGY**

**EARTH SCIENCE**

**ASSOCIATE IN SCIENCE DEGREE**

This Associate in Sciences Degree is designed to introduce the student to the multidisciplinary field of Earth Science. Students who complete this degree will be prepared for further study in Earth Science or related disciplines, for transfer to B.A./B.S. programs in Earth Science, or as preparation to teach Earth Science at a primary or secondary grade level. This degree requires a total of 24 units of which 16 units are in required courses. An additional 8 units must be chosen from the list of restricted electives.

**Program Outcomes**

1. Students will be able to demonstrate an understanding of how the scientific method is used to explore topics in earth science and geology.
2. Students will be able to apply earth science/geology concepts to better understand current issues of environmental and/or geologic concern.
3. Students will be able to demonstrate concept mastery.

| Course                                 | Units                |
|--|----------------------|
| <b>Core Courses:</b>                   |                      |
| Introduction to Astronomy / Honors     | ASTR A100 / A100H 3  |
| Introduction to Astronomy Lab / Honors | ASTR A100L / A100M 1 |
| General Geology / Honors               | GEOL A105 / A105H 3  |
| General Geology Lab / Honors           | GEOL A105L / A105M 1 |
| Evolution of the Earth / Honors        | GEOL A185 / A185H 3  |
| Evolution of the Earth Lab / Honors    | GEOL A185L A185M 1   |
| Oceanography / Honors                  | MRSC A100 / A100H 3  |
| Oceanography Lab / Honors              | MRSC A100L / A100M 1 |
| <b>Subtotal</b>                        | <b>16</b>            |

**Restricted Electives - Complete at least eight (8) units from the following:**

|  |               |
|--|---------------|
| Human Ecology                                  | ECOL A100 3   |
| Or   |               |
| Introduction to Environmental Science          | ESEC A100 3   |
| Wetlands Ecology and Management                | ECOL A210 3   |
| Or   |               |
| Wetlands Ecology and Management                | ESEC A210 3   |
| California Geography                           | GEOL A115 3   |
| Weather and Climate                            | GEOL A131 3   |
| Geologic Field Studies: Death Valley           | GEOL A132 2   |
| Geologic Field Studies: Colorado Plateau       | GEOL A133 4   |
| Geologic Field Studies: Cascade Range          | GEOL A134 4   |
| Geology of the Natural Parks and Monuments     | GEOL A135 3   |
| Geologic Field Studies: San Andreas Fault      | GEOL A136 1   |
| Introductory Field Geology                     | GEOL A137 4   |
| Geologic Field Studies: Yosemite National Park | GEOL A138 2   |
| Geologic Field Studies: Eastern Sierra Nevada  | GEOL A139 2   |
| Geologic Field Studies: Mojave Desert          | GEOL A141 2.5 |
| Geologic Field Studies: Hawaii Volcanology     | GEOL A142 2.5 |
| Environmental Geology                          | GEOL A160 4   |
| Natural Disasters                              | GEOL A165 3   |
| Introduction to Mineralogy                     | GEOL A280 4   |
| Petrology                                      | GEOL A285 4   |

|   |      |       |               |
|---|------|-------|---------------|
| Coastal Oceanography  | MRSC | A185  | 3             |
| Coastal Oceanography Lab  | MRSC | A185L | 1             |
| <b>Subtotal</b>   |      |       | <b>8</b>      |
| <b>Program Major Units</b>  |      |       | <b>24</b>     |
| <b>AS General Education Option 1, 2, or 3</b>                       |      |       | <b>Varies</b> |
| <b>Transferable electives as needed to satisfy unit requirement</b> |      |       | <b>Varies</b> |
| <b>Total Degree Units</b>   |      |       | <b>60</b>     |

## GEOLOGY

### ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Students graduating with an Associate in Science in Geology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Geology AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Science in Geology for transfer Degree focuses on an understanding of internal processes responsible for the formation of the Earth from a scientific perspective. Students choosing this degree program will study a range of natural science concepts including plate tectonics, climate change, and the evolution of the dynamic planet Earth. This degree employs the scientific method to understand the formation of the Earth, including how volcanoes and mountain building events change the geography and ecosystems of the Earth. Students will explore geologic time as it relates to the origins, and evolution of life through the fossil record.

An understanding of the formation of economically important mineral and fossil fuel resources is an important aspect of the degree program. Portions of the course work will focus on the diverse California geologic setting and coastal development. Completion of the Associate in Science in Geology for transfer Degree will provide students with a well-rounded understanding of human impacts on the globe and the ways geologic hazards such as earthquakes, floods, and landslides impact human development.

The coursework prepares students to think critically and apply reasoning skills to analyze real world situations. It is strongly recommended that all geology majors take courses in physics and biology in addition to the degree requirements, but this cannot be included as a requirement due to unit limitations.

#### Program Outcomes

1. Apply the scientific method to solve geological problems.
2. Summarize geologic time, explain the geologic time scale and its scientific basis, recount the milestone events in Earth history, and understand the basics of common dating methods.
3. Express the role of the geology in everyday life, appreciate the extent of human impact on Earth systems and environments, and understand the processes that create natural hazards, and the strategies that minimize their impact on society.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                     |      |              | Units |
|----------------------------|------|--------------|-------|
| <b>Core Courses:</b>       |      |              |       |
| Physical Geology           | GEOL | A110         | 4     |
| Evolution of the Earth     | GEOL | A185         | 3     |
| Evolution of the Earth Lab | GEOL | A185L        | 1     |
| General Chemistry A        | CHEM | A180         | 5     |
| General Chemistry B        | CHEM | A185         | 5     |
| Calculus 1 / Honors        | MATH | A180 / A180H | 4     |
| Calculus 2 / Honors        | MATH | A185 / A185H | 4     |

**Program Major Units** **26**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## GLOBAL STUDIES

### GLOBAL STUDIES

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Global Studies for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Global Studies AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Global Studies is an interdisciplinary course of study that provides students with an understanding of political, cultural, environmental and economic processes and their implications. The program introduces students to the study of global issues and perspectives while providing methodological tools and techniques for analyzing them at multiple scales (local, regional and global). Students will develop the skills for analyzing the impacts of globalization by applying diverse perspectives to current global issues.

By critically analyzing a variety of case studies, students will be prepared to participate in an interconnected environment and continue their studies in a variety of fields.

#### Program Outcomes

1. Students will demonstrate knowledge of the historical evolution of globalization, the interconnectedness of economic, political and environmental processes and its positive and negative consequences.
2. Students will apply knowledge to propose policies to address an issue of globalization.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

*Continued on next page*

**GLOBAL STUDIES AA-T DEGREE (CONTINUED)**

| Course                         |      |      | Units    |
|--------------------------------|------|------|----------|
| <b>Required Core:</b>          |      |      |          |
| Introduction to Global Studies | GLST | A101 | 3        |
| Introduction to Global Issues  | GLST | A102 | 3        |
| <b>Subtotal</b>                |      |      | <b>6</b> |

**List A - Select five (5) courses from at least four (4) of the following areas for a minimum of fifteen (15) units:**

**Culture and Society Area**

|                                |      |              |   |
|--------------------------------|------|--------------|---|
| Cultural Anthropology / Honors | ANTH | A100 / A100H | 3 |
| Introduction to Linguistics    | ANTH | A190         | 3 |
| World History 1 / Honors       | HIST | A161 / A161H | 3 |
| World History 2 / Honors       | HIST | A162 / A162H | 3 |
| World Religion                 | RLST | A110         | 3 |

**Geography Area**

|                                   |      |              |   |
|-----------------------------------|------|--------------|---|
| World Regional Geography / Honors | GEOG | A100 / A100H | 3 |
| Physical Geography / Honors       | GEOG | A180 / A180H | 3 |
| Cultural Geography                | GEOG | A185         | 3 |

**Economics Area**

|                         |      |              |   |
|-------------------------|------|--------------|---|
| Microeconomics / Honors | ECON | A170 / A170H | 3 |
| Macroeconomics / Honors | ECON | A175 / A175H | 3 |

**Politics Area**

|                              |      |              |   |
|------------------------------|------|--------------|---|
| International Relations      | PSCI | A110         | 3 |
| American Government / Honors | PSCI | A180 / A180H | 3 |
| Comparative Politics         | PSCI | A185         | 3 |

**Humanities Area**

|   |      |              |   |
|---|------|--------------|---|
| World Literature Through Renaissance / Honors | ENGL | A160 / A160H | 3 |
| World Literature Since Renaissance / Honors   | ENGL | A161 / A161H | 3 |
| Intermediate French 1                         | FREN | A280         | 4 |
| Intermediate French 2                         | FREN | A285         | 4 |
| Intermediate German 1                         | GRMN | A280         | 4 |
| Intermediate German 2                         | GRMN | A285         | 4 |
| Intermediate Japanese 1                       | JAPN | A280         | 5 |
| Intermediate Japanese 2                       | JAPN | A285         | 5 |
| Intermediate Spanish 1                        | SPAN | A280         | 5 |
| Intermediate Spanish 2                        | SPAN | A285         | 5 |

**Subtotal 15- 19**

**Program Major Units 21-25**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (HVACR)**

**HEATING, VENTILATION, AIR CONDITIONING AND REFRIGERATION (HVACR)**

**CERTIFICATE OF ACHIEVEMENT**

The Heating, Ventilation and Air Conditioning (HVACR) option prepares students for employment as heating, ventilating and air conditioning technicians. Students will be trained to install, service and maintain air conditioning/refrigeration equipment in buildings. The program provides a background for more advanced studies in the design and installation of computerized building automation systems.

Refrigeration relates to the cooling of air or liquids, thus providing lower temperatures to preserve food, cool beverages, make ice, and for many other applications. Air conditioning includes space cooling, heating, humidification, dehumidification, air filtration, and ventilation to condition the air and improve air quality. The field of HVACR Technology is vital to our health and security, from the cryogenic (ultra-low temperatures) scientific field to the preservation of our food products to the air conditioning of hospitals and institutions.

A math competency level equivalent to Tech A040 is strongly recommended or satisfactory score on math competency examination.

**Program Outcome**

1. Prepare students for entry-level employment as an HVACR Technician and for industry certifications.

| Course  |      |      | Units     |
|---|------|------|-----------|
| Computer Use in Technology                    | CHT  | A100 | 3         |
| Or  |      |      |           |
| Introduction to Computer Applications         | CIS  | A100 | 3         |
| Or  |      |      |           |
| Introduction to Computer Information Systems  | CIS  | A111 | 3         |
| Air Conditioning and Refrigeration Principles | HVAC | A100 | 3         |
| Basic Electrical for HVAC-R                   | HVAC | A101 | 3         |
| Refrigeration Service                         | HVAC | A102 | 3         |
| Air Conditioning Service                      | HVAC | A103 | 3         |
| Air Conditioning and Refrigeration Controls   | HVAC | A105 | 3         |
| Pneumatic Controls                            | HVAC | A110 | 3         |
| Building Automation                           | HVAC | A140 | 3         |
| <b>Subtotal</b>                               |      |      | <b>24</b> |

**Select six (6) units from the following:**

|                              |      |      |           |
|------------------------------|------|------|-----------|
| Air Balance                  | HVAC | A104 | 3         |
| Application/HVAC             | HVAC | A106 | 3         |
| Ice Machine Service & Repair | HVAC | A111 | 3         |
| <b>Subtotal</b>              |      |      | <b>6</b>  |
| <b>Total Units</b>           |      |      | <b>30</b> |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Heating, Ventilation, Air Conditioning, and Refrigeration Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.



## HISTORY

## HISTORY

### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in History for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the History AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

Lower-division history courses taken at Orange Coast College will introduce students to the broad sweep of historical events both within the United States and across the world and help them better understand the role of cause and effect and the interaction of continuity and change in the unfolding of history. Students will refine their ability to read and analyze historical courses and to use them appropriately in developing valid historical arguments. The most obvious application of a bachelor's degree in history is to prepare individuals to teach, pursue historical research, or work in museums. In addition, the insights into the human experience and the skills gained through the study of history - to think clearly and analytically and to communicate effectively both in writing and orally - are excellent preparation for careers in many fields including law, public service, and business.

#### Program Outcome

1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course   | Units               |
|--|---------------------|
| <b>Core Courses:</b>                             |                     |
| History of the United States to 1876 / Honors    | HIST A170 / A170H 3 |
| History of the United States Since 1876 / Honors | HIST A175 / A175H 3 |
| <b>Subtotal</b>                                  | <b>6</b>            |

#### List A - Six (6) units:

|                                 |                     |
|---------------------------------|---------------------|
| World History 1 / Honors        | HIST A161 / A161H 3 |
| Or                              |                     |
| Western Civilization 1 / Honors | HIST A180 / A180H 3 |
| World History 2 / Honors        | HIST A162 / A162H 3 |
| Or                              |                     |
| Western Civilization 2 / Honors | HIST A185 / A185H 3 |
| <b>Subtotal</b>                 | <b>6</b>            |

#### List B (Area 1) - Complete one (1) course:

|   |                     |
|---|---------------------|
| Afro-American History                               | HIST A101 3         |
| History of Mexico                                   | HIST A145 3         |
| Ethnic Groups of the United States: Their Histories | HIST A150 3         |
| *World History 1 / Honors                           | HIST A161 / A161H 3 |
| *World History 2 / Honors                           | HIST A162 / A162H 3 |
| Women in History                                    | HIST A187 3         |
| <b>Subtotal</b>                                     | <b>3</b>            |

#### List B (Area 2) - Complete one (1) course from the following (or any course not taken from above):

|   |           |               |
|---|-----------|---------------|
| History of England and Greater Britain                              | HIST A195 | 3             |
| <b>Subtotal</b>   |           | <b>3</b>      |
| <b>Program Major Units</b>  |           | <b>18</b>     |
| <b>CSU or IGETC for CSU</b>   |           | <b>37-39</b>  |
| <b>Transferable electives as needed to satisfy unit requirement</b> |           | <b>Varies</b> |
| <b>Total Degree Units</b>   |           | <b>60</b>     |

\*Course may not be used to fulfill List B (Area 1) if already used to fulfill List A.

## HORTICULTURE

The Horticulture program prepares students for many attractively paying positions in the nursery industry. These positions include those in production and sales, interior landscaping, landscape design, and construction and maintenance.

Students may take one or more courses from the program to learn about horticulture for its own sake and for theirs, or they may take the courses required for the Certificate of Achievement in Horticulture. Either option is an introduction to natural beauty. The courses have been designed both for full-time students planning to enter the horticulture field and for those people working in one of the many interesting areas of horticulture who wish to expand their horticultural knowledge. Most classes are conducted during convenient evening hours to allow working students to study for a new career and those with jobs in the field of Horticulture to upgrade their skills.

The Horticulture Department boasts excellent facilities, including a well-equipped classroom building set in beautifully landscaped grounds. The grounds themselves have been planted with a large collection of trees, shrubs, ground covers, and vines, and they serve as a laboratory for many of the classes. A nursery with over 6,000 square feet of greenhouse space and 4,000 square feet of shade structures round out this marvelous facility on the Orange Coast College campus.

## HORTICULTURE

### CERTIFICATE OF ACHIEVEMENT

Upon completion of the Horticulture Program students will have the knowledge, skills and experience to work with plant material in multiple applications and multiple fields in the Landscaping and Nursery industries. Students will be qualified for careers in Landscape Design, Landscape Contracting, Landscape Maintenance, Arboriculture, Nursery practices, and Irrigation and Water Management.

#### Program Outcomes

1. Use knowledge of various plant materials to better design and maintain an outdoor garden or landscape.
2. Describe man's relationship with plants for food and environmental enhancement.
3. Describe current sustainability issues in Southern California and how good horticultural practices will improve long term sustainability.

*Continued on next page*

**HORTICULTURE CERTIFICATE (CONTINUED)**

- Use knowledge of a particular chosen plant, greenhouse systems and propagation practices to successfully produce a healthy crop by a target date.
- Use knowledge of site conditions, drafting skills, client needs, and various plant and building materials to solve a design problem.

| Course               |      |      | Units |
|----------------------|------|------|-------|
| <b>FALL</b>          |      |      |       |
| **Botany             | BIOL | A183 | 3     |
| Or                   |      |      |       |
| Botany for Gardeners | HORT | A105 | 3     |
| Knowing Your Soils   | HORT | A109 | 3     |
| Ornamental Trees     | HORT | A181 | 3     |

**Subtotal** **9**

|                   |      |      |   |
|-------------------|------|------|---|
| <b>SPRING</b>     |      |      |   |
| Ornamental Shrubs | HORT | A182 | 3 |

**Subtotal** **3**

Select twelve (12) units from the following:

|   |      |      |     |
|---|------|------|-----|
| <b>FALL</b>   |      |      |     |
| Landscape Drafting Technique                              | HORT | A111 | 1   |
| Introduction to Tree Care                                 | HORT | A151 | 2   |
| Pest Control Applicators & Gardeners P.C.O. Certification | HORT | A170 | 1   |
| Greenhouse and Nursery Science                            | HORT | A184 | 3   |
| Plant Diseases  | HORT | A185 | 2   |
| Interior Plantscaping                                     | HORT | A187 | 2   |
| *Chronicles of Garden Design through the Ages             | HORT | A200 | 3   |
| Business of Landscape Design & Construction               | HORT | A231 | 2   |
| *Portfolio Development                                    | HORT | A284 | 1.5 |
| *Introduction to Landscape Design                         | HORT | A285 | 3   |
| Low-Voltage Landscape Lighting                            | HORT | A290 | 1.5 |
| Garden Pools, Fountains & Waterfalls in the Landscape     | HORT | A297 | 2   |

|   |      |      |     |
|---|------|------|-----|
| <b>SPRING</b>   |      |      |     |
| Landscape Graphics  | HORT | A115 | 3   |
| Digital Design  | HORT | A116 | 3   |
| Landscape Maintenance                                     | HORT | A150 | 3   |
| Plant Propagation   | HORT | A183 | 3   |
| Pests of Ornamentals                                      | HORT | A186 | 1.5 |
| Weeds and Their Control                                   | HORT | A189 | 1.5 |
| California Friendly Landscapes                            | HORT | A190 | 2   |
| Cacti and Succulents                                      | HORT | A191 | 1.5 |
| *Chronicles of Garden Design through the Ages             | HORT | A200 | 3   |
| Calculations for Horticulture and Landscape Professionals | HORT | A230 | 2   |
| Therapeutic Gardens: Design for Healing Spaces            | HORT | A283 | 2   |
| *Portfolio Development                                    | HORT | A284 | 1.5 |
| *Introduction to Landscape Design                         | HORT | A285 | 3   |
| Landscape Design Elements                                 | HORT | A286 | 2   |
| Planting Design   | HORT | A287 | 2   |
| Sprinkler Irrigation Systems Design                       | HORT | A288 | 1   |
| Installation of Residential Irrigation Systems            | HORT | A289 | 1   |
| Grading and Drainage for Landscape Design                 | HORT | A296 | 3   |
| Business Elective (any OCC Business course 100 or higher) |      |      | 3   |

**Subtotal** **12**

**Total Units** **24**

\*HORT A200, A284, A285 taken in Fall term may not be repeated in Spring term.

\*\*Transfer students should also take Biology A183L.

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Horticulture Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**LANDSCAPE SITE DESIGN ELEMENTS**

**CERTIFICATE OF SPECIALIZATION**

This program will prepare students for the complex task of developing residential landscapes with grading, drainage, materials, structures, lighting and other complex components that require a deeper knowledge base.

**Program Outcome**

- Students will be able to demonstrate fundamental skills in landscape design elements, process and techniques.
- Apply their understanding of sustainable aspects to the development of landscape site design to promote green living environments.

| Course  |      |      | Units |
|---|------|------|-------|
| Urban Container Planting                              | HORT | A192 | 1     |
| Landscape Design Elements                             | HORT | A286 | 2     |
| Low-Voltage Landscape Lighting                        | HORT | A290 | 1.5   |
| Grading and Drainage for Landscape Design             | HORT | A296 | 3     |
| Garden Pools, Fountains & Waterfalls in the Landscape | HORT | A297 | 2     |

**Total Units** **9.5**

**BASIC LANDSCAPE DESIGN**

**CERTIFICATE OF SPECIALIZATION**

The Basic Landscape Horticulture certificate program is intended for those students who are limited by time constraints to a one-year program. Graduates with this certificate can find employment at the basic or entry level in grounds maintenance or as a park worker, gardener, or landscape designer.

**Program Outcome**

- Communicate basic horticulture concepts to clients, contractors, and public agencies.

| Course                           |      |      | Units |
|----------------------------------|------|------|-------|
| Landscape Drafting Techniques    | HORT | A111 | 1     |
| Landscape Graphics               | HORT | A115 | 3     |
| Introduction to Landscape Design | HORT | A285 | 3     |
| Planting Design                  | HORT | A287 | 2     |

**Total Units** **9**

**INTERMEDIATE LANDSCAPE DESIGN AND LANDSCAPE SPECIALIST**

**CERTIFICATE OF SPECIALIZATION**

The Intermediate Landscape Design and Construction certificate program trains students to work in the field of landscape design/build. The curriculum provides studies in design, construction, history, basic horticulture, topics that help a student obtain employment in the field, and provide foundational training towards becoming licensed landscape contractors and related specialties.

**Program Outcome**

- Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

| Course                                       |      |      | Units     |
|--|------|------|-----------|
| Botany for Gardeners                         | HORT | A105 | 3         |
| Digital Design                               | HORT | A116 | 3         |
| California Friendly Landscapes               | HORT | A190 | 2         |
| Chronicles of Garden Design through the Ages | HORT | A200 | 3         |
| Landscape Design Elements                    | HORT | A286 | 2         |
| <b>Total Units</b>                           |      |      | <b>13</b> |

## ADVANCED LANDSCAPE DESIGN AND LANDSCAPE SPECIALIST

### CERTIFICATE OF SPECIALIZATION

Successful work in landscape design requires a comprehensive, multidisciplinary education in aspects of horticulture, design, and more. Without requiring prior background, the Landscape Design Certificate program provides entry-level skills for those seeking employment in the landscaping field or continuing education for landscapers, florists/nursery growers, architects, contractors, and anyone interested in a broader range of knowledge in this area.

The courses enable you to develop aesthetic sensitivity and environmental awareness, a thorough knowledge of historical precedent, a definable and defensible design methodology, the technical knowledge and skills necessary to compete effectively for jobs, and a comprehensive portfolio.

#### Program Outcome

1. Solve landscape challenges through the design/build process that provides basic human comfort and livability, and meet client functional and financial needs.

| Course   |      |      | Units       |
|--|------|------|-------------|
| Knowing Your Soils                             | HORT | A109 | 3           |
| Ornamental Trees                               | HORT | A181 | 3           |
| Ornamental Shrubs                              | HORT | A182 | 3           |
| Portfolio Development                          | HORT | A284 | 1.5         |
| Sprinkler Irrigation Systems Design            | HORT | A288 | 2           |
| Installation of Residential Irrigation Systems | HORT | A289 | 1           |
| <b>Total Units</b>                             |      |      | <b>13.5</b> |

## THE PROFESSIONAL PRACTICE OF A LANDSCAPE DESIGN & CONSTRUCTION BUSINESS

### CERTIFICATE OF SPECIALIZATION

Prepares students for self-employment and work within small businesses in the landscape industry. Builds on their industry education in landscape design and construction. Expands their education in entrepreneurship and small business management. Contributes to the student's financial independence, career success, and the world's economy. Prepares them to work for others and after passing the state contractor's examination, to own their own landscape construction business. The program is aligned with the California State License Board and completion of this program will help prepare students for the state exam.

### Program Outcome

1. Certificate students will be able to understand the theory and practice of managing a landscape business, including knowledge of legalities, finance, operations, planning, safety, estimating, bidding, decision making and the application leadership and managerial skills in various organizational environments.
2. Certificate students will be able to develop and implement a business plan by conducting research in the appropriate specialty area and identify the target market, competition, industry standards, and financial projections.

| Course  |      |      | Units    |
|---|------|------|----------|
| Introduction to Entrepreneurship                          | BUS  | A240 | 3        |
| Calculations for Horticulture and Landscape Professionals | HORT | A230 | 2        |
| Business of Landscape Design & Construction               | HORT | A231 | 2        |
| <b>Total Units</b>  |      |      | <b>7</b> |

## RETROFITTING CALIFORNIA URBAN GARDENS

### CERTIFICATE OF SPECIALIZATION

The Retrofitting California Urban Gardens Certificate of Specialization, is designed to provide formal training for individuals interested in transforming the landscape into a water-wise sustainable garden. This program provides students with entry-level working knowledge of the skills and resources they will need to design various sustainable landscapes upon completion of the certificate.

#### Program Outcome

1. Students will demonstrate areas of critical thinking, design, and visual communication for entry-level employment as a landscape/garden designer that will have a strong background in sustainability as well as the ability to pursue industry certifications.

| Course   |      |      | Units       |
|--|------|------|-------------|
| <b>FALL</b>                                    |      |      |             |
| Landscape Drafting Techniques                  | HORT | A111 | 1           |
| California Friendly Landscapes                 | HORT | A190 | 2           |
| Introduction to Landscape Design               | HORT | A285 | 3           |
| <b>Subtotal</b>                                |      |      | <b>6</b>    |
| <b>SPRING</b>                                  |      |      |             |
| Cacti and Succulents                           | HORT | A191 | 1.5         |
| Sprinkler Irrigation Systems Design            | HORT | A288 | 2           |
| Installation of Residential Irrigation Systems | HORT | A289 | 1           |
| <b>Subtotal</b>                                |      |      | <b>4.5</b>  |
| <b>Total Units</b>                             |      |      | <b>10.5</b> |

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## HOSPITALITY, TRAVEL AND TOURISM

The Hotel, Travel & Tourism programs at Orange Coast College are designed for employment or career advancement within the hospitality industry. Whether an individual is a novice or currently employed, these programs strengthen the opportunity for success within the fastest growing industries in southern California.

Career opportunities abound as growth of the hospitality industry continues throughout the United States and the world requiring trained individuals to fill the multitude of varied positions. Students may choose individual courses, certification in areas of specialization, as well as, completion of an Associate in Science Degree.

The Hotel, Travel & Tourism, and Spa Management programs at Orange Coast College use materials from the Educational Institute of the American Hotel & Lodging Association, the world leader in hospitality education and training. Students who successfully complete these courses earn globally recognized certificates from the American Hotel & Lodging Association in addition to college credits applicable toward a Certificate or Associate Degree at Orange Coast College. At least 50% of all Airline, Hotel, Spa, Meeting/Event, Travel & Tourism coursework must be completed at Orange Coast College.

Students are encouraged to complete the requirements for an Associate in Science degree; graduation requirements can be found in the college catalog. With additional coursework, students can prepare for a Bachelor's Degree in this field. For more department information, call 714-432-5835 x6 or visit the School of Hospitality website at [www.orangecoastcollege.edu](http://www.orangecoastcollege.edu).

Note: Curriculum may be adjusted to meet the needs of students with extensive industry related experience. Evening and weekend courses are available.

## AIRLINE TRAVEL CAREERS

### AIRLINE TRAVEL MANAGEMENT

#### CERTIFICATE OF ACHIEVEMENT

This program prepares students for ground operations and airport management. Ground operations involves all aspects of aircraft handling at the airport as well as aircraft movement around the aerodrome. Managers are at the center of the airport. They are the decision-makers and policy-makers for airports. They create jobs and manage each airport department. The job is multi-faceted and vital to aviation safety. Airports are often one of the largest employers in a local area.

Corporate aviation is one of the largest growing entities within the aviation community. The corporate side of aviation has flourished, with an increased demand for larger aircraft and "Third Crew" member responsibilities and placements.

#### Program Outcome

1. The outcome for the Certificate of Achievement is to prepare students for employment in all levels of corporate and retail aviation including: flight attendant, ground operations, airport management, guest service agents, and other airline careers.

| Course                                    |      |      | Units     |
|---|------|------|-----------|
| <b>FALL</b>                               |      |      |           |
| Operations, Terminology & Safety          | ARLN | A137 | 3         |
| Cultural Tourism                          | HTT  | A130 | 3         |
| Computer Reservation Systems – SABRE      | HTT  | A131 | 3         |
| Travel and Tourism Career Development     | HTT  | A150 | 3         |
| <b>Subtotal</b>                           |      |      | <b>12</b> |
| <b>SPRING</b>                             |      |      |           |
| Aviation Management                       | ARLN | A117 | 3         |
| Destination the Americas                  | HTT  | A125 | 3         |
| Destination Africa/Pacific                | HTT  | A128 | 3         |
| Homeland Security                         | HTT  | A135 | 3         |
| <b>Subtotal</b>                           |      |      | <b>12</b> |
| <b>FALL</b>                               |      |      |           |
| Passport to Success                       | HTT  | A105 | 3         |
| Destination Europe                        | HTT  | A127 | 3         |
| Enhancing Guest Service                   | HTT  | A180 | 3         |
| Leadership and Strategic Management       | HTT  | A284 | 3         |
| <b>Subtotal</b>                           |      |      | <b>12</b> |
| <b>SPRING</b>                             |      |      |           |
| Interviewing and Professional Development | HTT  | A185 | 3         |
| Travel & Tourism Internship               | HTT  | A225 | 4         |
| Human Resource Management                 | HTT  | A288 | 3         |
| Hospitality, Travel, and Tourism Law      | HTT  | A286 | 3         |
| Or<br>California Employment Law           | HTT  | A290 | 3         |
| <b>Subtotal</b>                           |      |      | <b>13</b> |
| <b>Total Units</b>                        |      |      | <b>49</b> |

#### Airline Travel Management Suggested Electives:

|  |      |      |         |
|--|------|------|---------|
| Interpersonal Communication                        | CMST | A100 | 3       |
| Sharing the Travel Experience                      | HTT  | A138 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT  | A299 | 3       |
| Elementary Spanish 1                               | SPAN | A180 | 5       |

## FLIGHT ATTENDANT AND AIRLINE AND TRAVEL CAREERS

#### CERTIFICATE OF ACHIEVEMENT

This program prepares men and women of all ages for the highly competitive flight attendant, or a customer service career in the airline and travel industry. Courses include airline, airport, and travel terminology codes, hiring qualifications, communication skills, appearance and image standards, written employment skills and oral interviewing techniques and strategies to set yourself apart. Students work on campus, and with community and charity events to enhance their public contact experience considered valuable for flight attendants and careers in the travel industry.

**Program Outcome**

1. The outcome for the Certificate of Achievement is to prepare students for employment as a flight attendant or ground customer service agent with the airline industry.

| Course  |      |      | Units     |
|---|------|------|-----------|
| <b>FALL</b>                                       |      |      |           |
| Operations, Terminology & Safety                  | ARLN | A137 | 3         |
| Cultural Tourism                                  | HTT  | A130 | 3         |
| Computer Reservation Systems – SABRE              | HTT  | A131 | 3         |
| Travel and Tourism Career Development             | HTT  | A150 | 3         |
| <b>Subtotal</b>                                   |      |      | <b>12</b> |
| <b>SPRING</b>                                     |      |      |           |
| Flight Attendant Qualifications and Opportunities | ARLN | A139 | 3         |
| Destination the Americas                          | HTT  | A125 | 3         |
| Destination Africa/Pacific                        | HTT  | A128 | 3         |
| Homeland Security                                 | HTT  | A135 | 3         |
| <b>Subtotal</b>                                   |      |      | <b>12</b> |
| <b>FALL</b>                                       |      |      |           |
| Passport to Success                               | HTT  | A105 | 3         |
| Destination Europe                                | HTT  | A127 | 3         |
| Enhancing Guest Service                           | HTT  | A180 | 3         |
| Leadership and Strategic Management               | HTT  | A284 | 3         |
| <b>Subtotal</b>                                   |      |      | <b>12</b> |
| <b>SPRING</b>                                     |      |      |           |
| Interviewing and Professional Development         | HTT  | A185 | 3         |
| Airline Internship                                | HTT  | A226 | 4         |
| <b>Subtotal</b>                                   |      |      | <b>7</b>  |
| <b>Total Units</b>                                |      |      | <b>43</b> |

**Flight Attendant and Airline Travel Careers Suggested Electives:**

|  |      |      |         |
|--|------|------|---------|
| Aviation Management                                | ARLN | A117 | 3       |
| Interpersonal Communication                        | CMST | A100 | 3       |
| First Aid and CPR                                  | KIN  | A203 | 2       |
| Sharing the Travel Experience                      | HTT  | A138 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT  | A299 | 3       |
| Elementary Spanish 1                               | SPAN | A180 | 5       |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Flight Attendant and Airline and Travel Careers Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires a minimum of 61 units for completion.**

**HOTEL MANAGEMENT**

**FRONT OFFICE SPECIALIST**

**CERTIFICATE OF ACHIEVEMENT**

These courses have been recommended by industry to provide essential preparation to supervise and manage within operational areas in a hotel. Courses have been organized to provide understanding of techniques and knowledge necessary in developing effective leadership and decision-making skills and successful communication among all departments contributing to positive guest experiences. The curriculum was developed with guidance from an advisory council of hospitality professionals who rank skills and knowledge required in the hospitality industry. Upon completion of the program there are employment opportunities with competitive salary.

**Program Outcome**

1. The outcome for the certificate of achievement is to prepare students for employment within the front office and operational support areas of a hotel.

| Course                                    |     |      | Units     |
|---|-----|------|-----------|
| <b>FALL</b>                               |     |      |           |
| Front Office Operations                   | HTT | A110 | 3         |
| Cultural Tourism                          | HTT | A130 | 3         |
| Travel and Tourism Career Development     | HTT | A150 | 3         |
| Enhancing Guest Service                   | HTT | A180 | 3         |
| <b>Subtotal</b>                           |     |      | <b>12</b> |
| <b>SPRING</b>                             |     |      |           |
| Hospitality Accounting                    | HTT | A118 | 3         |
| Computer Reservation Systems – SABRE      | HTT | A131 | 3         |
| Homeland Security                         | HTT | A135 | 3         |
| Revenue Management                        | HTT | A140 | 3         |
| <b>Subtotal</b>                           |     |      | <b>12</b> |
| <b>FALL</b>                               |     |      |           |
| Passport to Success                       | HTT | A105 | 3         |
| Hospitality and Tourism Marketing         | HTT | A240 | 3         |
| Leadership and Strategic Management       | HTT | A284 | 3         |
| <b>Subtotal</b>                           |     |      | <b>9</b>  |
| <b>SPRING</b>                             |     |      |           |
| Interviewing and Professional Development | HTT | A185 | 3         |
| Hotel Internship                          | HTT | A227 | 4         |
| Hospitality Operations                    | HTT | A285 | 3         |
| <b>Subtotal</b>                           |     |      | <b>10</b> |
| <b>Total Units</b>                        |     |      | <b>43</b> |

**Front Office Specialist Suggested Electives:**

|  |     |      |         |
|--|-----|------|---------|
| Sharing the Travel Experience                      | HTT | A138 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT | A299 | 3       |

## HOTEL MANAGEMENT

### ASSOCIATE IN SCIENCE DEGREE

The Hotel, Human Resource, Meeting/Event, Hospitality Marketing, and Spa Management programs at Orange Coast College are designed for employment or career advancement within the hospitality industry. Whether an individual is a novice or currently employed, these programs strengthen the opportunity for success within the fastest growing industry in Southern California.

Career opportunities abound as growth of the hospitality industry continues throughout the United States and the world requiring

#### Program Outcome

- The outcome for the certificate of achievement is to prepare students for employment as a supervisor or manager within the hospitality industry and to prepare students to transfer to a four-year college.

| Course  |     |      | Units         |
|---|-----|------|---------------|
| <b>FALL</b>                                   |     |      |               |
| Front Office Operations                       | HTT | A110 | 3             |
| Cultural Tourism                              | HTT | A130 | 3             |
| Travel and Tourism Career Development         | HTT | A150 | 3             |
| Enhancing Guest Service                       | HTT | A180 | 3             |
| <b>Subtotal</b>                               |     |      | <b>12</b>     |
| <b>SPRING</b>                                 |     |      |               |
| Homeland Security                             | HTT | A135 | 3             |
| Revenue Management                            | HTT | A140 | 3             |
| Hospitality Operations                        | HTT | A285 | 3             |
| Human Resource Management                     | HTT | A288 | 3             |
| <b>Subtotal</b>                               |     |      | <b>12</b>     |
| <b>FALL</b>                                   |     |      |               |
| Passport to Success                           | HTT | A105 | 3             |
| Hospitality Accounting                        | HTT | A118 | 3             |
| Hospitality and Tourism Marketing             | HTT | A240 | 3             |
| Leadership and Strategic Management           | HTT | A284 | 3             |
| <b>Subtotal</b>                               |     |      | <b>12</b>     |
| <b>SPRING</b>                                 |     |      |               |
| Interviewing and Professional Development     | HTT | A185 | 3             |
| Hotel Internship                              | HTT | A227 | 4             |
| Hospitality, Travel, and Tourism Law          | HTT | A286 | 3             |
| Or  |     |      |               |
| California Employment Law                     | HTT | A290 | 3             |
| <b>Subtotal</b>                               |     |      | <b>10</b>     |
| <b>Program Major Units</b>                    |     |      | <b>46</b>     |
| <b>AS General Education Option 1, 2, or 3</b> |     |      | <b>Varies</b> |
| <b>Minimum Degree Units Total</b>             |     |      | <b>64</b>     |

#### Hotel Management Suggested Electives:

|  |      |      |         |
|--|------|------|---------|
| Sharing the Travel Experience                      | HTT  | A138 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT  | A299 | 3       |
| Elementary Spanish 1                               | SPAN | A180 | 5       |

## HUMAN RESOURCE MANAGEMENT

### CERTIFICATE OF ACHIEVEMENT

Gain insight into decision making skills, and organizational understanding for advancement or employment in a human resource role.

#### Program Outcome

- The outcome for the certificate of achievement is to prepare students for employment within the hotel industry the area of human resources.

| Course  |      |      | Units     |
|---|------|------|-----------|
| <b>FALL</b>   |      |      |           |
| Passport to Success                                   | HTT  | A105 | 3         |
| Cultural Tourism                                      | HTT  | A130 | 3         |
| Travel and Tourism Career Development                 | HTT  | A150 | 3         |
| Leadership and Strategic Management                   | HTT  | A284 | 3         |
| <b>Subtotal</b>                                       |      |      | <b>12</b> |
| <b>SPRING</b>   |      |      |           |
| Enhancing Guest Service                               | HTT  | A180 | 3         |
| Interviewing and Professional Development             | HTT  | A185 | 3         |
| Human Resource Management                             | HTT  | A288 | 3         |
| California Employment Law                             | HTT  | A290 | 3         |
| <b>Subtotal</b>                                       |      |      | <b>12</b> |
| <b>FALL</b>   |      |      |           |
| Hotel Internship                                      | HTT  | A227 | 4         |
| Hospitality Operations                                | HTT  | A285 | 3         |
| Hospitality, Travel, and Tourism Law                  | HTT  | A286 | 3         |
| <b>Subtotal</b>                                       |      |      | <b>10</b> |
| <b>Total Units</b>                                    |      |      | <b>34</b> |
| <b>Human Resource Management Suggested Electives:</b> |      |      |           |
| Sharing the Travel Experience                         | HTT  | A138 | 3         |
| Current Issues in Hospitality, Travel, and Tourism    | HTT  | A199 | 0.5-1.5   |
| Certified Travel Associate                            | HTT  | A299 | 3         |
| Interpersonal Communication                           | CMST | A100 | 3         |
| Elementary Spanish 1                                  | SPAN | A180 | 5         |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Human Resource Management Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## MEETING AND EVENT MANAGEMENT

### CERTIFICATE OF ACHIEVEMENT

The Meeting and Event Management program focuses on the planner's practical "need to know" tools and skills. Learn from well-known experienced industry professionals who are eager to share the practical "need to know" tools and skills essential to every successful meeting and event planner. Attain a solid understanding of the myriad details and behind-the-scenes considerations needed to assure your meeting or event is the success you and your clients hoped for.

Convenient online and weekend classes are designed to provide a dynamic learning experience with extensive interaction between students and instructors-through case studies, real-life examples, group work and hands-on activities. Special features include "behind the scenes" visits to hotel meeting facilities and development of a hands-on project.

#### Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, and tourism industries as a meeting, convention, or event planner.

| Course                                       |     |      | Units       |
|--|-----|------|-------------|
| <b>FALL</b>                                  |     |      |             |
| Passport to Success                          | HTT | A105 | 3           |
| Principles of Event and Meeting Management   | HTT | A265 | 1.5         |
| Organize and Manage Events and Meetings      | HTT | A266 | 1.5         |
| Sport Event Management                       | HTT | A273 | 1           |
| Catering Design and Management               | HTT | A278 | 1.5         |
| Leadership and Strategic Management          | HTT | A284 | 3           |
| <b>Subtotal</b>                              |     |      | <b>11.5</b> |
| <b>SPRING</b>                                |     |      |             |
| Luxury, Incentive, and Corporate Travel      | HTT | A158 | 3           |
| Interviewing and Professional Development    | HTT | A185 | 3           |
| Managing Business Risks                      | HTT | A267 | 1.5         |
| Destination Management                       | HTT | A269 | 1           |
| Meeting and Event Marketing and Sales        | HTT | A270 | 1.5         |
| Event Fund-Raising and Sponsorship           | HTT | A275 | 1           |
| Expo and Trade Show Management and Promotion | HTT | A276 | 1           |
| Wedding Planning as a Business               | HTT | A277 | 1           |
| <b>Subtotal</b>                              |     |      | <b>13</b>   |
| <b>FALL</b>                                  |     |      |             |
| Sharing the Travel Experience                | HTT | A138 | 3           |
| Meeting and Event Management Internship      | HTT | A221 | 4           |
| Establish and Operate an Event Business      | HTT | A274 | 1           |
| <b>Subtotal</b>                              |     |      | <b>8</b>    |
| <b>Total Units</b>                           |     |      | <b>32.5</b> |

#### Meeting and Event Management Suggested Electives:

|  |      |      |         |
|--|------|------|---------|
| Interpersonal Communication                        | CMST | A100 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT  | A299 | 3       |
| Elementary Spanish 1                               | SPAN | A180 | 5       |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Meeting and Event Management Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## SALES AND MARKETING SPECIALIST

### CERTIFICATE OF ACHIEVEMENT

Develop essential skills necessary for advancement or employment within a sales or marketing role in the hospitality, event, or meeting management industries.

#### Program Outcome

1. The outcome for the certificate of achievement is to prepare students for employment within the hospitality, travel, or tourism industries in a sales or marketing capacity.

| Course                                     |     |      | Units     |
|--|-----|------|-----------|
| <b>FALL</b>                                |     |      |           |
| Cultural Tourism                           | HTT | A130 | 3         |
| Travel and Tourism Career Development      | HTT | A150 | 3         |
| Enhancing Guest Service                    | HTT | A180 | 3         |
| Leadership and Strategic Management        | HTT | A284 | 3         |
| <b>Subtotal</b>                            |     |      | <b>12</b> |
| <b>SPRING</b>                              |     |      |           |
| Passport to Success                        | HTT | A105 | 3         |
| Tour Escorting and Group Travel            | HTT | A157 | 3         |
| Interviewing and Professional Development  | HTT | A185 | 3         |
| Hospitality Operations                     | HTT | A285 | 3         |
| <b>Subtotal</b>                            |     |      | <b>12</b> |
| <b>FALL</b>                                |     |      |           |
| Sharing the Travel Experience              | HTT | A138 | 3         |
| Hotel Internship                           | HTT | A227 | 4         |
| Hospitality and Tourism Marketing          | HTT | A240 | 3         |
| Principles of Event and Meeting Management | HTT | A265 | 1.5       |
| Organize and Manage Events and Meetings    | HTT | A266 | 1.5       |
| <b>Subtotal</b>                            |     |      | <b>13</b> |
| <b>Total Units</b>                         |     |      | <b>37</b> |

#### Sales and Marketing Specialist Suggested Electives:

|  |      |      |         |
|--|------|------|---------|
| Interpersonal Communication                        | CMST | A100 | 3       |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 0.5-1.5 |
| Certified Travel Associate                         | HTT  | A299 | 3       |
| Elementary Spanish 1                               | SPAN | A180 | 5       |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Sales and Marketing Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## SPA MANAGEMENT

### CERTIFICATE OF ACHIEVEMENT

The popularity of spas in the U.S. has increased dramatically over the past few years and shows no signs of slowing. According to a recent international Spa Association study, the spa industry generated over \$12.7 billion in revenue in 2015. Each year, more spas are being opened across the country creating new jobs for spa professionals.

Orange Coast College is one of the first community college's to offer Spa Management certification. The greater Orange County area is thriving with spas and our program is in a unique position to provide students access to numerous world-class resorts and spas – right in our own back yard.

Coursework in the program provides comprehensive business education and industry input to create a well-rounded educational experience for career success in the Spa market. You will acquire business and management strategies, desirable skills for successful day-to-day operations, combined with long-range strategies necessary for growth and profitability.

With increasing integration of spas in the hotel, resort, medical, healthcare, and tourism industries, spa management professionals are in demand. Our graduates will have the knowledge and skills needed to become leaders in the spa industry

#### Program Outcome

1. The outcome of this certificate of achievement is to prepare students for employment as a supervisor, manager, director or owner in the spa industry.

| Course   |     |      | Units     |
|--|-----|------|-----------|
| <b>FALL</b>                                    |     |      |           |
| Cultural Tourism                               | HTT | A130 | 3         |
| Introduction to Spa and Hospitality Operations | HTT | A160 | 1.5       |
| Spa Industry Services and Treatments           | HTT | A165 | 1.5       |
| Enhancing Guest Services                       | HTT | A180 | 3         |
| Leadership and Strategic Management            | HTT | A284 | 3         |
| <b>Subtotal</b>                                |     |      | <b>12</b> |
| <b>SPRING</b>                                  |     |      |           |
| Passport to Success                            | HTT | A105 | 3         |
| Spa Industry Finance                           | HTT | A170 | 1.5       |
| Spa Marketing and Retail Management            | HTT | A175 | 1.5       |
| Interviewing and Professional Development      | HTT | A185 | 3         |
| Hospitality Operations                         | HTT | A285 | 3         |
| <b>Subtotal</b>                                |     |      | <b>12</b> |
| <b>FALL</b>                                    |     |      |           |
| Sharing the Travel Experience                  | HTT | A138 | 3         |
| Hospitality and Tourism Marketing              | HTT | A240 | 3         |
| Spa Internship                                 | HTT | A279 | 4         |
| <b>Subtotal</b>                                |     |      | <b>10</b> |
| <b>Total Units</b>                             |     |      | <b>34</b> |

#### Spa Management Suggested Electives:

|  |      |      |       |
|--|------|------|-------|
| Interpersonal Communication                        | CMST | A100 | 3     |
| Current Issues in Hospitality, Travel, and Tourism | HTT  | A199 | 5-1.5 |
| Elementary Spanish 1                               | SPAN | A180 | 5     |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Spa Management Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## TRAVEL & TOURISM

### TRAVEL SPECIALIST

#### CERTIFICATE OF ACHIEVEMENT

These courses have been recommended by industry to provide essential preparation to sell, operate, supervise and manage within a travel agency or as an independent contractor of travel or home based agent. Courses have been organized to provide an understanding of techniques and knowledge necessary to develop effective leadership, decision-making skills, and successful communication among all departments contributing to positive, guest sales, and travel experiences.

#### Program Outcome

1. The outcome of this certificate of achievement is to prepare students for employment with a retail or home-based agency, independent contractor, tour operator, cruise line, adventure company, receptive operator, or tourism/convention bureau.

| Course                                    |     |      | Units     |
|---|-----|------|-----------|
| <b>FALL</b>                               |     |      |           |
| Destination Europe                        | HTT | A127 | 3         |
| Cultural Tourism                          | HTT | A130 | 3         |
| Travel and Tourism Career Development     | HTT | A150 | 3         |
| Cruising & Vacation Packages              | HTT | A156 | 3         |
| <b>Subtotal</b>                           |     |      | <b>12</b> |
| <b>SPRING</b>                             |     |      |           |
| Destination Africa/Pacific                | HTT | A128 | 3         |
| Computer Reservation Systems – SABRE      | HTT | A131 | 3         |
| Homeland Security                         | HTT | A135 | 3         |
| Interviewing and Professional Development | HTT | A185 | 3         |
| <b>Subtotal</b>                           |     |      | <b>12</b> |
| <b>FALL</b>                               |     |      |           |
| Passport to Success                       | HTT | A105 | 3         |
| Sharing the Travel Experience             | HTT | A138 | 3         |
| Hospitality and Tourism Marketing         | HTT | A240 | 3         |
| Leadership and Strategic Management       | HTT | A284 | 3         |
| Certified Travel Associate                | HTT | A299 | 3         |
| <b>Subtotal</b>                           |     |      | <b>15</b> |
| <b>SPRING</b>                             |     |      |           |
| Destination the Americas                  | HTT | A125 | 3         |
| Tour Escorting and Group Travel           | HTT | A157 | 3         |
| Luxury, Incentive, and Corporate Travel   | HTT | A158 | 3         |
| Travel & Tourism Internship               | HTT | A225 | 4         |
| <b>Subtotal</b>                           |     |      | <b>13</b> |
| <b>Total Units</b>                        |     |      | <b>52</b> |

#### Travel Specialist Suggested Electives:

|  |     |      |         |
|--|-----|------|---------|
| Current Issues in Hospitality, Travel, and Tourism | HTT | A199 | 0.5-1.5 |
|--|-----|------|---------|

### ASSOCIATE IN SCIENCE DEGREE

Complete the Travel Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. **Note: this AS degree requires a minimum of 70 units for completion.**



## INTEGRATIVE HEALTH

### INTEGRATIVE HEALTH COACH

#### CERTIFICATE OF ACHIEVEMENT

The Integrative Health Coach will have a holistic approach to patient services and will have knowledge of integrative modalities that support health and wellness. Integrative Health Coaches assist patients in understanding the recommendations of their clinicians for improved health outcomes. Tools used by Integrative Health Coach include goal setting for behavior change, motivational interviewing, and health education. Their understanding of the U.S. healthcare system and health insurance will allow them to help patients navigate the healthcare system, assuring that patients are connected to services including under coverage and/or connecting the patient to additional community resources.

The Integrative Health Coach program will prepare students to serve on health care teams, providing patient navigational support in understanding and accessing medical care. The Integrative Health Coach empowers patients to make lasting health behavior changes that are the cornerstones of lifelong well-being. It bridges the gap between medical recommendations and patients' ability to successfully implement their clinician's recommendations into their behavior choices.

Students who complete the Integrative Health Coach Certificate of Achievement may elect to complete additional graduation requirements and earn an Associate of Science, Integrative Health Coach. The program is structured to allow students who have completed the Medical Assisting program can complete the requirements in one semester. It will also benefit individuals who are currently working within health care or who have completed an undergraduate degree and desire addition skills.

#### Program Outcome

1. Students will have the knowledge, skills, and dispositions to be successful members of an integrated healthcare team.
2. Students will understand basic disease etiology and treatment and be able to assist patients in understanding diagnostic test in relationship to behaviors and treatment adherence.
3. Students will have the skills necessary to motivate patients in setting realistic goals for behavior change that promotes health and wellness.

| Course   |      |      | Units            |
|--|------|------|------------------|
| <b>CORE COURSES</b>  |      |      |                  |
| Medical Terminology  | ALH  | A111 | 3                |
| Clinical Skills for the Integrative Health Coach   | INHL | A115 | 2.5              |
| Or   |      |      |                  |
| Patient Care   | ALH  | A115 | 2.5              |
| Human Diseases   | ALH  | A120 | 2                |
| IHC Principles & Practice  | INHL | A100 | 3                |
| Introduction to Nutrition Concepts   | FN   | A140 | 2                |
| Or   |      |      |                  |
| Nutrition  | FN   | A170 | 3                |
| Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | INHL | A210 | 3                |
| Or   |      |      |                  |
| Administrative Medical Assisting 2   | MA   | A205 | 5                |
| Techniques and Topics in Health Education  | INHL | A220 | 3                |
| Introduction to Complementary and Alternative Medicine   | INHL | A225 | 3                |
| Integrative Health Coach Internship  | INHL | A250 | 2                |
| <b>Subtotal</b>  |      |      | <b>23.5-26.5</b> |

#### RESTRICTED ELECTIVES

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

|  |      |      |   |
|--|------|------|---|
| Enhancing Guest Service                    | HTT  | A180 | 3 |
| Assessing and Analyzing Health Information | INHL | A230 | 3 |
| Theory of Yoga                             | KIN  | A284 | 3 |
| Medical Assisting Core                     | MA   | A150 | 3 |
| Introduction to Medical Nutrition Therapy  | NC   | A180 | 3 |
| Introduction to Public Health              | PUBH | A200 | 3 |
| Health and Social Justice                  | PUBH | A203 | 3 |

**Subtotal** 3

**Total Units** 26.5-29.5

#### ASSOCIATE IN SCIENCE DEGREE

Complete the Integrative Health Coach Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## INTERIOR DESIGN

The Interior Design Program at Orange Coast College is dedicated to helping students develop their fullest potential in academic, professional and personal skills, preparing them for a rewarding career in design. This exceptional, multi-level program, developed by educators and industry professionals, promotes an interdisciplinary, equal opportunity education committed to building confident, responsible and socially aware individuals who will contribute to quality of life through interior design. The OCC Interior Design Program Mission is achieved through the following sequential tri-level curriculum.

### LEVEL 1 – INTERIOR MERCHANDISING

#### CERTIFICATE OF ACHIEVEMENT

The Interior Merchandising certificate prepares students for employment in retail furnishings and merchandising with a working knowledge of the design process, principles and elements of design, materials and products, and application of color theories.

#### Program Outcome

1. To prepare students for entry-level employment in retail furnishing and merchandising and to prepare students for the Level 2- Interior Design Associate in Science Degree.

| Course   |    |      | Units     |
|--|----|------|-----------|
| <b>FIRST SEMESTER</b>                              |    |      |           |
| Fundamentals of Interior Design                    | ID | A100 | 3         |
| Interior Design Studio 1                           | ID | A105 | 3         |
| Design Communication 1: Design Graphics            | ID | A110 | 2         |
| Interior Design Careers                            | ID | A120 | 1         |
| History of Interior Architecture and Furnishings 1 | ID | A180 | 3         |
| <b>Subtotal</b>                                    |    |      | <b>12</b> |

*Continued on next page*

**LEVEL 1 – INTERIOR MERCHANDISING CERTIFICATE  
(CONTINUED)**

**SECOND SEMESTER**

|  |      |      |           |
|--|------|------|-----------|
| Color & Design: Two-Dimensional<br>Or<br>Applied Color and Design Theory | ART  | A110 | 3         |
| Design Communication 2: CAD 2-D  | ID   | A130 | 3         |
| Interior Materials and Products  | ID   | A150 | 3         |
| History of Interior Architecture and Furnishings 2                       | ID   | A190 | 3         |
| Professional Selling   | MKTG | A110 | 3         |
| <b>Subtotal</b>  |      |      | <b>15</b> |
| <b>Total Units</b>   |      |      | <b>27</b> |

**LEVEL 2 – INTERIOR DESIGN ASSISTANT**

**ASSOCIATE IN SCIENCE DEGREE**

The Level 2 Interior Design Assistant degree furthers the process of education by offering additional knowledge in design history, space planning, drafting, illustration, computer applications, selection and specification of materials and products, lighting, construction documents, building codes, business/professional practices, plus internship and portfolio development. Course information is applied to both residential and commercial design.

**Program Outcomes**

- To prepare students for entry-level employment as an interior design assistant to a professional interior designer. In addition, the outcome of this level is for students to progress to Level 3 – Interior Design Professional Level and/or for transfer.

**Required Prerequisites:**

Level 1 Interior Merchandising Certificate of Achievement

| <b>Subtotal</b>                               |       |      | <b>27</b>     |
|---|-------|------|---------------|
| Course  | Units |      |               |
| <b>THIRD SEMESTER</b>                         |       |      |               |
| Space Planning                                | ID    | A170 | 3             |
| Design Communication 3: Illustration          | ID    | A200 | 3             |
| Fundamentals of Lighting                      | ID    | A210 | 3             |
| Design Communication 4: Digital Visualization | ID    | A260 | 3             |
| <b>Subtotal</b>                               |       |      | <b>12</b>     |
| <b>FOURTH SEMESTER</b>                        |       |      |               |
| Interior Design Studio 2                      | ID    | A215 | 3             |
| Interior Design Construction Documents        | ID    | A220 | 3             |
| Business Professional Practice                | ID    | A230 | 3             |
| Interior Design Internship                    | ID    | A240 | 2             |
| Portfolio Development                         | ID    | A245 | 2             |
| <b>Subtotal</b>                               |       |      | <b>13</b>     |
| <b>Program Major Units</b>                    |       |      | <b>52</b>     |
| <b>AS General Education Option 1, 2, or 3</b> |       |      | <b>Varies</b> |
| <b>Minimum Total Degree Units</b>             |       |      | <b>70</b>     |

**LEVEL 3 – INTERIOR DESIGN  
PROFESSIONAL**

**CERTIFICATE OF ACHIEVEMENT**

The Interior Design Professional certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects. Students in Level 3 are prepared to begin their interior design careers as entry level professional designers and to pursue industry certifications.

**Program Outcome**

- To prepare students for entry-level employment as a professional interior designer and for industry certifications.

**Required Prerequisites:**

Level 2 Interior Design Associate in Science Degree

| <b>Subtotal</b>   |            |              | <b>70</b>    |
|---|------------|--------------|--------------|
| Course  | Units      |              |              |
| <b>FIFTH SEMESTER</b>   |            |              |              |
| Codes and Building Systems  | ID         | A250         | 3            |
| Studio - Project Specialization   | ID         | A265         | 3            |
| BIM 1 for Architecture  | ARCH       | A155         | 2            |
| Restricted Elective   | (see list) |              | 2-4          |
| <b>Subtotal</b>   |            |              | <b>10-12</b> |
| <b>Level 3 Professional Design Restricted Electives - Select one (1) course from the following:</b> |            |              |              |
| BIM 2 for Architecture  | ARCH       | A156         | 2            |
| Color and Design: Three-Dimensional   | ART        | A111         | 3            |
| Furniture Making and Design   | ART/CNST   | A116         | 4            |
| Introduction to Entrepreneurship  | BUS        | A240         | 3            |
| Introduction to Display and Visual Presentation   | DVP        | A180         | 3            |
| Introduction to Photography / Honors  | PHOTO      | A120 / A120H | 3            |
| Introduction Digital Photography  | PHOTO      | A123         | 3            |
| <b>Subtotal</b>   |            |              | <b>10-12</b> |
| <b>Total Units</b>  |            |              | <b>80-82</b> |

**KITCHEN AND BATH ADVANCED  
CERTIFICATE**

**CERTIFICATE OF SPECIALIZATION**

The Kitchen and Bath Advanced Certificate builds upon the foundation of Level 2 by applying added knowledge and technology to more advanced projects and a focused specialization. Students earning this certificate are ready to begin their interior design careers as entry level Kitchen and Bath designers and to pursue industry certifications.

**Program Outcome**

- To prepare students for entry-level employment as a specialized Kitchen and Bath designer and for industry certifications.

| Course   | Units |      |           |
|--|-------|------|-----------|
| Codes and Building Systems                     | ID    | A250 | 3         |
| Digital Communication 4: Digital Visualization | ID    | A260 | 3         |
| Interior Design Studio - Bath Design           | ID    | A280 | 2         |
| Interior Design Studio - Kitchen Design        | ID    | A285 | 2         |
| <b>Total Units</b>                             |       |      | <b>10</b> |

**Kitchen and Bath Suggested Electives:**

|                                     |     |      |   |
|-------------------------------------|-----|------|---|
| Color and Design: Two-Dimensional   | ART | A110 | 3 |
| Color and Design: Three-Dimensional | ART | A111 | 3 |
| Beginning Drawing                   | ART | A120 | 3 |
| Perspective Drawing                 | ART | A125 | 3 |
| Exhibition Design 1                 | ART | A145 | 2 |

## JOURNALISM

### JOURNALISM

#### ASSOCIATE IN ARTS DEGREE

Students graduating with an Associate of Arts degree in Journalism will be prepared to enter the workforce in an entry level capacity without transfer to a four-year university. Students will gain skills in newswriting, feature writing, editing, design, photography, multimedia producing and editorial design making.

**Program Outcome**

1. The student will be able to write a balanced news article on deadline in traditional journalistic style incorporating interviewing skills, analyzing information and presenting a complete, balanced story.
2. Students will demonstrate an ability to write, edit and produce all aspects of the bi-weekly campus newspaper Coast Report, including an understanding of design, photography use and editing peer's articles.
3. Students will be able to evaluate online media and distinguish between mainstream, traditional media and news promoting a philosophy or one-sided agenda. They will also be able to evaluate blogs and social media.
4. Students will demonstrate the ability to use visual journalism to tell a story.

| Course  |      |              | Units         |
|---|------|--------------|---------------|
| <b>Core Courses:</b>  |      |              |               |
| Media Literacy  | CMST | A240         | 3             |
| News Writing and Reporting  | JOUR | A110         | 3             |
| Newspaper Production Level 1  | JOUR | A115         | 4             |
| <b>Subtotal</b>   |      |              | <b>10</b>     |
| <b>Restricted Electives - Complete at least eight (8) units from the following:</b> |      |              |               |
| Introduction to Mass Communications   | CMST | A180         | 3             |
| Television Production 1   | FILM | A155         | 3             |
| Multi-Media Reporting and Producing   | JOUR | A116         | 3             |
| Narrative Journalism  | JOUR | A117         | 3             |
| Newspaper Production Level 1  | JOUR | A125         | 4             |
| Photojournalism   | JOUR | A185         | 3             |
| Coast Report Editorial Board Level 1  | JOUR | A215         | 1             |
| American Government / Honors  | PSCI | A180 / A180H | 3             |
| <b>Minimum Program Major Units</b>  |      |              | <b>18</b>     |
| <b>AA General Education Option 1, 2, or 3</b>                                       |      |              | <b>Varies</b> |
| <b>Transferable electives as needed to satisfy unit requirement</b>                 |      |              | <b>Varies</b> |
| <b>Total Degree Units</b>   |      |              | <b>60</b>     |

## JOURNALISM

### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Journalism for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the CSU system with 60 units of upper-division coursework. Students who complete the Journalism AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Department of Journalism at Orange Coast College is a comprehensive program with offerings ranging from beginning journalism instruction to state-of-the-art multimedia production. Our mission is to use theory and practice to help how journalists report and write for a variety of publications and understand the value of a free press in America. We strive to help students achieve an AA or AS or transfer to other institutions of higher learning and be prepared for the opportunities that may exist. The department also operates a weekly student newspaper, the Coast Report, the website [www.coastreportonline.com](http://www.coastreportonline.com), and regularly posts a variety of multimedia productions. Classes are open to students of all majors.

The Journalism AA-T degree directly aligns with many of the department's goals and objectives: achieving an AA and transferring to an institution of higher education. It is also designed to give students a broad perspective on the options they might select at the 4-year level and help prepare them for their transfer goals. They will also be prepared to work on any campus publication or website with journalistic confidence and experience.

**Program Outcomes**

1. Analyze a complete newspaper and understand why stories were chosen for inclusion.
2. Find and pitch both news and feature stories.
3. Conduct numerous interviews to obtain factual information.
4. Write a complete story using proper structure, style and grammar, and have the story published in the newspaper or online.
5. Assess their own strengths, weaknesses, and omissions in writing news and feature stories or taking photographs for publication and be able to adjust future performance in light of their self-assessments.
6. Collaborate in developing, designing, and completing a multi-media project and post it to the web.
7. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools. **Course Units**

**Core Courses:**

|                                     |      |      |           |
|-------------------------------------|------|------|-----------|
| Introduction to Mass Communications | CMST | A180 | 3         |
| Newswriting and Reporting           | JOUR | A110 | 3         |
| Newspaper Production Level 1        | JOUR | A115 | 4         |
| <b>Subtotal</b>                     |      |      | <b>10</b> |

**List A - Complete one (1) of the following:**

|                                     |          |      |          |
|-------------------------------------|----------|------|----------|
| Public Relations                    | BUS/CMST | A185 | 3        |
| Multi-Media Reporting and Producing | JOUR     | A116 | 3        |
| Narrative Journalism                | JOUR     | A117 | 3        |
| Photojournalism                     | JOUR     | A185 | 3        |
| <b>Subtotal</b>                     |          |      | <b>3</b> |

*Continued on next page*

**JOURNALISM AA-T DEGREE (CONTINUED)**

**List B - Complete two (2) of the following not taken from List A:**

|   |      |              |   |
|---|------|--------------|---|
| Essentials of Argumentation                               | CMST | A220         | 3 |
| Microeconomics  | ECON | A170         | 3 |
| Or  |      |              |   |
| Macroeconomics  | ECON | A175         | 3 |
| Critical Thinking, Reading, Writing: Literature / Honors  | ENGL | A101 / A101H | 4 |
| Critical Reasoning, Reading, Writing: Nonfiction / Honors | ENGL | A102 / A102H | 4 |
| *Narrative Journalism                                     | JOUR | A117         | 3 |
| *Photojournalism  | JOUR | A185         | 3 |
| Introduction to Statistics / Honors                       | MATH | A160 / A160H | 4 |
| Introduction to Photography / Honors                      | PHOT | A120 / A120H | 3 |
| American Government Honors                                | PSCI | A180 / A180H | 3 |
| Comparative Politics                                      | PSCI | A185         | 3 |
| Critical Reasoning and Writing                            | PHIL | A150         | 3 |

**Subtotal** **6-8**

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

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

\*Course may not be used to fulfill List B requirement if already used to fulfill List A requirement.

**KINESIOLOGY**

**YOGA INSTRUCTOR TRAINING**

**CERTIFICATE OF SPECIALIZATION**

Orange Coast College's Yoga Instructor 200-hour certification training provides students with the fundamentals required to teach yoga to a variety of levels and abilities. This program meets the requirements for Yoga Alliance, a professional membership and trade association, to become a registered yoga teacher (RYT). The Yoga Instructor Training program features an inclusive curriculum that focuses on philosophy, anatomy, theory, practice, and teaching. Once completed, the student is prepared for employment in health clubs, spas, yoga/dance studios, hospitals, the health industry, and self-employment as a private yoga instructor.

**Program Outcome**

1. Properly instruct a yoga class for all levels and abilities including the use of prop, utilizing themes and yoga philosophy to enhance classes.
2. Understand the history and evolution of yoga.
3. Satisfy the 200 hour requirement to qualify for the Yoga Alliance 200-Hour certification.

| Course                |     |      | Units    |
|-----------------------|-----|------|----------|
| <b>FIRST SEMESTER</b> |     |      |          |
| Hatha Yoga Level II   | KIN | A228 | 1        |
| Theory of Yoga        | KIN | A284 | 3        |
| Yoga Methodology      | KIN | A285 | 3        |
| <b>Subtotal</b>       |     |      | <b>7</b> |

**SECOND SEMESTER**

|                        |     |      |           |
|------------------------|-----|------|-----------|
| Yoga Methodology 2     | KIN | A286 | 3         |
| Yoga Practicum Level 1 | KIN | A287 | 3         |
| <b>Subtotal</b>        |     |      | <b>6</b>  |
| <b>Total</b>           |     |      | <b>13</b> |

**ATHLETIC TRAINING LEVEL 1**

**CERTIFICATE OF ACHIEVEMENT**

The Athletic Training Certificate provides an educational and practical foundation for students interested in athletic training, physical therapy, physical therapy assistant and physical therapy aide. The Athletic Training Certificate objective is to enable students to develop a strong foundation in the Kinesiology and athletic training. The theoretical knowledge, laboratory, and clinical experience skills acquired by students in this program will also enhance their general understanding in the fitness and physical therapy industry. The required courses are a cross section of required courses in nearby athletic training curricula.

Since curriculum requirements may vary amongst institutions, it is imperative that students entering OCC's certificate in Athletic Training meet with a counselor at the start of their academic career.

**Program Outcome**

1. Students will have the knowledge, skills and experience necessary to be well qualified applicants undergraduate athletic training programs.

| Course                            |     |      | Units        |
|-----------------------------------|-----|------|--------------|
| <b>Required Courses:</b>          |     |      |              |
| First Aid and CPR                 | KIN | A203 | 2            |
| Sports Medicine                   | KIN | A273 | 3            |
| Athletic Taping/Modal             | KIN | A274 | 3            |
| Sports Medicine Practicum Level 1 | KIN | A275 | 2-4          |
| Sports Medicine Practicum Level 2 | KIN | A276 | 2-4          |
| <b>Subtotal</b>                   |     |      | <b>12-16</b> |

**Athletics Training Restricted Electives - Choose two (2) courses from the following:**

|   |           |      |              |
|---|-----------|------|--------------|
| Introduction to Biology                   | BIOL      | A100 | 4            |
| Human Anatomy                             | BIOL      | A220 | 5            |
| Anatomy-Physiology                        | BIOL      | A221 | 4            |
| Human Physiology                          | BIOL      | A225 | 5            |
| Principles of Chemistry                   | CHEM      | A100 | 3            |
| Introduction to Chemistry                 | CHEM      | A110 | 5            |
| Preparation for General Chemistry         | CHEM      | A130 | 4            |
| Nutrition                                 | FN        | A170 | 3            |
| Personal Health Education/Personal Health | HLED/PUBH | A100 | 3            |
| Introduction to Kinesiology               | KIN       | A202 | 3            |
| Movement Analysis                         | KIN       | A272 | 3            |
| Nutrition, Fitness and Performance        | KIN       | A283 | 3            |
| College Algebra                           | MATH      | A115 | 4            |
| Introduction to Statistics                | MATH      | A160 | 4            |
| Conceptual Physics                        | PHYS      | A110 | 3            |
| Introduction to Psychology                | PSYC      | A100 | 3            |
| Psychobiology                             | PSYC      | A250 | 3            |
| <b>Subtotal</b>                           |           |      | <b>6-10</b>  |
| <b>Total Units</b>                        |           |      | <b>18-26</b> |

## FITNESS SPECIALIST

### CERTIFICATE OF ACHIEVEMENT

This program provides students with theory necessary to be effective in the health fitness industry (health clubs, corporate fitness, etc.). Students in this program will learn scientific principles of exercise and physical conditioning, techniques for the measurement of human performance, and methods for establishing healthy nutritional patterns.

#### Program Outcomes:

1. Students will have the knowledge, skills & experience necessary to assess an individual's level of physical fitness and design appropriate exercise programming to improve physical fitness.
2. Students will be qualified for careers as fitness instructors, exercise testing technicians, strength coaches, or personal fitness trainers.
3. Develops a strong understanding of the business aspects of personal training, including effective practices, professional ethics, marketing, record keeping, and communication.

| Course                       |     |      | Units    |
|------------------------------|-----|------|----------|
| <b>FALL</b>                  |     |      |          |
| Fitness and Health           | KIN | A270 | 3        |
| Strength Conditioning/Theory | KIN | A280 | 3        |
| Fitness Specialist Practicum | KIN | A297 | 2        |
| <b>Subtotal</b>              |     |      | <b>8</b> |

|                                     |     |      |            |
|-------------------------------------|-----|------|------------|
| <b>SPRING</b>                       |     |      |            |
| Introduction to Exercise Physiology | KIN | A282 | 3          |
| Personal Trainer                    | KIN | A296 | 3          |
| Fitness Specialist Internship       | KIN | A298 | 2-3        |
| <b>Subtotal</b>                     |     |      | <b>8-9</b> |

#### Restricted Electives - Complete a minimum of three (3) units from the following in either semester:

|   |          |                     |            |
|---|----------|---------------------|------------|
| Human Anatomy                               | BIOL     | A220                | 5          |
| Anatomy-Physiology                          | BIOL     | A221                | 4          |
| Human Physiology                            | BIOL     | A225                | 5          |
| Nutrition, Fitness and Performance          | FN / KIN | A136 / A283         | 3          |
| Introduction to Kinesiology                 | KIN      | A202                | 3          |
| Drugs and Sports                            | KIN      | A271                | 3          |
| Movement Analysis                           | KIN      | A272                | 3          |
| Sports Medicine                             | KIN      | A273                | 3          |
| Sports Management                           | KIN      | A279                | 3          |
| Any Kinesiology active participation course | KIN      | A105-A156, A205-256 | 3          |
| <b>Subtotal</b>                             |          |                     | <b>3-5</b> |

|                    |              |
|--------------------|--------------|
| <b>Total Units</b> | <b>19-22</b> |
|--------------------|--------------|

### ASSOCIATE IN SCIENCE DEGREE

Complete the Fitness Specialist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## KINESIOLOGY

### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Kinesiology for Transfer Degree are well positioned to complete a Bachelor's Degree in Kinesiology within the CSU system with 60 units of upper-division coursework. Students who complete the Kinesiology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

#### Program Outcomes

1. Identify and describe major concepts, theoretical principles, empirical findings, and historical trends in Kinesiology.
2. Know, comprehend, and apply scientific principles to movement, exercise, and sport, including the demonstration of knowledge and skill in fitness activities, aquatics, combatives, individual sports, and/or team sports.
3. Analyze and evaluate how anatomical and physiological systems impact human movement.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                      |            |      | Units     |
|-----------------------------|------------|------|-----------|
| <b>Core Courses:</b>        |            |      |           |
| Human Anatomy               | BIOL       | A220 | 5         |
| Human Physiology            | BIOL       | A225 | 5         |
| Introduction to Kinesiology | KIN        | A202 | 3         |
| Movement-Based Courses      | (see list) |      | 3         |
| <b>Subtotal</b>             |            |      | <b>16</b> |

#### List A – Select two (2) courses from the following:

|                                     |      |              |   |
|-------------------------------------|------|--------------|---|
| Human Biology                       | BIOL | A125         | 3 |
| Introduction to Chemistry           | CHEM | A110         | 5 |
| Or                                  |      |              |   |
| General Chemistry A                 | CHEM | A180         | 5 |
| Introduction to Statistics / Honors | MATH | A160 / A160H | 4 |
| Or                                  |      |              |   |
| Statistics for Behavioral Sciences  | PSYC | A160         | 4 |
| Algebra-Based Physics: Mechanics    | PHYS | A120         |   |
| Or                                  |      |              |   |
| Calculus-Based Physics: Mechanics   | PHYS | A185         | 4 |

|                 |            |
|-----------------|------------|
| <b>Subtotal</b> | <b>7-9</b> |
|-----------------|------------|

|                          |              |
|--------------------------|--------------|
| <b>Total Major Units</b> | <b>23-25</b> |
|--------------------------|--------------|

|                             |              |
|-----------------------------|--------------|
| <b>CSU or IGETC for CSU</b> | <b>37-39</b> |
|-----------------------------|--------------|

|   |               |
|---|---------------|
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b> |
|---|---------------|

|                           |           |
|---------------------------|-----------|
| <b>Total Degree Units</b> | <b>60</b> |
|---------------------------|-----------|

*Continued on next page*

**KINESIOLOGY AA-T DEGREE (CONTINUED)**

**Kinesiology AA-T Movement-Based Course List - Select one (1) course from three (3) separate areas for a total of three (3) units:**

**Area 1 - Aquatics**

|                           |     |      |       |
|---------------------------|-----|------|-------|
| Aqua Fitness              | KIN | A130 | 5-1.5 |
| Swimming for Fitness 1    | KIN | A131 | 1-2   |
| Swimming 1                | KIN | A132 | 1-2   |
| Outrigger Canoeing        | KIN | A140 | 5-1.5 |
| *Surfing & Ocean Safety 1 | KIN | A141 | 2     |

**Area 2 - Combatives**

|               |     |      |       |
|---------------|-----|------|-------|
| Aikido        | KIN | A126 | 5-1.5 |
| Karate        | KIN | A127 | 5-1.5 |
| *Tai Chi Chih | KIN | A129 | 5-2   |

**Area 3 - Fitness**

|                             |     |      |       |
|-----------------------------|-----|------|-------|
| Cardiovascular Fitness      | KIN | A105 | 5-2.5 |
| Weight Training             | KIN | A106 | 5-1.5 |
| Fitness Programs 1          | KIN | A107 | 5-3   |
| Strength and Conditioning 1 | KIN | A108 | 5-3   |
| Walking for Fitness 1       | KIN | A110 | 5-1.5 |
| Step Cardio and Core 1      | KIN | A111 | 1-2   |
| Triathlon Techniques        | KIN | A116 | 2.5   |

**Area 4 - Individual Sports**

|                           |     |      |       |
|---------------------------|-----|------|-------|
| Hatha Yoga 1              | KIN | A128 | 5-1.5 |
| *Tai Chi Chih             | KIN | A129 | 5-1   |
| *Surfing & Ocean Safety 1 | KIN | A141 | 5-2   |
| Tennis 1                  | KIN | A146 | 1-1.5 |
| Bowling Level 1           | KIN | A155 | 5-1.5 |
| Golf 1                    | KIN | A153 | 1-2   |
| Rock Climbing             | KIN | A156 | 5-2   |
| Hatha Yoga 2              | KIN | A228 | 5-1.5 |

**Area 5 - Team Sports:**

|              |     |      |       |
|--------------|-----|------|-------|
| Badminton 1  | KIN | A145 | 5-1   |
| Basketball   | KIN | A150 | 5-1.5 |
| Soccer 1     | KIN | A152 | 1-2   |
| Volleyball 1 | KIN | A154 | 5-1.5 |

\*Course may not be used to fulfill more than one (1) area requirement.

**LEADERSHIP STUDIES**

**LEADERSHIP STUDIES**

**CERTIFICATE OF SPECIALIZATION**

The goal of this program is to enhance individual and organizational effectiveness. Students will develop personal leadership skills, study ethical dimensions of leadership, understand how leadership affects people, organizations, and society, and articulate and apply their own philosophy of leadership in their careers and lives.

**Program Outcomes**

1. Function effectively in a leadership role using the skills, principles, and tools they have acquired.
2. Apply the leadership principles they have learned in their personal and/or organizational lives.
3. Distinguish between the qualities of effective and ineffective leaders.

| Course                      |      |      | Units    |
|-----------------------------|------|------|----------|
| Interpersonal Communication | CMST | A100 | 3        |
| Personal Leadership         | LEAD | A180 | 3        |
| Organizational Leadership   | LEAD | A200 | 3        |
| <b>Total Units</b>          |      |      | <b>9</b> |

**LIBERAL ARTS**

**LIBERAL ARTS**

**ASSOCIATE IN ARTS DEGREE**

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

| Course  |  | Course Number                          |
|---|--|--|
| <b>All coursework must be 100 level or above.</b> |  |  |
| Anthropology                                      | ANTH   | A100 or above                          |
| Art   | ART  | A100 / A100H, A101 / A101H, A102, A108 |
| Astronomy   | ASTR   | A100 or above                          |
| Biology   | BIOL   | A100 or above                          |
| Chemistry   | CHEM   | A100 or above                          |
| Communications Studies                            | CMST   | A100 or above                          |
| Dance   | DANC   | A200                                   |
| Ecology/Environmental Science and Ecology         | ECOL/ESEC                                      | A100 or above                          |
| Economics   | ECON   | A100 or above                          |
| Ethnic Studies                                    | ETHS   | A100 or above                          |
| English   | ENGL   | A100 or above                          |
| Film  | FILM   | A100, A104                             |
| Foreign Language                                  | CHIN, FREN, GERM, ITAL, JAPN, PORT, SPAN, VIET | A180 or above                          |
| Gender Studies                                    | GNDR   | A100 or above                          |
| Geography   | GEOG   | A100 or above                          |
| Geology   | GEOL   | A100 or above                          |
| History   | HIST   | A100 or above                          |
| Humanities  | HUM  | A100 or above                          |
| Marine Science                                    | MRSC   | A100 or above                          |
| Music   | MUS  | A100, A105, A109, A173, A180           |
| Natural Science                                   | NS   | A100 or above                          |
| Philosophy  | PHIL   | A100 or above                          |
| Photography                                       | PHOT   | A101, A130                             |
| Physics   | PHYS   | A100 or above                          |
| Political Science                                 | PSCI   | A100 or above                          |
| Psychology  | PSYC   | A100 or above                          |
| Religious Studies                                 | RLST   | A100 or above                          |
| Sociology   | SOC  | A100 or above                          |
| Theatre Arts                                      | THEA   | A100, A101, A105                       |

**Minimum Program Major Units** **18**

**AA General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## MANAGEMENT

### MANAGEMENT INSTITUTE

#### CERTIFICATE OF SPECIALIZATION

These selected courses are designed for students who desire to sharpen their managerial skills. Completion of all three courses will provide the basic skills necessary to succeed in any managerial position.

##### Program Outcomes

- Function effectively in a management position using the skills, principles, and tools they have acquired.
- Apply the management principles they have learned to effectively manage in a variety of settings. Distinguish between the qualities of effective and ineffective managers.

| Course                              |          |      | Units    |
|-------------------------------------|----------|------|----------|
| Applied Management                  | MGMT     | A100 | 3        |
| Human Relations & Supervision<br>Or | MGMT     | A115 | 3        |
| Organizational Leadership           | LEAD     | A200 | 3        |
| Professional Communication          | BUS/MGMT | A239 | 3        |
| <b>Total Units</b>                  |          |      | <b>9</b> |

### MANAGEMENT AND LEADERSHIP STUDIES

#### CERTIFICATE OF ACHIEVEMENT

The Management and Leadership Studies certificate program is designed to build and/or upgrade skills in leading and managing people while enhancing individual and organizational effectiveness within the workplace. Courses emphasize leading, organizing, planning, communicating, training, and controlling.

##### Program Outcomes

- Function effectively in a leadership or management role using the skills, principles, and tools they have acquired.
- Apply the leadership and management principles they have learned in their personal and/or organizational lives.
- Distinguish between the qualities of effective and ineffective leaders and managers.
- Analyze the ethical dimensions of effective leaders and managers in everyday conduct and decision making.
- Demonstrate effective written and/or oral skills.

| Course                                |      |              | Units     |
|---------------------------------------|------|--------------|-----------|
| <b>FALL</b>                           |      |              |           |
| Introduction to Business/Honors       | BUS  | A100 / A100H | 3         |
| Introduction to Computer Applications | CIS  | A100         | 3         |
| Interpersonal Communication           | CMST | A100         | 3         |
| Applied Management                    | MGMT | A100         | 3         |
| <b>Subtotal</b>                       |      |              | <b>12</b> |

#### SPRING

|                                 |      |      |   |
|---------------------------------|------|------|---|
| Business Communication          | BUS  | A139 | 3 |
| Personal Leadership             | LEAD | A180 | 3 |
| Human Relations and Supervision | MGMT | A115 | 3 |

**Subtotal 9**

#### FALL

|                            |          |      |   |
|----------------------------|----------|------|---|
| Professional Communication | BUS/MGMT | A239 | 3 |
| Organizational Leadership  | LEAD     | A200 | 3 |
| Professional Selling       | MKTG     | A110 | 3 |
| Or                         |          |      |   |
| Public Speaking            | CMST     | A110 | 3 |

**Subtotal 9**

#### SPRING

|                     |            |      |     |
|---------------------|------------|------|-----|
| Business Law        | BUS        | A110 | 3   |
| Restricted Elective | (see list) |      | 3-4 |

**Subtotal 6-7**

**Total Units 36-37**

#### Management and Leadership Studies Restricted Electives - Select one (1) course from the following:

|                            |           |      |   |
|----------------------------|-----------|------|---|
| Financial Accounting       | ACCT      | A101 | 4 |
| Managerial Accounting      | ACCT      | A102 | 4 |
| Personal Financial Success | BUS       | A120 | 3 |
| Entrepreneurship           | BUS       | A240 | 3 |
| Public Speaking            | CMST      | A110 | 3 |
| Introduction to Marketing  | MKTG      | A100 | 3 |
| Professional Selling       | MKTG      | A110 | 3 |
| Ethics                     | PHIL/RLST | A120 | 3 |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Management and Leadership Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## RETAIL

#### CERTIFICATE OF ACHIEVEMENT

This program is approved by the Western Association of Food Chains and persons completing the prescribed courses are eligible to receive both the OCC Certificate of Achievement and the WAFC Retail Management Certificate.

##### Program Outcomes

- Function effectively as a manager in a retail environment using the skills, principles, and tools they have acquired.
- Apply the retail principles they have learned in their professional lives.
- Analyze the ethical dimensions of effective retail managers in everyday conduct and decision making.
- Demonstrate effective written and/or oral skills.

| Course                                |      |      | Units |
|---------------------------------------|------|------|-------|
| Accounting-Small Business             | ACCT | A100 | 3     |
| Or                                    |      |      |       |
| Financial Accounting                  | ACCT | A101 | 4     |
| Business Communication                | BUS  | A139 | 3     |
| Introduction to Computer Applications | CIS  | A100 | 3     |
| Organizational Leadership             | LEAD | A200 | 3     |

*Continued on next page*

**RETAIL CERTIFICATE (CONTINUED)**

|   |      |      |   |
|---|------|------|---|
| Applied Management for Public & Private Organizations | MGMT | A100 | 3 |
| Human Relations and Supervision                       | MGMT | A115 | 3 |
| Introduction to Marketing                             | MKTG | A100 | 3 |
| Retail E-Commerce Management                          | MKTG | A200 | 3 |

**Total Units** **24-25**

**Retail Suggested electives:**

|                                  |      |      |   |
|----------------------------------|------|------|---|
| Managerial Accounting            | ACCT | A102 | 4 |
| Business Law                     | BUS  | A110 | 3 |
| Business English                 | BUS  | A138 | 3 |
| Introduction to Entrepreneurship | BUS  | A240 | 3 |
| Professional Selling             | MKTG | A110 | 3 |
| Retail Buying                    | MKTG | A220 | 3 |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Retail Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**MANUFACTURING TECHNOLOGY**

OCC's Manufacturing Technology program is designed to train students for entry-level positions as machine operators. Additionally, both beginning students and working machinists can build on their skill and knowledge by completing the requirements for one of the advanced certificates.

The Manufacturing Technology program is divided into four areas: Machinist, Computer Numerical Control (CNC) Operator, CNC Programmer, and Tool Maker. All four programs follow sequential plans which spin off from the core machinist program. After completing the machinist program in two semesters, the student can take the classes required for one of the more advanced certificates.

The student who completes the machinist program also satisfies the major requirements for the Associate in Science degree.

**CNC OPERATOR**

**CERTIFICATE OF SPECIALIZATION**

This Professional Upgrade Certificate is designed for students who are already machinists. Before starting on this plan you should be able to set up and operate both conventional lathes and mills. You should be able to read blueprints and use all common machine shop measuring tools. If you have a deficiency in these areas, please refer back to the basic machining courses found in the Machinist certificate.

**Program Outcome**

1. Set-up and operate CNC Lathes and Milling Machines.

| Course                                     |      |      | Units    |
|--|------|------|----------|
| <b>FALL</b>                                |      |      |          |
| CNC Machine Operation 1                    | MACH | A125 | 3        |
| Introduction to CNC and Manual Programming | MACH | A130 | 3        |
| <b>Subtotal</b>                            |      |      | <b>6</b> |
| <b>SPRING</b>                              |      |      |          |
| CNC Machine Operation 2                    | MACH | A126 | 2        |
| <b>Subtotal</b>                            |      |      | <b>2</b> |
| <b>Total Units</b>                         |      |      | <b>8</b> |

**CNC PROGRAMMER**

**CERTIFICATE OF SPECIALIZATION**

This Professional Upgrade Certificate is designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC operator upgrade certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provide excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use course first (Computer & High Technology A100 or Computer Information Systems A100).

**Program Outcome**

1. Write part machine programs for controlling CNC lathes and milling machines.

| Course                      |      |      | Units       |
|-----------------------------|------|------|-------------|
| CNC Programming-Mastercam 1 | MACH | A133 | 3           |
| CNC Programming-Mastercam 2 | MACH | A134 | 3           |
| CNC Machine Operation 2     | MACH | A126 | 2           |
| Mastercam Lathe             | MACH | A141 | 1.5         |
| Mastercam Solids            | MACH | A142 | 2           |
| <b>Total Units</b>          |      |      | <b>11.5</b> |

**MACHINIST**

**CERTIFICATE OF ACHIEVEMENT**

The Machinist certificate program trains students for positions as entry-level operators, which often are the first manufacturing jobs for industrial employees. This certificate program provides the skill and knowledge necessary for job candidates to become successful wage earners. This program also comprises the core courses for the more advanced certificates.

**Program Outcomes**

1. Machine precision manufactured parts using conventional lathes and milling machines and perform necessary measurements.

| Course                                     |      |      | Units     |
|--|------|------|-----------|
| <b>FALL</b>                                |      |      |           |
| Introduction to Machine Shop               | MACH | A100 | 3         |
| Lathe                                      | MACH | A105 | 5         |
| Measurement and Blueprint Reading          | MACH | A120 | 3         |
| Computations for Machinists                | MACH | A121 | 3         |
| <b>Subtotal</b>                            |      |      | <b>14</b> |
| <b>SPRING</b>                              |      |      |           |
| Milling Machine                            | MACH | A110 | 5         |
| Production Machining Techniques            | MACH | A115 | 2         |
| Introduction to CNC and Manual Programming | MACH | A130 | 3         |
| <b>Subtotal</b>                            |      |      | <b>10</b> |
| <b>Total Units</b>                         |      |      | <b>24</b> |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Machinist Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.



## CNC MACHINE OPERATOR

### CERTIFICATE OF ACHIEVEMENT

The CNC Machine Operator certificate enhances the skills of students who have earned the Machinist certificate by providing that student with CNC machine operating skills and manual programming skills. The courses required for earning this certificate are designed to make the machine operator capable of setting up and manually programming a CNC machine tool. The CNC Machine Operator Professional Upgrade Certificate is specifically for the returning student with on-the-job machining experience.

#### Program Outcome

1. Set-up and operate CNC Lathes and Milling Machines.

#### Required Prerequisites:

Machinist Certificate of Achievement

**Subtotal** 24

| Course                        |      |      | Units     |
|-------------------------------|------|------|-----------|
| <b>FALL</b>                   |      |      |           |
| CNC Machine Operation 1       | MACH | A125 | 3         |
| <b>Subtotal</b>               |      |      | <b>3</b>  |
| <b>SPRING</b>                 |      |      |           |
| CNC Machine Operation 2       | MACH | A126 | 2         |
| CNC Programming - Mastercam 1 | MACH | A133 | 3         |
| <b>Subtotal</b>               |      |      | <b>5</b>  |
| <b>Total Units</b>            |      |      | <b>32</b> |

### ASSOCIATE IN SCIENCE DEGREE

Complete the CNC Machine Operator Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## CNC MACHINE PROGRAMMER

### CERTIFICATE OF ACHIEVEMENT

The CNC Machine Programmer certificate includes courses designed to upgrade the skills and knowledge of the machinist or the CNC machine operator to the level of the CNC machine programmer. If you are a machinist and have minimal experience with CNC machines or machine language programming, you will first want to complete the CNC Machine Operator Professional Upgrade Certificate. If you have both machining experience and CNC experience, the software used for the Machine Technology A133 and A134 courses provides excellent experiences in computer-assisted CNC programming. All of our programming courses require the use of a personal-type computer. If you have no computer experience, we strongly suggest you enroll in a basic computer use type course first (Computer & High Technology A100 or Computer Information Systems A100).

#### Program Outcome

1. Write part machine programs for controlling CNC lathes and milling machines.

#### Required Prerequisites:

Machinist Certificate of Achievement

**Subtotal** 24

| Course                        |      |      | Units       |
|-------------------------------|------|------|-------------|
| <b>FALL</b>                   |      |      |             |
| CNC Machine Operation 1       | MACH | A125 | 3           |
| <b>Subtotal</b>               |      |      | <b>3</b>    |
| <b>SPRING</b>                 |      |      |             |
| CNC Machine Operation 2       | MACH | A126 | 2           |
| Mastercam Solids              | MACH | A142 | 2           |
| <b>Subtotal</b>               |      |      | <b>4</b>    |
| <b>FALL</b>                   |      |      |             |
| CNC Programming - Mastercam 2 | MACH | A134 | 3           |
| Mastercam Lathe               | MACH | A141 | 1.5         |
| <b>Subtotal</b>               |      |      | <b>4.5</b>  |
| <b>Total Units</b>            |      |      | <b>35.5</b> |

### ASSOCIATE IN SCIENCE DEGREE

Complete the CNC Machine Programmer Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## TOOLING

### CERTIFICATE OF ACHIEVEMENT

Earning the Tooling certificate upgrades the skills of the machinist to the point required for profitable employment as an entry-level tool maker, a die maker, or a mold maker. As well as other subjects that must be learned by the beginning tool maker, the Tooling certificate program includes courses in metallurgy, tool and cutter grinding, and welding tooling.

#### Program Outcome

1. Manufacture precision tooling for Dies, Molds, and Prototype tooling.

| Course                                     |      |      | Units     |
|--|------|------|-----------|
| Introduction to Machine Shop               | MACH | A100 | 3         |
| Lathe                                      | MACH | A105 | 5         |
| Milling Machine                            | MACH | A110 | 5         |
| Production Machining Techniques            | MACH | A115 | 2         |
| Measurement Blueprint Reading              | MACH | A120 | 3         |
| Computations for Machinists                | MACH | A121 | 3         |
| CNC Machine Operation 1                    | MACH | A125 | 3         |
| Introduction to CNC and Manual Programming | MACH | A130 | 3         |
| Tool and Cutter Grinding                   | MACH | A150 | 2.5       |
| Dimensioning and Tolerancing               | MACH | A175 | 3         |
| Elementary Metallurgy                      | MACH | A190 | 2         |
| Tooling                                    | MACH | A200 | 2.5       |
| Arc & Oxy-acetylene Welding                | WELD | A100 | 3         |
| <b>Total Units</b>                         |      |      | <b>40</b> |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Tooling Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## MARINE SCIENCE

### MARINE SCIENCE

#### ASSOCIATE IN SCIENCE DEGREE

Upon completion of the requirements for the Associate in Science Degree in Marine Science, students will have a broad introduction to the academic study of marine science and will have a strong background for upper division work in marine science or related fields, such as earth and environmental sciences.

The Marine Science major requires completion of a minimum of 18 program major units, 11 of which are required core units. The additional 7 units must be taken from additional marine science courses and a list of restricted related electives. The department strongly recommends that all declared Marine Science majors work with counseling to select electives that will best prepare them for their intended transfer institution.

#### Program Outcomes

1. Describe how the ocean influences and is influenced by terrestrial, atmospheric, geological and biological processes.
2. Describe how the physical and chemical properties of water molecules affect the way that the ocean is structured and how the large scale movement of this water in waves, currents and tides influences oceanographic processes.
3. Describe the diversity of life in the ocean.
4. Identify how humans have influenced the ocean (chemically, physically and biologically) and explain the potential challenges associated with those changes.

| Course                    | Units     |
|---------------------------|-----------|
| <b>Core Courses:</b>      |           |
| Oceanography / Honors     | 3         |
| Oceanography Lab / Honors | 1         |
| Marine Biology            | 3         |
| Marine Biology Lab        | 1         |
| Coastal Oceanography      | 3         |
| <b>Subtotal</b>           | <b>11</b> |

#### Marine Science Restricted Electives - Complete at least three (3) units from the following:

|  |           |       |   |
|--|-----------|-------|---|
| Marine Intertidal Ecology                          | ESEC/MRSC | A121  | 1 |
| Ecology of the Gray Whale                          | ESEC/MRSC | A124  | 1 |
| Marine Aquarium Science                            | MRSC      | A120  | 1 |
| Husbandry of Aquatic Organisms                     | MRSC      | A130  | 1 |
| Aquarium Life Support Operation and Maintenance    | MRSC      | A140  | 1 |
| Coastal Oceanography Lab                           | MRSC      | A185L | 1 |
| Marine Mammals                                     | MRSC      | A187  | 3 |
| Marine Mammal Field Studies                        | MRSC      | A188  | 1 |
| Practical Experience Aquarium Science/Management 1 | MRSC      | A220  | 1 |
| Practical Experience Aquarium Science/Management 2 | MRSC      | A221  | 1 |
| Practical Experience Aquarium Science/Management 3 | MRSC      | A222  | 1 |
| Practical Experience Aquarium Science/Management 4 | MRSC      | A223  | 1 |

|                           |      |              |          |
|---------------------------|------|--------------|----------|
| Directed Study 1 / Honors | MRSC | A291 / A291H | 1        |
| Directed Study 2 / Honors | MRSC | A292 / A292H | 2        |
| <b>Subtotal</b>           |      |              | <b>3</b> |

#### Related Fields Restricted Electives - Complete at least four (4) units from the following:

|  |             |               |          |
|--|-------------|---------------|----------|
| Planetary Astronomy                            | ASTR        | A101          | 3        |
| Cell and Molecular Biology                     | BIOL        | A180          | 4        |
| Zoology & Zoology Lab                          | BIOL        | A182 & A182L  | 4        |
| Diversity of Organisms                         | BIOL        | A185          | 5        |
| General Microbiology                           | BIOL        | A210          | 5        |
| Evolutionary Ecology                           | BIOL        | A280          | 4        |
| Biochemistry                                   | BIOL        | A281          | 2        |
| Molecular Biology                              | BIOL        | A282          | 2        |
| Genetics                                       | BIOL        | A283          | 4        |
| Human Ecology                                  | ECOL / ESEC | A100          | 3        |
| Island Ecology                                 | ECOL / ESEC | A110          | 3        |
| Wetlands Ecology and Management                | ECOL / ESEC | A210          | 3        |
| Introduction to Geographic Information Systems | GEOG        | A190          | 2        |
| General Geology / Honors                       | GEOL        | A105 / A105H  | 3        |
| General Geology Lab / Honors                   | GEOL        | A105L / A105M | 1        |
| Physical Geology                               | GEOL        | A110          | 4        |
| Weather and Climate                            | GEOL        | A131          | 3        |
| Introductory Field Geology                     | GEOL        | A137          | 4        |
| Environmental Geology                          | GEOL        | A160          | 4        |
| Evolution of the Earth / Honors                | GEOL        | A185 / A185H  | 3        |
| Evolution of the Earth Lab / Honors            | GEOL        | A185L A185M   | 1        |
| Introduction to Ocean Sailing                  | MARA        | A138          | 1        |
| Coastal Navigation                             | MARA        | A150          | 3        |
| Boat Handling and Seamanship                   | MARA        | A152          | 3        |
| Maritime Environment                           | MARA        | A156          | 2        |
| <b>Subtotal</b>                                |             |               | <b>4</b> |

**Program Major Units 18**

**AS General Education Option 1, 2, or 3 Varies**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

## AQUARIUM SCIENCE

#### CERTIFICATE OF ACHIEVEMENT

##### Program Outcomes

1. Describe how a properly designed aquarium environment (habitat, water parameters, filtration components, and microbial populations) influences the health of aquatic organisms.
2. Identify commonly kept aquatic organisms and explain what critical aspects of their anatomy, physiology and life history a well-trained aquarist must know to be successful with their growth and potential reproduction.
3. Demonstrate the ability to design, set-up, operate, maintain and trouble-shoot aquarium life support equipment including biological filtration, mechanical filtration, chemical filtration, centrifugal pumps, and quarantine life support systems.
4. Demonstrate the ability to manage aquarium facilities including preparation of equipment and supply ordering lists, proper documentation, and restocking of facility.

| Course  |      |       | Units    |
|---|------|-------|----------|
| Marine Aquarium Science                                   | MRSC | A120  | 1        |
| Husbandry of Aquatic Organisms                            | MRSC | A130  | 1        |
| Aquarium Life Support Operation and Maintenance           | MRSC | A140  | 1        |
| Marine Biology  | MRSC | A180  | 3        |
| Marine Biology Lab  | MRSC | A180L | 1        |
| Practical Experience in Aquarium Science and Management 1 | MRSC | A220  | 1        |
| Practical Experience in Aquarium Science and Management 2 | MRSC | A221  | 1        |
| <b>Total Units</b>  |      |       | <b>9</b> |

## MARKETING

The Marketing certificate programs are designed to train those individuals whose career paths involve the creative techniques of both oral and written sales presentations, advertising, and marketing. Courses emphasize the tools used by marketers, the environmental forces affecting the marketing process, sales communication skills, the major components of modern advertising and promotion, marketing research, and advertising planning and strategy.

## ADVERTISING

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Function effectively in entry-level advertising business positions using the skills, principles, and tools they have acquired.

| Course                          |      |              | Units    |
|---------------------------------|------|--------------|----------|
| Beginning Drawing/Honors<br>Or  | ART  | A120 / A120H | 3        |
| Graphic Design                  | DMAD | A182         | 3        |
| Mass Communications<br>Or       | CMST | A180         | 3        |
| History of Radio and Television | FILM | A150         | 3        |
| Principles of Advertising       | MKTG | A130         | 3        |
| <b>Total Units</b>              |      |              | <b>9</b> |

## ENTRY-LEVEL MARKETING

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Function effectively in entry-level marketing positions using the skills, principles, and tools they have acquired.
- Effectively apply and utilize the marketing principles and techniques they have learned to market a business, product, or service.

| Course                    |      |      | Units    |
|---------------------------|------|------|----------|
| Introduction to Marketing | MKTG | A100 | 3        |
| Professional Selling      | MKTG | A110 | 3        |
| Principles of Advertising | MKTG | A130 | 3        |
| <b>Total Units</b>        |      |      | <b>9</b> |

## GENERAL MARKETING

### CERTIFICATE OF ACHIEVEMENT

#### Program Outcomes

- Function effectively in a multitude of first-entry marketing positions using the skills, tools and principles they have acquired.
- Communicate effectively and persuasively in personal, organizational, and selling environments.
- Effectively apply and utilize their acquired knowledge of the principles of marketing to market and/or promote a business, product, or service.

| Course                            |          |              | Units     |
|-----------------------------------|----------|--------------|-----------|
| Introduction to Business / Honors | BUS      | A100 / A100H | 3         |
| Professional Communication        | BUS/MGMT | A239         | 3         |
| Introduction to Marketing         | MKTG     | A100         | 3         |
| Professional Selling              | MKTG     | A110         | 3         |
| Principles of Advertising         | MKTG     | A130         | 3         |
| International Marketing / Honors  | MKTG     | A150 / A150H | 3         |
| <b>Subtotal</b>                   |          |              | <b>18</b> |

#### Select nine (9) units from the following:

|                                     |          |      |           |
|-------------------------------------|----------|------|-----------|
| Business English                    | BUS      | A125 | 3         |
| Business English                    | BUS      | A138 | 3         |
| Public Relations                    | BUS/CMST | A185 | 3         |
| Introduction to Mass Communications | CMST     | A180 | 3         |
| Direct Marketing                    | MKTG     | A142 | 1.5       |
| <b>Subtotal</b>                     |          |      | <b>9</b>  |
| <b>Total Units</b>                  |          |      | <b>27</b> |

### ASSOCIATE IN SCIENCE DEGREE

Complete the General Marketing Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## INTERNATIONAL BUSINESS

### CERTIFICATE OF SPECIALIZATION

#### Program Outcomes

- Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.
- Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

*Continued on next page*

**INTERNATIONAL BUSINESS CERTIFICATE (CONTINUED)**

| Course  |      |              | Units     |
|---|------|--------------|-----------|
| Introduction to International Business / Honors | BUS  | A118 / A118H | 3         |
| Introduction to Marketing                       | MKTG | A100         | 3         |
| Professional Selling                            | MKTG | A110         | 3         |
| International Marketing / Honors                | MKTG | A150 / A150H | 3         |
| <b>Total Units</b>                              |      |              | <b>12</b> |

**INTERNATIONAL BUSINESS**

**CERTIFICATE OF ACHIEVEMENT**

**Program Outcomes**

- Function effectively in an entrepreneurial, managerial, or entry-level international business position using the skills, tools and principles they have acquired.
- Effectively apply the international business principles they have learned to effectively facilitate international business transactions in a variety of settings.

| Course  |          |              | Units     |
|---|----------|--------------|-----------|
| Introduction to Business / Honors               | BUS      | A100 / A100H | 3         |
| Introduction to International Business / Honors | BUS      | A118 / A118H | 3         |
| Professional Communication                      | BUS/MGMT | A239         | 3         |
| Introduction to Marketing                       | MKTG     | A100         | 3         |
| Professional Selling                            | MKTG     | A110         | 3         |
| Principles of Advertising                       | MKTG     | A130         | 3         |
| International Marketing / Honors                | MKTG     | A150 / A150H | 3         |
| <b>Total Units</b>                              |          |              | <b>21</b> |

**ASSOCIATE IN SCIENCE DEGREE**

Complete the International Business Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

**SALES**

**CERTIFICATE OF SPECIALIZATION**

**Program Outcome**

- Function effectively in entry-level sales positions using the skills, principles, and tools they have acquired.

| Course                      |      |      | Units    |
|-----------------------------|------|------|----------|
| Professional Communication  | BUS  | A239 | 3        |
| Interpersonal Communication | CMST | A100 | 3        |
| Or                          |      |      |          |
| Public Speaking             | CMST | A110 | 3        |
| Professional Selling        | MKTG | A110 | 3        |
| <b>Total Units</b>          |      |      | <b>9</b> |

**MATHEMATICS**

**MATHEMATICS**

**ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

Students graduating with an Associate in Science in Mathematics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Mathematics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

- Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course               |      |              | Units        |
|----------------------|------|--------------|--------------|
| <b>Core Courses:</b> |      |              |              |
| Calculus 1 / Honors  | MATH | A180 / A180H | 4            |
| Calculus 2 / Honors  | MATH | A185 / A185H | 4            |
| Calculus 3 / Honors  | MATH | A280 / A280H | 4-5          |
| <b>Subtotal</b>      |      |              | <b>12-13</b> |

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

|   |      |              |            |
|---|------|--------------|------------|
| Applied Linear Algebra                                    | MATH | A235         | 3          |
| Intro to Linear Algebra & Differential Equations / Honors | MATH | A285 / A285H | 4-5        |
| <b>Subtotal</b>   |      |              | <b>3-5</b> |

**List B - Complete one (1) course, selecting from any course not used in List A or the following:**

|  |      |              |            |
|--|------|--------------|------------|
| C++ Programming Language 1               | CS   | A150         | 4          |
| Java Programming 1                       | CS   | A170         | 4          |
| Introduction to Statistics / Honors      | MATH | A160 / A160H | 4          |
| Introduction to Discrete Mathematics     | MATH | A230         | 5          |
| Calculus-Based Physics: Mechanics/Honors | PHYS | A185 / A185H | 4          |
| <b>Subtotal</b>                          |      |              | <b>3-5</b> |

**Program Major Units** **19-23**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## MEDICAL ASSISTING

### CCMA ELIGIBLE PROGRAM

#### CERTIFICATE OF ACHIEVEMENT

The Medical Assisting program includes specific business and clinical courses that prepare students for employment as clinical and/or administrative assistants in medical offices, clinics, or in related medical and business fields. The coursework can be completed in two semesters, and includes on-the-job experience in a medical office or ambulatory care center.

Orange Coast College is accredited by the Accreditation Commission of Community and Junior Colleges (ACCJC) of the Western Association of Schools and Colleges (WASC). Such accreditation permits graduates of this program to take the California Certified Medical Assistant examination (CCMA) immediately upon graduation. The California Certifying Board for Medical Assistants has been administering the CCMA exam since 1990. CCMA is one of three Boards that is recognized by the Medical Board of California. The medical assisting profession is highly diversified, and the work is challenging and personally rewarding. Employment opportunities are excellent in the expanding health care field.

#### Program Admission

Allied Health 010 course – application and orientation

#### Program Outcome

- The graduates of the program will be prepared for entry-level employment as a professional and competent Medical Assistant to meet the needs of the local health care community.

#### Required Prerequisites:

All prerequisite courses must be completed prior to admission into the program.

|                                      |      |      |   |
|--------------------------------------|------|------|---|
| Allied Health                        | ALH  | A010 | 5 |
| Medical Terminology                  | ALH  | A111 | 3 |
| Introduction to Anatomy & Physiology | BIOL | A221 | 4 |

**Subtotal** **7.5**

| Course                             |     |      | Units       |
|------------------------------------|-----|------|-------------|
| <b>FALL</b>                        |     |      |             |
| Patient Care                       | ALH | A115 | 2.5         |
| Medical Assisting Core             | MA  | A150 | 3           |
| Administrative Medical Assisting 1 | MA  | A175 | 3           |
| Clinical Medical Assisting 1       | MA  | A181 | 5           |
| <b>Subtotal</b>                    |     |      | <b>13.5</b> |

#### SPRING

|   |     |      |     |
|---|-----|------|-----|
| Human Diseases                                    | ALH | A120 | 2   |
| Administrative Medical Assisting 2                | MA  | A205 | 5   |
| Medical Assisting Clinical Experience             | MA  | A281 | 3.5 |
| Clinical Medical Assisting 2 Specialty Procedures | MA  | A289 | .5  |

**Subtotal** **11**

**Total Units** **32**

#### Medical Assisting Suggested Electives:

|                      |           |      |   |
|----------------------|-----------|------|---|
| Applied Pharmacology | ALH       | A130 | 3 |
| Business English     | BUS       | A138 | 3 |
| Ethics               | PHIL/RLST | A120 | 3 |

## ASSOCIATE IN SCIENCE DEGREE

Complete the Medical Assisting CCMA Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## MUSIC

Because Orange County is close to the heart of the television, movie, and recording industries, OCC answers a real need to train performing musicians and sound technicians, as well as composers, teachers, and music-store owners and salespeople.

Our music industry programs are designed to give the serious music student the theory, applied training, and performing experience needed for success in the field they choose. Traditional music courses are integrated with music-industry courses to provide comprehensive programs.

To increase their chances of enjoying long and satisfying careers in a highly competitive industry, we encourage our students to become proficient in a wide variety of musical styles, and to be aware of the many career alternatives open to them.

## BUSINESS EMPLOYEE

#### CERTIFICATE OF ACHIEVEMENT

This program will prepare students for employment in music stores, record shops, and other commercial music activities. Many opportunities in the business of music are available to students with a broad general knowledge of how this segment of the music industry functions in addition to traditional musical skills.

#### Program Outcomes

- Demonstrate knowledge of basic requirements of vocalists, guitarists and pianists
- Working Knowledge of basic studio techniques and equipment applications
- Prepare and deliver an effective sales presentation for a product or service.
- Organize, develop and prepare a written professional sales presentation for a product or service.

| Course                 |     |      | Units    |
|------------------------|-----|------|----------|
| <b>FIRST SEMESTER</b>  |     |      |          |
| History of Rock Music  | MUS | A139 | 3        |
| Piano 1                | MUS | A141 | 1        |
| Voice 1                | MUS | A145 | 1        |
| Music as a Business    | MUS | A262 | 2        |
| <b>Subtotal</b>        |     |      | <b>7</b> |
| <b>SECOND SEMESTER</b> |     |      |          |
| Basic Guitar           | MUS | A116 | 2        |
| Theory 1               | MUS | A180 | 3        |
| Musicianship 1         | MUS | A181 | 1        |
| Recording Techniques 1 | MUS | A261 | 3        |
| <b>Subtotal</b>        |     |      | <b>9</b> |

*Continued on next page*

**BUSINESS EMPLOYEE CERTIFICATE (CONTINUED)**

**THIRD SEMESTER**

|                      |            |      |   |
|----------------------|------------|------|---|
| Professional Selling | MKTG       | A110 | 3 |
| Computers in Music 1 | MUS        | A110 | 3 |
| Restricted Electives | (see list) |      | 5 |

**Subtotal** **11**

**Total Units** **27**

**Business Employee Restricted Electives - Select five (5) units from the following:**

|                                  |      |      |     |
|----------------------------------|------|------|-----|
| Accounting for Small Business    | ACCT | A100 | 3   |
| Introduction to Entrepreneurship | BUS  | A240 | 3   |
| Retail E-Commerce Management     | MKTG | A200 | 3   |
| Beginning Instruments            | MUS  | A140 | 2   |
| Piano 2                          | MUS  | A142 | 1   |
| Voice 2                          | MUS  | A146 | 1   |
| Classical Guitar 1               | MUS  | A148 | 2   |
| Studio Guitar 1                  | MUS  | A151 | 1.5 |
| Piano 3                          | MUS  | A241 | 2   |
| Piano 4                          | MUS  | A242 | 2   |

**ASSOCIATE IN ARTS DEGREE**

Complete the Business Employee Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**MIDI APPLICATIONS**

**CERTIFICATE OF ACHIEVEMENT**

This program is designed for the musician or computer professional who wants a concentrated course of study in the field of computer music. Courses are designed to emphasize the practical application of MIDI (Musical Instrument Digital Interface).

**Program Outcomes**

1. Create and perform musical compositions utilizing a standard scoring program.
2. Create musical compositions utilizing standard music production programs that demonstrate competency in the following techniques: looping, sequencing, editing, and virtual synthesis.
3. Demonstrate applications of studio recording techniques.

| Course                                |            |      | Units |
|---------------------------------------|------------|------|-------|
| Introduction to Computer Applications | CIS        | A100 | 3     |
| Computers in Music 1                  | MUS        | A110 | 3     |
| Computers in Music 2                  | MUS        | A111 | 3     |
| Computers in Music 3                  | MUS        | A112 | 3     |
| Computers in Music 4                  | MUS        | A113 | 3     |
| Fundamentals of Music                 | MUS        | A115 | 3     |
| Recording Techniques 1                | MUS        | A261 | 3     |
| Restricted Electives                  | (see list) |      | 5     |

**Total Units** **26**

**MIDI Applications Restricted Electives - Select five (5) units from the following:**

|                            |      |      |   |
|----------------------------|------|------|---|
| C++ Programming Language 1 | CS   | A150 | 4 |
| Film Production 1          | FILM | A110 | 3 |
| Piano 1                    | MUS  | A141 | 1 |
| Piano 2                    | MUS  | A142 | 1 |
| Theory 1                   | MUS  | A180 | 3 |
| Musicianship 1             | MUS  | A181 | 1 |
| Piano 3                    | MUS  | A241 | 2 |
| Piano 4                    | MUS  | A242 | 2 |

**ASSOCIATE IN ARTS DEGREE**

Complete the MIDI Applications Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**MUSIC**

**ASSOCIATE IN ARTS DEGREE**

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

**Program Outcomes**

1. Demonstrate competence in the technical skills of music performance by presenting public performances of music compositions.
2. Demonstrate ability to analyze and critique music techniques, style, and aesthetic strategies.

| Course                            |     |      | Units |
|-----------------------------------|-----|------|-------|
| History and Appreciation of Music | MUS | A100 | 3     |
| College Choir                     | MUS | A120 | 1     |
| Orchestra                         | MUS | A133 | 1     |
| Piano 1                           | MUS | A141 | 1     |
| Piano 2                           | MUS | A142 | 1     |
| History of Jazz                   | MUS | A143 | 3     |
| Voice 1                           | MUS | A145 | 1     |
| Studio Guitar 1                   | MUS | A151 | 1.5   |
| Theory 1                          | MUS | A180 | 3     |
| Theory 2                          | MUS | A185 | 3     |
| Jazz Improvisation                | MUS | A230 | 1     |
| Piano 3                           | MUS | A241 | 2     |
| Piano 4                           | MUS | A242 | 2     |
| Theory 3                          | MUS | A280 | 3     |
| Theory 4                          | MUS | A285 | 3     |

**Minimum Program Major Units** **18**

**AA General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## MUSIC

### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Music for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Music AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This degree is designed to prepare students to demonstrate competence and discipline in the study of music in all of its facets, read and audiate music, and demonstrate commitment to the serious study of music in practice and in theory, and provide comprehensive preparation for upper-division work.

#### Program Outcomes

1. Demonstrate competence in the technical skills of music performance by presenting public performances of music compositions.
2. Demonstrate ability to analyze and critique music techniques, style, and aesthetic strategies.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                 |     |            | Units |
|------------------------|-----|------------|-------|
| <b>Core Courses:</b>   |     |            |       |
| Theory 1               | MUS | A180       | 3     |
| Musicianship 1         | MUS | A181       | 1     |
| Theory 2               | MUS | A185       | 3     |
| Musicianship 2         | MUS | A186       | 1     |
| Theory 3               | MUS | A280       | 3     |
| Musicianship 3         | MUS | A281       | 1     |
| Theory 4               | MUS | A285       | 3     |
| Musicianship 4         | MUS | A286       | 1     |
| *Applied Music         | MUS | A290       | 2     |
| Large Ensemble Courses |     | (see list) | 4     |

**Total Major Units 22**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**Music AA-T Large Ensemble Courses - Complete four (4) semesters of one-unit courses from the following list:**

|                             |     |      |   |
|-----------------------------|-----|------|---|
| Chamber Singers             | MUS | A122 | 1 |
| Jazz Lab Ensemble           | MUS | A127 | 1 |
| Guitar Ensemble             | MUS | A129 | 1 |
| Wind Ensemble               | MUS | A132 | 1 |
| Orchestra                   | MUS | A133 | 1 |
| Jazz Improvisation          | MUS | A230 | 1 |
| Symphonic Chamber Orchestra | MUS | A233 | 1 |
| Studio Jazz Ensemble        | MUS | A234 | 1 |

\*MUS A290 is 0.5 unit course, which must be taken each semester for a total of two (2) units.

## MUSICAL ENTERTAINER — INSTRUMENTAL

### CERTIFICATE OF ACHIEVEMENT

This program is designed to give the aspiring commercial instrumentalist a concentrated theoretical background in traditional and commercial music as well as a look at the music industry.

#### Program Outcomes

1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.

| Course                  |     |      | Units |
|-------------------------|-----|------|-------|
| <b>FIRST SEMESTER</b>   |     |      |       |
| History of Rock Music   | MUS | A139 | 3     |
| Piano 1                 | MUS | A141 | 1     |
| Theory 1                | MUS | A180 | 3     |
| Musicianship 1          | MUS | A181 | 1     |
| Sightreading Workshop   | MUS | A187 | 2     |
| *Music Performing Group |     |      | 1     |

**Subtotal 11**

#### SECOND SEMESTER

|                         |     |      |     |
|-------------------------|-----|------|-----|
| Piano 2                 | MUS | A142 | 1   |
| History of Jazz         | MUS | A143 | 3   |
| Theory 2                | MUS | A185 | 3   |
| Musicianship 2          | MUS | A186 | 1   |
| Applied Music           | MUS | A290 | 0.5 |
| *Music Performing Group |     |      | 1   |

**Subtotal 9.5**

#### THIRD SEMESTER

|                         |     |      |     |
|-------------------------|-----|------|-----|
| Computers in Music 1    | MUS | A110 | 3   |
| Jazz Improvisation      | MUS | A230 | 1   |
| Music as a Business     | MUS | A262 | 2   |
| Applied Music           | MUS | A290 | 0.5 |
| *Music Performing Group |     |      | 1   |

**Subtotal 7.5**

**Total Units 28**

\*Music students in this major must participate in at least one major performing group per semester. Students should select a performing group that fits their performance specialty or interest.

**Musical Entertainer - Instrumental Music Performing Group Course Options - Musical Entertainer Instrumental:**

|                             |     |      |   |
|-----------------------------|-----|------|---|
| Jazz Lab Ensemble           | MUS | A127 | 1 |
| Wind Ensemble               | MUS | A132 | 1 |
| Orchestra                   | MUS | A133 | 1 |
| Intermediate Band/Orchestra | MUS | A150 | 2 |
| Jazz Improvisation          | MUS | A230 | 1 |
| Symphonic Chamber Orchestra | MUS | A233 | 1 |
| Studio Jazz Ensemble        | MUS | A234 | 1 |

**Musical Entertainer - Instrumental Suggested Electives:**

|                        |     |      |     |
|------------------------|-----|------|-----|
| Studio Guitar 1        | MUS | A151 | 1.5 |
| Studio Guitar 2        | MUS | A152 | 1.5 |
| Sophomore Recital      | MUS | A240 | .5  |
| Recording Techniques 1 | MUS | A261 | 3   |

*Continued on next page*

**MUSICAL ENTERTAINER - INSTRUMENTAL CERTIFICATE  
(CONTINUED)**

**ASSOCIATE IN ARTS DEGREE**

Complete the Musical Entertainer - Instrumental Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**MUSICAL ENTERTAINER – VOCAL**

**CERTIFICATE OF ACHIEVEMENT**

This program is designed to give the aspiring commercial vocalist a concentrated theoretical background in traditional and commercial music and vocal techniques as well as a look at the music industry.

**Program Outcomes**

1. Perform musical selections in a variety of popular styles.
2. Organize a performing event.
3. Develop repertoire for a performing event.
4. Develop a professional marketing strategy.
5. Record a demo CD.

| Course                        |     |      | Units      |
|-------------------------------|-----|------|------------|
| <b>FIRST SEMESTER</b>         |     |      |            |
| College Choir                 | MUS | A120 | 1          |
| Piano 1                       | MUS | A141 | 1          |
| Popular Vocal Techniques      | MUS | A144 | 1.5        |
| Theory 1                      | MUS | A180 | 3          |
| Musicianship 1                | MUS | A181 | 1          |
| <b>Subtotal</b>               |     |      | <b>7.5</b> |
| <b>SECOND SEMESTER</b>        |     |      |            |
| College Choir                 | MUS | A120 | 1          |
| Sightreading Workshop         | MUS | A187 | 2          |
| Advanced Pop Vocal Techniques | MUS | A247 | 1.5        |
| Applied Music                 | MUS | A290 | 0.5        |
| <b>Subtotal</b>               |     |      | <b>5</b>   |
| <b>THIRD SEMESTER</b>         |     |      |            |
| College Choir                 | MUS | A120 | 1          |
| History of Jazz               | MUS | A143 | 3          |
| Recording Techniques          | MUS | A261 | 3          |
| Music as a Business           | MUS | A262 | 2          |
| Applied Music                 | MUS | A290 | 0.5        |
| <b>Subtotal</b>               |     |      | <b>9.5</b> |
| <b>Total Units</b>            |     |      | <b>22</b>  |

**Musical Entertainer - Vocal Suggested Electives:**

|                   |     |      |   |
|-------------------|-----|------|---|
| Basic Guitar      | MUS | A116 | 2 |
| Sophomore Recital | MUS | A240 | 5 |

**ASSOCIATE IN ARTS DEGREE**

Complete the Musical Entertainer - Vocal Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.

**STUDIO GUITAR PERFORMER**

**CERTIFICATE OF ACHIEVEMENT**

A studio guitarist is a complete guitarist and musician who can accurately perform in a variety of musical styles. The courses in this program cover jazz, rock and classical guitar techniques, traditional and commercial music theory and include numerous performance opportunities.

**Program Outcomes**

1. Develop repertoire for a recording event.
2. Develop a professional marketing strategy.
3. Record a demo CD.

| Course                 |     |      | Units      |
|------------------------|-----|------|------------|
| <b>FIRST SEMESTER</b>  |     |      |            |
| Piano 1                | MUS | A141 | 1          |
| Classical Guitar 1     | MUS | A148 | 2          |
| Studio Guitar 1        | MUS | A151 | 1.5        |
| Theory 1               | MUS | A180 | 3          |
| Musicianship 1         | MUS | A181 | 1          |
| <b>Subtotal</b>        |     |      | <b>8.5</b> |
| <b>SECOND SEMESTER</b> |     |      |            |
| Computers in Music 1   | MUS | A110 | 3          |
| Guitar Ensemble        | MUS | A129 | 1          |
| Classical Guitar 2     | MUS | A149 | 2          |
| Studio Guitar 2        | MUS | A152 | 1.5        |
| Sightreading Workshop  | MUS | A187 | 2          |
| Applied Music          | MUS | A290 | 0.5        |
| <b>Subtotal</b>        |     |      | <b>10</b>  |
| <b>THIRD SEMESTER</b>  |     |      |            |
| Guitar Ensemble        | MUS | A129 | 1          |
| Jazz Improvisation     | MUS | A230 | 1          |
| Recording Techniques   | MUS | A261 | 3          |
| Music as a Business    | MUS | A262 | 2          |
| Applied Music          | MUS | A290 | 0.5        |
| <b>Subtotal</b>        |     |      | <b>7.5</b> |
| <b>Total Units</b>     |     |      | <b>26</b>  |

**Studio Guitar Performer Suggested Electives:**

|                          |     |      |     |
|--------------------------|-----|------|-----|
| Popular Vocal Techniques | MUS | A144 | 1.5 |
| Voice 1                  | MUS | A145 | 1   |
| Theory 2                 | MUS | A185 | 3   |
| Musicianship 2           | MUS | A186 | 1   |
| Sophomore Recital        | MUS | A240 | 0.5 |
| Classical Guitar 3       | MUS | A248 | 2   |
| Studio Guitar 3          | MUS | A271 | 1.5 |
| Theory 3                 | MUS | A280 | 3   |
| Musicianship 3           | MUS | A281 | 1   |

**ASSOCIATE IN ARTS DEGREE**

Complete the Studio Guitar Performer Certificate of Achievement and Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog.



## NATURAL SCIENCE

### NATURAL SCIENCE

#### ASSOCIATE IN SCIENCE DEGREE

Complete eighteen (18) units from the following and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.

| Course  | Units         |
|---|---------------|
| <b>All coursework must 100 level or higher:</b>                     |               |
| Astronomy   | ASTR          |
| Biology   | BIOL          |
| Chemistry   | CHEM          |
| Ecology   | ECOL          |
| Environmental Science & Ecology                                     | ESEC          |
| Geology   | GEOL          |
| Marine Science  | MRSC          |
| Natural Science   | NS            |
| Physics   | PHYS          |
| <b>Minimum Program Major Units</b>                                  | <b>18</b>     |
| <b>AS General Education Option 1, 2, or 3</b>                       | <b>Varies</b> |
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b> |
| <b>Total Degree Units</b>   | <b>60</b>     |

## NEURODIAGNOSTIC TECHNOLOGY

### NEURODIAGNOSTIC TECHNOLOGY

#### ASSOCIATE IN SCIENCE DEGREE

Neurodiagnostic Technology is an allied health specialty for diagnosing patients with neurological disorders such as epilepsy, stroke, coma, multiple sclerosis, and many others. A competent Neurodiagnostic Technologist has knowledge of the nervous system and knows how to properly operate many types of sophisticated instruments. Neurodiagnostic Technologists are employed in hospitals, clinics, physicians' offices, university medical centers and research centers.

Orange Coast College's Neurodiagnostic Technologist program provides theory and clinical experience in Electroencephalography (EEG) and in Evoked Potential (BAEP, PVEP, SSEP) testing as well as an introduction to other neurological testing procedures. Some of the testing procedures include Nerve Conduction Studies (NCS), Long-term Monitoring (LTM) for Epilepsy, Intraoperative Neurophysiological Monitoring (IONM), Transcranial Doppler (TCD) Studies, and more.

The Commission on Accreditation of Allied Health Education Programs (CAAHEP) has accredited this NDT Program. The program meets the eligibility requirements to take the EEG and EP exams of the American Board of Registration in Electroencephalographic and Evoked Potential Technologists (ABRET).

The program can be completed in approximately 22 months (4 semesters and 1 summer). Completion of the program earns an Associate in Science Degree in Neurodiagnostic Technology. A new group of students begins this program in the fall semester of even years.

#### Program Admission

- Allied Health 010 course – application and orientation
- The student must complete Associate in Science degree General Education requirements and the program prerequisites prior to acceptance into the program.

#### Program Outcome

- The goal of the program is to meet the needs of the local health care community by preparing students for entry level employment as a professional and competent Neurodiagnostic technologist.

#### Program Prerequisites:

|                     |      |      |            |
|---------------------|------|------|------------|
| Health Occupations  | ALH  | A010 | .5         |
| Medical Terminology | ALH  | A111 | 3          |
| Anatomy-Physiology  | BIOL | A221 | 4          |
| <b>Subtotal</b>     |      |      | <b>7.5</b> |

| Course                       | Units        |
|------------------------------|--------------|
| <b>FALL</b>                  |              |
| Patient Care                 | ALH A115 2.5 |
| Applied Pharmacology         | ALH A130 3   |
| Basic Electroencephalography | NDT A110 4   |
| Human Diseases               | ALH A120 2   |
| <b>Subtotal</b>              | <b>11.5</b>  |

#### INTERSESSION

|                              |             |
|------------------------------|-------------|
| Neurodiagnostic Lab Practice | NDT A200 .5 |
| <b>Subtotal</b>              | <b>.5</b>   |

#### SPRING

|   |              |
|---|--------------|
| Advanced Electroencephalography               | NDT A115 4   |
| Clinical Experience 1                         | NDT A116 3.5 |
| Introduction to Neuro Anatomy and Physiology  | NDT A190 3   |
| Electroencephalography Record Review-Normal   | NDT A191 1   |
| Electroencephalography Record Review-Abnormal | NDT A287 1.5 |
| <b>Subtotal</b>                               | <b>13</b>    |

#### SUMMER

|                       |            |
|-----------------------|------------|
| Clinical Experience 2 | NDT A117 3 |
| <b>Subtotal</b>       | <b>3</b>   |

#### FALL

|   |              |
|---|--------------|
| Neurologic Disorders                      | NDT A280 3   |
| Introduction to Transcranial Doppler      | NDT A284 1   |
| Introduction to Nerve Conduction Velocity | NDT A285 1   |
| Clinical Experience 3                     | NDT A286 3.5 |
| Evoked Potentials                         | NDT A288 4   |
| <b>Subtotal</b>                           | <b>12.5</b>  |

*Continued on next page*

**NEURODIAGNOSTIC TECHNOLOGY AS DEGREE  
(CONTINUED)**

**SPRING**

|  |     |      |   |
|--|-----|------|---|
| Clinical Experience 4                          | NDT | A289 | 2 |
| Introduction to Intraoperative Monitoring      | NDT | A296 | 2 |
| Microcomputer Applications in Neurodiagnostics | NDT | A297 | 2 |
| Clinical Internship                            | NDT | A298 | 1 |
| Polysomnography Basics                         | PSG | A100 | 1 |

**Subtotal** **8**

**Program Major Units** **56**

**AS General Education Option 1, 2, or 3** **Varies**

**Total Minimum AS Degree Units** **71**

**Neurodiagnostic Technology Suggested Electives:**

|                                    |           |      |    |
|------------------------------------|-----------|------|----|
| Interpersonal Communication        | CMST      | A100 | 3  |
| Technical Electronics              | ELEC      | A140 | 3  |
| Child Growth and Development       | HMDV      | A180 | 3  |
| Specialty Procedures               | MA        | A289 | .5 |
| Ethics                             | PHIL/RLST | A120 | 3  |
| Conceptual Physics                 | PHYS      | A110 | 3  |
| Statistics for Behavioral Sciences | PSYC      | A160 | 4  |
| Elementary Spanish 1               | SPAN      | A180 | 5  |

**POLYSOMNOGRAPHY CROSS-TRAINING  
OPTION**

This option is recommended for Neurodiagnostic Technology graduates who would like to cross-train as Polysomnographic Technologists. Upon completing the cross-training courses, students will earn an additional AS in Polysomnography.

**Program Option Prerequisites:**

Neurodiagnostic Technology Associate in Science Degree

**Subtotal** **70**

| Course                             |      |      | Units |
|------------------------------------|------|------|-------|
| <b>FALL</b>                        |      |      |       |
| Introduction to Polysomnography    | PSG  | A150 | 3     |
| Polysomnography Testing 1          | PSG  | A160 | 2     |
| Polysomnography Clinical 1         | PSG  | A165 | 1     |
| Polysomnographic Practice          | PSG  | A170 | .5    |
| Respiratory Anatomy and Physiology | RSPC | A185 | 3     |
| Pulmonary Pathology                | RSPC | A265 | 3     |

**Subtotal** **12.5**

**INTERSESSION**

|                            |     |      |   |
|----------------------------|-----|------|---|
| Polysomnography Clinical 2 | PSG | A175 | 1 |
|----------------------------|-----|------|---|

**Subtotal** **1**

**SPRING**

|                               |      |      |     |
|-------------------------------|------|------|-----|
| Child Growth and Development  | HMDV | A180 | 3   |
| Polysomnography Record Review | PSG  | A250 | 2.5 |
| Polysomnography Testing 2     | PSG  | A260 | 2   |
| Polysomnography Clinical 3    | PSG  | A265 | 2   |
| Physician Lecture Series      | PSG  | A270 | 1   |
| Polysomnography Internship    | PSG  | A285 | 2   |

**Subtotal** **12.5**

**Total Units** **96**

**NEURODIAGNOSTIC  
TECHNOLOGY UPGRADE**

**CERTIFICATE OF SPECIALIZATION**

The courses required in this professional upgrade certificate are intended for the advanced neurodiagnostic student or for technologists working in the field of electroneurodiagnostic technology. The required courses reflect the most recent industry changes, and many have listed required prerequisites. Certificates will be awarded through the Consumer and Health Sciences division office.

| Course   |      |      | Units      |
|--|------|------|------------|
| Introduction to Intraoperative Monitoring      | NDT  | A296 | 2          |
| Microcomputer Applications in Neurodiagnostics | NDT  | A297 | 2          |
| Polysomnography Basics                         | PSG  | A100 | 1          |
| Introduction Transcranial Doppler              | NDT  | A284 | 1          |
| Or   |      |      |            |
| Introduction Nerve Conduction Velocity         | NDT  | A285 | 1          |
| Or   |      |      |            |
| Statistics for Behavioral Sciences             | PSYC | A160 | 3          |
| <b>Total Units</b>                             |      |      | <b>6-8</b> |

**NUTRITION AND DIETETICS**

**NUTRITION AND DIETETICS TECHNICIAN**

**ASSOCIATE IN SCIENCE DEGREE**

Students completing this program are prepared to join the dietetic team in various nutritional aspects of health care. Graduates from this program are employed by acute care, long term care, and rehabilitation hospitals, as well as by community agencies that provide education in nutrition. Completion of the following courses, along with the Associate Degree program at Orange Coast College qualifies the student to sit for the Nutritional and Dietetics Technician, Registered (NDTR) exam. Students are highly encouraged to become a member of the Academy of Nutrition and Dietetics.

Upon successful completion of these courses (with grade of 'C' or better), the program requirements, and the General Education Requirements, students will receive a Verification Statement from the program director confirming that all requirements of the program have been met. Students will then be eligible to take the National Registration Exam administered by the Commission on Dietetic Registration.

This program has been granted full accreditation by the Accreditation Council for Education in Nutrition and Dietetics, of the Academy of Nutrition and Dietetics, 120 S. Riverside Plaza, Suite 2190, Chicago, IL 60606-6995, 800-877-1600 x5400, [www.eatrightacend.org/ACEND](http://www.eatrightacend.org/ACEND).

*It is recommended that the student complete at least 15-17 units of general education requirements prior to entering the program.*

**Program Outcomes**

1. Demonstrate competent entry-level skills of a Nutrition and Dietetics Technician, Registered (NDTR) in order to meet the employment needs of the community.
2. Communicate and work effectively with an interdisciplinary workforce and clientele of the community.
3. Participate in personal growth and lifelong learning activities

**Required Prerequisites:**

|                                   |       |      |            |
|-----------------------------------|-------|------|------------|
| Health Occupations                | ALH   | A010 | 0.5        |
| Medical Terminology               | ALH   | A111 | 3          |
| Careers in Dietetics/Food Science | NC/FN | A100 | 1          |
| <b>Subtotal</b>                   |       |      | <b>4.5</b> |

| Course                                |     |      | Units       |
|---------------------------------------|-----|------|-------------|
| <b>FALL SEMESTER</b>                  |     |      |             |
| Patient Care                          | ALH | A115 | 2.5         |
| **Nutrition                           | FN  | A170 | 3           |
| **Quantity Foods Preparation          | FSM | A150 | 4           |
| **Sanitation and Safety               | FSM | A160 | 3           |
| **Supervision and Training Techniques | FSM | A260 | 3           |
| <b>Subtotal</b>                       |     |      | <b>15.5</b> |

|   |      |      |             |
|---|------|------|-------------|
| <b>SPRING SEMESTER</b>                      |      |      |             |
| Anatomy-Physiology                          | BIOL | A221 | 4           |
| **Food Production Management                | FSM  | A151 | 2           |
| **Health Care Field Experience              | NC   | A175 | 3.5         |
| **Introduction to Medical Nutrition Therapy | NC   | A180 | 3           |
| <b>Subtotal</b>                             |      |      | <b>12.5</b> |

Completion of the first year with a "C" grade in all courses is required before beginning second year.

|                             |    |      |             |
|-----------------------------|----|------|-------------|
| <b>FALL SEMESTER</b>        |    |      |             |
| Life Cycle Nutrition        | FN | A144 | 3           |
| Applied Nutrition           | FN | A171 | 2           |
| Intermediate Nutrition Care | NC | A280 | 2           |
| Supervised Practice 1       | NC | A281 | 3.5         |
| <b>Subtotal</b>             |    |      | <b>10.5</b> |

|                              |     |      |            |
|------------------------------|-----|------|------------|
| <b>SPRING SEMESTER</b>       |     |      |            |
| Menu Planning and Purchasing | FSM | A250 | 3          |
| Advanced Nutrition Care      | NC  | A285 | 2          |
| Supervised Practice 2        | NC  | A286 | 3.5        |
| <b>Subtotal</b>              |     |      | <b>8.5</b> |

**Program Major Units                    51.5**

**AS General Education Option 1, 2, or 3                    Varies**

**Total Minimum Degree Units                    69.5**

\*\*These courses meet the California Department of Public Health requirement for Dietetic Service Supervisor.

**Dietetic Technician Suggested Electives:**

|                             |      |      |   |
|-----------------------------|------|------|---|
| Human Diseases              | ALH  | A120 | 2 |
| Applied Pharmacology        | ALH  | A130 | 2 |
| Interpersonal Communication | CMST | A100 | 3 |
| Food Science                | FN   | A195 | 4 |
| Introduction to Psychology  | PSYC | A100 | 3 |

## NUTRITION AND DIETETICS

### ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Students graduating with an Associate in Science in Nutrition and Dietetics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Nutrition and Dietetics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

This degree provides students with the foundational knowledge and common core of lower division courses required to transfer and pursue a baccalaureate degree in nutrition/dietetics to further prepare for careers as a registered dietitian nutritionist (RDN). There are many career opportunities for dietitians. They work in a variety of settings such as hospitals, long-term care facilities, school districts, community organizations, and corporations.

**Program Outcomes**

1. Evaluate scientific concepts of nutrition related to the functioning of nutrients in the basic life process.
2. Demonstrate basic food science principles and food preparation techniques.
3. Apply chemistry and biology concepts to determine the effects of nutrients on the human body.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                     |      |      | Units     |
|----------------------------|------|------|-----------|
| <b>Required Core:</b>      |      |      |           |
| General Microbiology       | BIOL | A210 | 5         |
| General Chemistry A        | CHEM | A180 | 5         |
| Nutrition                  | FN   | A170 | 3         |
| Introduction to Psychology | PSYC | A100 | 3         |
| <b>Subtotal</b>            |      |      | <b>16</b> |

**List A - Select two courses from the following list.**

**In order to be better prepared for transfer, OCC Nutrition and Dietetics faculty strongly recommend that all students completing this degree use elective credits to complete all courses in List A. Note - CHEM A220 and CHEM A220L are considered one course.**

|   |      |              |             |
|---|------|--------------|-------------|
| Human Physiology                                | BIOL | A225         | 5           |
| Organic Chemistry A and Organic Chemistry A Lab | CHEM | A220 & A220L | 5           |
| Introduction to Statistics                      | MATH | A160         | 4           |
| <b>Subtotal</b>                                 |      |              | <b>9-10</b> |

**List B - Complete the following:**

|                     |    |      |            |
|---------------------|----|------|------------|
| Principles of Foods | FN | A180 | 3          |
| <b>Subtotal</b>     |    |      | <b>9.5</b> |

**Program Major Units                    24-27**

**CSU or IGETC for CSU                    37-39**

**Transferable electives as needed to satisfy unit requirement                    Varies**

**Total Degree Units                    60**

## NUTRITION EDUCATION

### CERTIFICATE OF ACHIEVEMENT

Students who graduate from this program are prepared for employment in one of the fastest growing and most prolific industries in Southern California, encompassing weight control clinics, health and exercise spas and gymnasiums, community agencies concerned with nutrition education, and manufacturers and distributors of nutrition-related products.

#### Program Outcome

1. Graduates will be competent entry-level Nutrition Education Assistants meeting the employment needs of the community.

| Course                                    |       |      | Units            |
|---|-------|------|------------------|
| <b>FIRST SEMESTER</b>                     |       |      |                  |
| Anatomy & Physiology                      | BIOL  | A221 | 4                |
| Careers in Dietetics/Food Science         | FN/NC | A100 | 1                |
| Sanitation and Safety                     | FSM   | A160 | 3                |
| Nutrition                                 | FN    | A170 | 3                |
| <b>Subtotal</b>                           |       |      | <b>11</b>        |
| <b>SECOND SEMESTER</b>                    |       |      |                  |
| Vegetarian Nutrition                      | FN    | A125 | 1                |
| Principles of Food                        | FN    | A180 | 3                |
| Fitness Programs 1                        | KIN   | A107 | 1-3              |
| Introduction to Medical Nutrition Therapy | NC    | A180 | 3                |
| <b>Subtotal</b>                           |       |      | <b>8-10</b>      |
| <b>THIRD SEMESTER</b>                     |       |      |                  |
| Applied Nutrition                         | FN    | A171 | 2                |
| Cultural Foods                            | FN    | A185 | 2                |
| Intermediate Nutrition Care               | NC    | A280 | 2                |
| Supervised Practice 1                     | NC    | A281 | 3.5              |
| <b>Subtotal</b>                           |       |      | <b>9.5</b>       |
| <b>Total Units</b>                        |       |      | <b>28.5-30.5</b> |

#### Suggested electives:

|   |      |      |   |
|---|------|------|---|
| Introduction to Display and Visual Presentation | DVP  | A180 | 3 |
| Nutrition, Fitness, and Performance             | FN   | A136 | 3 |
| Child Growth and Development                    | HMDV | A180 | 3 |
| Professional Selling                            | MKTG | A110 | 3 |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Nutrition Education Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## NUTRITION AND FITNESS EDUCATION

### CERTIFICATE OF ACHIEVEMENT

Students who graduate from this program are prepared for entry-level positions in the health and fitness industry, encompassing weight control clinics, sports medicine clinics, health clubs and gyms, corporate fitness and wellness centers, fitness and nutrition programs in schools, and community agencies concerned with health, fitness and nutrition education.

Students in this program will be able to advise clients on normal nutrition, weight control and improved performance by working with other nutrition professionals. The fitness industry is experiencing rapid growth and has a growing demand for trained fitness and nutrition educators. The employment outlook is excellent.

#### Program Outcome

1. Graduates will be competent entry-level Nutrition and Fitness professionals meeting the employment needs of the community.

| Course   |       |      | Units            |
|--|-------|------|------------------|
| <b>FIRST SEMESTER</b>                                  |       |      |                  |
| Anatomy & Physiology                                   | BIOL  | A221 | 4                |
| Careers in Dietetics/Food Science                      | FN/NC | A100 | 1                |
| Nutrition, Fitness and Performance                     | FN    | A136 | 3                |
| Sanitation and Safety                                  | FSM   | A160 | 3                |
| <b>Subtotal</b>  |       |      | <b>11</b>        |
| <b>SECOND SEMESTER</b>                                 |       |      |                  |
| Cultural Foods   | FN    | A185 | 2                |
| Cardiovascular Training & Strength Development Level 1 | KIN   | A109 | 1-3              |
| Fitness and Health                                     | KIN   | A270 | 3                |
| Introduction to Medical Nutrition Therapy              | NC    | A180 | 3                |
| <b>Subtotal</b>  |       |      | <b>9-11</b>      |
| <b>THIRD SEMESTER</b>                                  |       |      |                  |
| Applied Nutrition                                      | FN    | A171 | 2                |
| Life Cycle Nutrition                                   | FN    | A144 | 3                |
| Introduction to Exercise Physiology                    | KIN   | A282 | 3                |
| Intermediate Nutrition Care                            | NC    | A280 | 2                |
| Supervised Practice 1                                  | NC    | A281 | 3.5              |
| <b>Subtotal</b>  |       |      | <b>13.5</b>      |
| <b>Total Units</b>                                     |       |      | <b>33.5-35.5</b> |

Recommendation - Combine the Nutrition and Fitness Assistant Certificate with the Fitness Specialist Certificate in the Kinesiology Department.

## PHILOSOPHY

### PHILOSOPHY

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Philosophy for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Philosophy AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Arts in Philosophy for Transfer degree focuses on a critical analysis of philosophical history, ideas, and concepts as well the development of analytical, critical thinking, writing, and reading skills. Students choosing this major will study a range of Philosophical subjects including metaphysics, epistemology, logic, and ethics. In addition, students will learn how to identify philosophical principles and concepts, critically analyze texts, and generate proper arguments. Completion of this major will provide students with a well-rounded understanding of Philosophy and equip them with the skills of a philosopher.

#### Program Outcomes

1. Articulate and critically evaluate philosophical arguments and theories.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                         |           |      | Units    |
|--------------------------------|-----------|------|----------|
| <b>Core Courses:</b>           |           |      |          |
| Introduction to Philosophy     | PHIL      | A100 | 3        |
| Or                             |           |      |          |
| Ethics                         | PHIL/RLST | A120 | 3        |
| Introduction to Logic          | PHIL      | A155 | 3        |
| Or                             |           |      |          |
| Introduction to Symbolic Logic | PHIL      | A220 | 3        |
| <b>Subtotal</b>                |           |      | <b>6</b> |

#### List A - Complete one (1) course from the Core not yet taken, or select one (1) of the following:

|                                |      |      |          |
|--------------------------------|------|------|----------|
| History of Ancient Philosophy  | PHIL | A125 | 3        |
| Critical Reasoning and Writing | PHIL | A150 | 3        |
| <b>Subtotal</b>                |      |      | <b>3</b> |

#### List B - Complete two (2) courses, selecting from List A courses not yet taken and the following:

|                                 |      |              |          |
|---------------------------------|------|--------------|----------|
| Western Civilization 1 / Honors | HIST | A180 / A180H | 3        |
| Western Civilization 2 / Honors | HIST | A185 / A185H | 3        |
| Philosophy of Religion          | PHIL | A115         | 3        |
| <b>Subtotal</b>                 |      |              | <b>6</b> |

#### List C - Complete one (1) course from List A or B not yet taken, or select two (2) of the following:

|  |      |              |   |
|--|------|--------------|---|
| Critical Thinking, Reading, Writing: Literature / Honors | ENGL | A101 / A101H | 4 |
| Introduction to the Humanities                           | HUM  | A100         | 3 |
| Aesthetics/Philosophy of Art                             | PHIL | A118         | 3 |
| The Theory of Knowledge                                  | PHIL | A165         | 3 |
| Contemporary Philosophy                                  | PHIL | A185         | 3 |

**Subtotal** **3-7**

**Program Major Units** **18-22**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## PHOTOGRAPHY

### PHOTOGRAPHY — STILL

#### CERTIFICATE OF ACHIEVEMENT

Anyone with an interest in photography, whether beginner, advanced amateur or professional, will find a course or program within the photography program that will teach them new skills and/or prepare them for a career in photography.

The OCC Photography program is intended to prepare students for employment in a number of specialization areas within the field of professional photography. The student, after completing the first year foundation courses, may elect to take advanced courses in art, commercial, advertising illustration, portraiture, architectural, fashion, or documentary photography, color management, digital work flow, and business practices for photographers.

In addition to courses intended to train photographers, the program also includes several black and white and digital classes for professional photographers who wish to learn new skills and/or for those who are interested in careers as photographic digital technicians.

#### Program Outcomes

1. Demonstrate competence in the technical skills of photography.
2. Demonstrate the ability to evaluate photographic aesthetic strategies.
3. Create photographs that illustrate a critical understanding of visual language.

| Course  |      |              | Units    |
|---|------|--------------|----------|
| <b>FIRST SEMESTER</b>                                 |      |              |          |
| Survey of Western Art: Renaissance to Modern / Honors | ART  | A101 / A101H | 3        |
| Or  |      |              |          |
| Survey of Modern and Contemporary Art / Honors        | ART  | A102 / A102H | 3        |
| Or  |      |              |          |
| Photography and Society                               | PHOT | A101         | 3        |
| Introduction to Digital Photography                   | PHOT | A123         | 3        |
| History and Aesthetics of Still Photography           | PHOT | A130         | 3        |
| <b>Subtotal</b>                                       |      |              | <b>9</b> |

*Continued on next page*

**PHOTOGRAPHY STILL CERTIFICATE (CONTINUED)**

**SECOND SEMESTER**

|  |      |      |   |
|--|------|------|---|
| Imaging with Photoshop 1                 | PHOT | A125 | 3 |
| Darkroom For Photography Majors          | PHOT | A127 | 2 |
| Introduction to Professional Photography | PHOT | A180 | 4 |

**Subtotal** **9**

**THIRD SEMESTER**

|  |      |      |   |
|--|------|------|---|
| Commercial Photography   | PHOT | A188 | 5 |
| Professional Digital Workflow and Color Management                       | PHOT | A225 | 3 |
| Three (3) units of "A200" level PHOT courses (excluding Photo A260-A267) |      |      | 3 |

**Subtotal** **11**

**FOURTH SEMESTER**

|  |      |      |   |
|--|------|------|---|
| Business Practices for Photographers                                   | PHOT | A241 | 3 |
| Professional Digital Techniques  | PHOT | A280 | 3 |
| Art Photography  | PHOT | A283 | 4 |
| Two (2) units of "A200" level PHOT courses (including Photo A260-A267) |      |      | 2 |

**Subtotal** **12**

**Total Units** **41**

**Photography - Still Suggested Electives:**

|                      |      |      |   |
|----------------------|------|------|---|
| Freshman Composition | ENGL | A100 | 3 |
|----------------------|------|------|---|

**ASSOCIATE IN SCIENCE DEGREE**

Complete the Photography - Still Certificate of Achievement and Associate in Science general education requirements as outlined in the Graduation Requirements section of the catalog.

**PHOTOGRAPHY DIGITAL TECHNICIAN**

**CERTIFICATE OF ACHIEVEMENT**

This program offers training in areas such as digital photography, digital workflow, large format digital capture and studio photography techniques. It is intended to prepare students for digital tech and photo assisting jobs in the professional photography community.

**Program Outcome**

- Students will be able to demonstrate competence in the digital skills of photography and display skills in professional practices.

| Course  | Units |      |           |
|---|-------|------|-----------|
| Introduction to Professional Photography              | PHOT  | A180 | 4         |
| Commercial Photography                                | PHOT  | A188 | 5         |
| Professional Digital Workflow and Color Management    | PHOT  | A225 | 3         |
| Professional Digital Techniques                       | PHOT  | A280 | 3         |
| Any "A200" level PHOT course, three (3) units minimum |       |      | 3         |
| <b>Total Units</b>                                    |       |      | <b>18</b> |

**Photography Digital Technician Suggested Electives:**

|                                      |      |      |   |
|--------------------------------------|------|------|---|
| Business Practices for Photographers | PHOT | A241 | 3 |
|--------------------------------------|------|------|---|

\*Note: Photo A123 (3 units) is a prerequisite to Photo A180 and Photo A125 (3 units) is a prerequisite to Photo A225.

**DIGITAL SLR PHOTOGRAPHY AND VIDEOGRAPHY TECHNICIAN**

**CERTIFICATE OF ACHIEVEMENT**

The Digital SLR Photography and Videography Certificate program is a Career Technical Ed specialty, designed for the student who wants a concentrated course of study in the field of photography coupled with video production. It has been designed to prepare students for entry-level employment as both a photographer and videographer. Students will be educated in the use of DSLR cameras, storytelling, event documentation, lighting, sound, post-production and business practices. The first 19 units give the student a strong foundation, while the 6 elective units allow students to "customize" the certificate to their unique needs.

**Program Outcome**

- Students will be able to demonstrate competence as both a photographer and a videographer, and show a critical understanding of visual language.

| Course                              | Units |      |          |
|-------------------------------------|-------|------|----------|
| <b>FIRST SEMESTER</b>               |       |      |          |
| Film Production 1                   | FILM  | A110 | 3        |
| Introduction to Digital Photography | PHOT  | A123 | 3        |
| Imaging with Photoshop 1            | PHOT  | A125 | 3        |
| <b>Subtotal</b>                     |       |      | <b>9</b> |

|  |      |      |           |
|--|------|------|-----------|
| <b>SECOND SEMESTER</b>                   |      |      |           |
| Editing 1                                | FILM | A194 | 3         |
| Introduction to Professional Photography | PHOT | A180 | 4         |
| Cinematography                           | FILM | A262 | 3         |
| <b>Subtotal</b>                          |      |      | <b>10</b> |

**Complete an additional six (6) elective units, in either semester from the following:**

|  |      |      |           |
|--|------|------|-----------|
| Computers in Music                                 | MUS  | A110 | 3         |
| The Business of Film and Television                | FILM | A102 | 3         |
| Social Media Marketing                             | FILM | A215 | 3         |
| Field Production and the Documentary               | FILM | A265 | 4         |
| Commercial Photography                             | PHOT | A188 | 5         |
| Documentary Photography                            | PHOT | A200 | 3         |
| Professional Digital Workflow and Color Management | PHOT | A225 | 3         |
| Professional Digital Techniques                    | PHOT | A280 | 3         |
| <b>Subtotal</b>                                    |      |      | <b>6</b>  |
| <b>Total Units</b>                                 |      |      | <b>25</b> |

## PHYSICS

### PHYSICS

#### ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)

Students graduating with an Associate in Science in Physics for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Physics AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

It is strongly recommended that all Physics majors take a course in differential equations in addition to the degree requirements, but this cannot be included as a requirement due to unit limitations.

#### Program Outcomes

1. Identify and describe major concepts and theoretical principles as applied to physics.
2. Apply appropriate physical laws and mathematical techniques to analyze various physical situations.
3. Perform various scientific experiments and to analyze data to check agreement with theoretical predictions.
4. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  | Units                 |
|---|-----------------------|
| <b>Core Courses:</b>  |                       |
| Calculus 1 / Honors   | MATH A180 / A180H 4   |
| Calculus 2 / Honors   | MATH A185 / A185H 4   |
| Calculus 3 / Honors   | MATH A280 / A280H 4-5 |
| Calculus-Based Physics: Mechanics                                   | PHYS A185 4           |
| Calculus-Based Physics: Electricity and Magnetism                   | PHYS A280 4           |
| Calculus-Based Physics: Modern                                      | PHYS A285 4           |
| <b>Program Major Units</b>  | <b>24-25</b>          |
| <b>CSU or IGETC for CSU</b>   | <b>37-39</b>          |
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b>         |
| <b>Total Degree Units</b>   | <b>60</b>             |

## POLITICAL SCIENCE

### POLITICAL SCIENCE

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Political Science for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Political Science AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Political Science Department facilitates the success of general education students and political science majors by offering lower division courses in each of the sub-fields: American government, international relations, comparative politics, public law, and political theory. Political Science classes emphasize the importance of an informed citizenry, seek to instill the ability to analyze political phenomena in a critical way, and develop the communication skills to convey those analyses to others.

#### Program Outcomes

1. Students will demonstrate an increased awareness of their rights and responsibilities to themselves and to their communities--local, regional, national and global.
1. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course   | Units               |
|--|---------------------|
| <b>Core Course:</b>  |                     |
| American Government / Honors                                   | PSCI A180 / A180H 3 |
| <b>Subtotal</b>  | <b>3</b>            |
| <b>List A - Complete three (3) courses from the following:</b> |                     |
| Intro to Statistics / Statistics for Behavioral Sciences       | MATH/PSYC A160 4    |
| Or   |                     |
| Introduction to Political Science Research Methods             | PSCI A201 3         |
| International Relations  | PSCI A110 3         |
| Comparative Politics   | PSCI A185 3         |
| Introduction to Political Theory                               | PSCI A188 3         |
| Introduction to Political Science                              | PSCI A200 3         |
| <b>Subtotal</b>  | <b>9-10</b>         |

*Continued on next page*

**POLITICAL SCIENCE AA-T DEGREE (CONTINUED)**

**List B - Complete two (2) courses, selecting from List A courses not yet taken and the following:**

|  |      |      |   |
|--|------|------|---|
| Microeconomics                                   | ECON | A170 | 3 |
| Macroeconomics                                   | ECON | A175 | 3 |
| Women, Politics, and Inequality                  | GNDR | A130 | 3 |
| History of the United States to 1876 / Honors    | HIST | A170 | 3 |
| History of the United States Since 1876 / Honors | HIST | A175 | 3 |
| Survey of Current Issues                         | PSCI | A101 | 3 |
| Introduction to the American Legal System        | PSCI | A190 | 3 |

**Subtotal 6-7**

**Program Major Units 18-19**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**POLYSOMNOGRAPHIC TECHNOLOGY**

**POLYSOMNOGRAPHIC TECHNOLOGY**

**ASSOCIATE IN SCIENCE DEGREE**

Polysomnographic (PSG) Technology is an allied health specialty for the diagnosis and treatment of disorders of sleep and daytime alertness. The range of sleep disorders is varied but includes common disorders such as narcolepsy, sleep apnea, insomnias and many others. PSG technologists operate a variety of sophisticated electronic monitoring devices which record brain activity (EEG), muscle and eye movement, respiration, blood oxygen and other physiological events. Technologists are also involved in evaluation of various treatment methods.

PSG technologists are employed in Sleep Disorders Centers which can be located in medical centers, hospitals or clinic/office settings. The PSG program offers instruction which includes lecture, laboratory experience on campus, clinical experience at accredited sleep centers and physician lectures.

As a CAAHEP-accredited PSG Program, this course of instruction meets the eligibility requirements to take the PSG exam of the Board of Registered Polysomnographic Technologists (BRPT) and The Medical Board of California Licensure as a "Registered Polysomnographic Technologist".

Graduates from OCC's Neurodiagnostic Technology or Respiratory Care programs may complete the PSG degree program with one additional year of study, as many courses from these programs are directly related to Polysomnography (see the Neurodiagnostic Technology and/or Respiratory Care sections of this catalog for more information). Students without these backgrounds can complete the AS degree in Polysomnographic Technology within two years. This program will accept new students to begin in the fall semester of odd years.

**Program Admission**

1. Allied Health 010 course – application and orientation
2. The student must complete Associate in Science degree General Education requirements and the program prerequisites prior to acceptance into the program.

**Program Outcomes**

1. The goal of the program is to meet the needs of the local health care community by preparing students for entry level employment as a professional and competent Polysomnographic Technologist.

**Program Prerequisites:**

|                     |      |      |   |
|---------------------|------|------|---|
| Health Occupations  | ALH  | A010 | 5 |
| Medical Terminology | ALH  | A111 | 3 |
| Anatomy-Physiology  | BIOL | A221 | 4 |

**Subtotal 7.5**

| Course | Units |  |  |
|--------|-------|--|--|
|--------|-------|--|--|

**FALL**

|                                    |      |      |     |
|------------------------------------|------|------|-----|
| Patient Care                       | ALH  | A115 | 2.5 |
| Applied Pharmacology               | ALH  | A130 | 3   |
| Basic Electroencephalography       | NDT  | A110 | 4   |
| Respiratory Anatomy and Physiology | RSPC | A185 | 3   |

**Subtotal 12.5**

**SPRING**

|   |      |      |   |
|---|------|------|---|
| Human Diseases                              | ALH  | A120 | 2 |
| Child Growth and Development                | HMDV | A180 | 3 |
| Advanced Electroencephalography             | NDT  | A115 | 4 |
| Introduction to Neuroanatomy and Physiology | NDT  | A190 | 3 |
| Polysomnography Basics                      | PSG  | A100 | 1 |

**Subtotal 13**

**FALL**

|                                 |      |      |    |
|---------------------------------|------|------|----|
| Introduction to Polysomnography | PSG  | A150 | 3  |
| Polysomnography Testing         | PSG  | A160 | 3  |
| Polysomnography Clinical 1      | PSG  | A165 | 1  |
| Polysomnographic Practice       | PSG  | A170 | .5 |
| Pulmonary Pathology             | RSPC | A265 | 3  |

**Subtotal 9.5**

**INTERSESSION**

|                            |     |      |   |
|----------------------------|-----|------|---|
| Polysomnography Clinical 2 | PSG | A175 | 1 |
|----------------------------|-----|------|---|

**Subtotal 1**

**SPRING**

|                               |     |      |   |
|-------------------------------|-----|------|---|
| Polysomnography Record Review | PSG | A250 | 2 |
| Advanced Polysomnography      | PSG | A260 | 2 |
| Polysomnography Clinical 3    | PSG | A265 | 2 |
| Physician Lecture Series      | PSG | A270 | 1 |
| Polysomnography Internship    | PSG | A285 | 2 |

**Subtotal 9**

**Program Major Units 52.5**

**AS General Education Option 1, 2, or 3 Varies**

**Total Degree Units 64.5**

\*BIOL A221 and HMDV A180 in program double count towards General Education Breadth.

**Polysomnographic Technology Suggested Electives:**

|                                    |           |      |   |
|------------------------------------|-----------|------|---|
| Interpersonal Communication        | CMST      | A100 | 3 |
| Ethics                             | PHIL/RLST | A120 | 3 |
| Conceptual Physics                 | PHYS      | A110 | 3 |
| Abnormal Psychology                | PSYC      | A255 | 3 |
| Statistics for Behavioral Sciences | PSYC      | A160 | 4 |



## PROFESSIONAL MARINER

### PROFESSIONAL MARINER

#### CERTIFICATE OF ACHIEVEMENT

Curriculum includes career path identification and job search preparation in the maritime industry, maritime environment, seamanship, marine safety, boat handling, navigation, and boat maintenance. In addition to lecture, most courses include hands-on practical exercises.

Students must be able to swim 50 yards and tread water for 10 minutes. Previous boating experience is advantageous but not required. Facility fees will be charged.

#### Program Outcomes

1. Communicate verbally and in writing in a clear manner and with correct nautical protocol.
2. Identify maritime career paths along with required U.S. Coast Guard licensing requirements.
3. Demonstrate safe operation and maintenance of vessels.
4. Demonstrate prevention and safety response in First Aid, Personal Survival and Social Responsibility at sea, as well as fire prevention and response.

| Course                              |            |      | Units        |
|-------------------------------------|------------|------|--------------|
| <b>FIRST SEMESTER</b>               |            |      |              |
| Coastal Navigation                  | MARA       | A150 | 3            |
| Maritime Industry                   | MARA       | A151 | 2            |
| Boat Handling and Seamanship        | MARA       | A152 | 3            |
| <b>Subtotal</b>                     |            |      | <b>8</b>     |
| <b>SECOND SEMESTER</b>              |            |      |              |
| Marine Basic Safety Training        | MARA       | A153 | 4            |
| Yachtkeeping and Engine Maintenance | MARA       | A154 | 2            |
| Maritime Environment                | MARA       | A156 | 2            |
| Restricted Elective                 | (see list) |      | 3-5          |
| <b>Subtotal</b>                     |            |      | <b>11-13</b> |
| <b>Total Units</b>                  |            |      | <b>19-21</b> |

**Professional Mariner Restricted Electives - Select three to five (3-5) units from the following:**

|   |           |             |     |
|---|-----------|-------------|-----|
| Any Foreign Language                        |           |             | 4-5 |
| Personal Financial Success                  | BUS       | A120        | 3   |
| Cultural Foods                              | FN        | A185        | 2   |
| Personal Health                             | HLED/PUBH | A100        | 3   |
| Fitness Programs 1                          | KIN       | A107        | 5-3 |
| Strength and Conditioning                   | KIN       | A108        | 5-3 |
| Swimming for Fitness - Level 1              | KIN       | A131        | 1-2 |
| Personal Leadership                         | LEAD      | A180        | 3   |
| Introduction to Sailing                     | MARA      | A136        | 1   |
| Introduction to Keel Boats                  | MARA      | A137        | 1   |
| Introduction to Ocean Sailing               | MARA      | A138        | 1   |
| Radar Observer                              | MARA      | A157        | 2   |
| Professional Mariner Internship and Lecture | MARA      | A200 & A201 | 3   |
| Any Marine Science                          |           |             | 1-3 |
| Precalculus                                 | MATH      | A170        | 4   |
| Calculus                                    | MATH      | A180        | 4   |

## PROFESSIONAL MARINER

### ASSOCIATE IN SCIENCE DEGREE

The Professional Mariner degree prepares students for careers in the maritime industry in Southern California and around the world in private or commercial vessel operations: large private yachts, charter yachts, cruise ships, passenger ferries, sport fishing, commercial fishing, whale watching, dive boats, supply vessels, work boats, tug boats, and commercial shipping. These vessels must operate with qualified crew so the curriculum for the Orange Coast College Professional Mariner program was developed with guidance from an Advisory Council of maritime industry professionals who ranked skills and knowledge that they require in their deck crew. Upon completion of the program, there are employment opportunities with competitive salary.

Students must be able to swim 50 yards and tread water for 10 minutes. Previous boating experience is advantageous but not required. Facility fees will be charged.

#### Program Outcomes

1. Communicate verbally and in writing in a clear manner and with correct nautical protocol.
2. Identify maritime career paths along with required U.S. Coast Guard licensing requirements.
3. Demonstrate safe operation and maintenance of vessels.
4. Demonstrate prevention and safety response in First Aid, Personal Survival and Social Responsibility at sea, as well as fire prevention and response.

| Course                                       |      |             | Units     |
|--|------|-------------|-----------|
| <b>FIRST SEMESTER</b>                        |      |             |           |
| Introduction to Sailing Or                   | MARA | A136        | 1         |
| Introduction to Keel Boats                   | MARA | A137        | 1         |
| Coastal Navigation                           | MARA | A150        | 3         |
| Maritime Industry                            | MARA | A151        | 2         |
| Boat Handling and Seamanship                 | MARA | A152        | 3         |
| Yachtkeeping and Engine Maintenance          | MARA | A154        | 2         |
| Maritime Environment                         | MARA | A156        | 2         |
| <b>Subtotal</b>                              |      |             | <b>13</b> |
| <b>SECOND SEMESTER</b>                       |      |             |           |
| Marine Basic Safety Training                 | MARA | A153        | 4         |
| Radar Observer                               | MARA | A157        | 2         |
| *Professional Mariner Internship and Lecture | MARA | A200 & A201 | 3         |
| <b>Subtotal</b>                              |      |             | <b>9</b>  |

**Program Major Units** **22**

**AS General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **20**

**Total Degree Units** **60**

\*Courses must be taken concurrently

#### Professional Mariner Suggested Electives:

|                      |      |      |     |
|----------------------|------|------|-----|
| Any Foreign Language |      |      | 4-5 |
| Cultural Foods       | FN   | A185 | 2   |
| Precalculus          | MATH | A170 | 4   |

## PSYCHOLOGY

### PSYCHOLOGY

#### ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)

Students graduating with an Associate in Arts in Psychology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Psychology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The field of psychology addresses the scientific study of behavior and mental processes of humans and animals. Learning more about human behavior through scientific research methods is the focus of many psychologists, while other psychologists apply principles of psychology in areas such as psychotherapy, applied behavioral analysis, and industrial/organizational psychology.

This psychology program offers a comprehensive view of psychology by offering a variety of courses that will support transfer in psychology, while providing a foundational understanding of the discipline of psychology, the methods psychologists use to learn about behavior, and applications of psychological information to the world around us.

#### Program Outcomes

1. Identify and describe major concepts, theoretical perspectives, empirical findings, and historical trends in psychology.
2. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                               |      |              | Units     |
|--------------------------------------|------|--------------|-----------|
| <b>Core Courses:</b>                 |      |              |           |
| Introduction to Psychology / Honors  | PSYC | A100 / A100H | 3         |
| Statistics for Behavioral Sciences   | PSYC | A160         | 4         |
| Or                                   |      |              |           |
| Introduction to Statistics / Honors  | MATH | A160 / A160H | 4         |
| Introduction to Experimental Methods | PSYC | A280         | 4         |
| <b>Subtotal</b>                      |      |              | <b>11</b> |

#### List A - Complete the following:

|                 |      |      |          |
|-----------------|------|------|----------|
| Psychobiology   | PSYC | A250 | 3        |
| <b>Subtotal</b> |      |      | <b>3</b> |

#### List B - Complete one (1) course from the following:

|                                    |      |              |          |
|------------------------------------|------|--------------|----------|
| Life Span Developmental Psychology | PSYC | A130         | 3        |
| Principles of Psychology           | PSYC | A185         | 3        |
| Cross-Cultural Psychology / Honors | PSYC | A190 / A190H | 3        |
| Social Psychology                  | PSYC | A260         | 3        |
| <b>Subtotal</b>                    |      |              | <b>3</b> |

#### List C - Complete one (1) course from above not yet taken, or choose from the following:

|                           |      |      |   |
|---------------------------|------|------|---|
| Psychology of Personality | PSYC | A220 | 3 |
| Abnormal Psychology       | PSYC | A255 | 3 |
| Psychology of Learning    | PSYC | A270 | 3 |

|   |               |
|---|---------------|
| <b>Subtotal</b>   | <b>3</b>      |
| <b>Program Major Units</b>  | <b>20</b>     |
| <b>CSU or IGETC for CSU</b>   | <b>37-39</b>  |
| <b>Transferable electives as needed to satisfy unit requirement</b> | <b>Varies</b> |
| <b>Total Degree Units</b>   | <b>60</b>     |

## PUBLIC HEALTH

### PUBLIC HEALTH

#### ASSOCIATE IN ARTS DEGREE

This program will introduce students to health science, including personal health and public health. Students can choose from a variety of courses that will increase their knowledge and understanding of the biopsychosocial model of health, the determinants of health, and how to improve the health of communities. Students will be able to evaluate the burden of disease for a population and analyze global health issues from a social justice perspective. The impact of the environment, socio-economics, politics, and culture on health and health systems are also explored. Though not an Associate Degree for Transfer, this option will prepare students for transfer to CSU Fullerton. Students should see a counselor for questions related to the requirements of specific CSUs.

#### Program Outcomes

1. Students will understand how the body functions and how behavioral choices impact health.
2. Student will be able to analyze global health issues and identify the impact of environment, socioeconomics, politics, and culture on health and health systems.
3. Student will prepare for transfer to local CSUs, i.e., CSU Fullerton.

| Course                        |      |      | Units    |
|-------------------------------|------|------|----------|
| <b>Core Courses:</b>          |      |      |          |
| Personal Health               | PUBH | A100 | 3        |
| Introduction to Public Health | PUBH | A200 | 3        |
| <b>Subtotal</b>               |      |      | <b>6</b> |

#### Complete one (1) course:

|  |      |      |   |
|--|------|------|---|
| Drugs, Health, and Society   | PUBH | A202 | 3 |
| Health and Social Justice  | PUBH | A203 | 3 |
| Peer Health Educator - Level 1   | PUBH | A160 | 2 |
| Assessing and Analyzing Health Information   | PUBH | A230 | 3 |
| Peer Health Education - Level 2  | PUBH | A260 | 2 |
| Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs | INHL | A210 | 3 |
| Techniques and Topics in Health Education  | INHL | A220 | 3 |
| Introduction to Complementary and Alternative Medicine   | INHL | A225 | 3 |
| Introduction to Geographic Information Systems   | GEOG | A190 | 2 |

|                 |            |
|-----------------|------------|
| <b>Subtotal</b> | <b>2-3</b> |
|-----------------|------------|

**Anatomy/Physiology - Complete one (1) course:**

|                    |      |      |   |
|--------------------|------|------|---|
| Human Anatomy      | BIOL | A220 | 5 |
| Anatomy-Physiology | BIOL | A221 | 4 |
| Human Physiology   | BIOL | A225 | 5 |

**Subtotal** **4-5**

**Biology - Science. Complete one (1) biology course with lab:**

|                                  |      |              |   |
|----------------------------------|------|--------------|---|
| Introduction to Biology / Honors | BIOL | A100 / A100H | 4 |
| Cell and Molecular Biology       | BIOL | A180         | 4 |

**Subtotal** **4**

**Oral Communication - Complete one (1) course:**

|                             |      |      |   |
|-----------------------------|------|------|---|
| Interpersonal Communication | CMST | A100 | 3 |
| Public Speaking             | CMST | A110 | 3 |

**Subtotal** **3**

**Social Science - Complete one (1) course:**

|                                     |      |              |   |
|-------------------------------------|------|--------------|---|
| Introduction to Psychology / Honors | PSYC | A100 / A100H | 3 |
| Introduction to Sociology / Honors  | SOC  | A100 / A100H | 3 |

**Subtotal** **3**

**Program Major Units** **22-24**

**AA General Education Option 1, 2, or 3** **Varies**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

**PUBLIC HEALTH SCIENCE**

**ASSOCIATE IN SCIENCE DEGREE FOR TRANSFER (AS-T)**

Students graduating with an Associate in Science in Public Health Science for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Public Health Science AS-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Associate in Science in Public Health Science for Transfer focuses on an understanding of the health of populations. This degree is designed to prepare students in the study of public health science and provide comprehensive preparation for upper-division work. Students choosing this degree program will study a range of topics related to human health and disease including: core functions and disciplines of public health; human anatomy and physiology; diseases and their causes, including risk factor; distributions of diseases; primary prevention strategies; and behavior-change theory and application. Students will be gain understanding of the biopsychosocial basis for health and healthy populations. Further they will be able to understand and assess the burden of disease on the health of populations, including the impact of environmental exposures; use of data to support evidence based practices; develop and deliver health programs and interventions that are based on behavior frameworks; and evaluate health programs and initiatives for effectiveness. Public Health Science bridges the gap between scientific discoveries and the application of this knowledge to improve the quality of life.

**Program Outcomes**

1. Students will be able to assess the burden of disease on the health of populations, including the impact of environmental exposures and use data to support evidence based practices.
2. Students will be able to develop and deliver health programs and interventions that are based on behavior frameworks, and evaluate health programs and initiatives for effectiveness.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course                              | Units |              |           |
|-------------------------------------|-------|--------------|-----------|
| <b>Required Core:</b>               |       |              |           |
| Personal Health                     | PUBH  | A100         | 3         |
| Concepts in Public Health           | PUBH  | A200         | 3         |
| Introduction to Statistics / Honors | MATH  | A160 / A160H | 4         |
| Or                                  |       |              |           |
| Statistics for Behavioral Sciences  | PSYC  | A160         | 4         |
| Introduction to Biology / Honors    | BIOL  | A100 / A100H | 4         |
| General Chemistry A                 | CHEM  | A180         | 5         |
| Introduction to Psychology / Honors | PSYC  | A100 / A100H | 3         |
| Human Anatomy                       | BIOL  | A220         | 5         |
| Human Physiology                    | BIOL  | A225         | 5         |
| <b>Subtotal</b>                     |       |              | <b>32</b> |

**List A - Complete one (1) of the following:**

|                                    |      |              |   |
|------------------------------------|------|--------------|---|
| Microeconomics / Honors            | ECON | A170 / A170H | 3 |
| Macroeconomics / Honors            | ECON | A175 / A175H | 3 |
| Nutrition                          | FN   | A170         | 3 |
| Principles of Human Sexuality 1    | PSYC | A165         | 3 |
| Drugs, Health, and Society         | PUBH | A202         | 3 |
| Health and Social Justice          | PUBH | A203         | 3 |
| Introduction to Sociology / Honors | SOC  | A100 / A100H | 3 |

**Subtotal** **3**

**Program Major Units** **35**

**CSU or IGETC for CSU** **37-39**

**Transferable electives as needed to satisfy unit requirement** **Varies**

**Total Degree Units** **60**

## RADIOLOGIC TECHNOLOGY

### RADIOLOGIC TECHNOLOGY

#### ASSOCIATE IN SCIENCE DEGREE

The Radiologic Technologist captures images of human anatomy utilizing digital, x-ray film, or video for diagnostic use by a radiologist or other medical specialist. Graduates of the program are eligible for examination by the American Registry of Radiologist Technologists. Successful applicants have the right to use the title "Registered Radiologic Technologist" (RT)(R)(ARRT). In order to practice in California, the R.T. must also apply for licensure by the Department of Health Services in Sacramento. Completion of the Associate in Science degree a program qualifies the student for eligibility for the state C.R.T. Examination. A bachelor degree program has been articulated with CSU Northridge. The Orange Coast College Radiologic Technology program is accredited by the Joint Review Committee on Education in Radiologic Technology, 20 N. Wacker Drive, Suite 900, Chicago, IL 60606-2901, Tel: (312) 704-5300, Fax: (312) 704-5304 and approved by the California Department of Public Health and is affiliated with numerous hospitals in Orange County. Classrooms are well equipped and include on-campus energized x-ray laboratories.

Program application process is accomplished by taking program prerequisite, Allied Health A010. This short-term course is mandatory for all prospective program applicants. The Radiologic Technology program starts only in the fall semester of every school year.

The Radiologic Technology program is a full-time (two years including one summer session and two intersessions) program. Successful program completion requires the following: 1) completion of all required radiologic technology courses as outlined in catalog, 2) completion of approximately 1850 clinical hours, and 3) completion of all requirements for an Associate in Science degree as required by Orange Coast College. These specific program completion requirements must be satisfied within the two-year time frame of the Radiologic Technology program. Eligibility for the post program state and registry examinations is dependent upon meeting these requirements.

This program requires the student to participate in clinical experience concurrent with classroom courses. Clinical responsibilities will be arranged by the Radiologic Technology faculty and will include evening and/or weekend assignments. The student receives no salary for this clinical experience but will receive course credit toward program completion. Clinical sites will be within a 30 mile radius of the school and transportation is the responsibility of the student and may include parking fees.

Radiologic Technology is a rapidly expanding allied health profession.

#### Program Admission:

- Allied Health A010 course - application and orientation.
- The student must complete the general education requirements for an Associate in Science Degree requirements and the program prerequisites prior to acceptance to the program.

#### Program Outcomes

- Graduate students who are clinically competent and ready to begin a successful career in the Radiologic Sciences.
- Students will be able to demonstrate professional and ethical behaviors.
- Students will exhibit the communication skills necessary to effectively perform the duties of a Radiographer in a variety of health care environments.

- Students will demonstrate independent critical thinking skills to solve clinical practice related problems to optimize diagnostic outcomes.

#### Program Prerequisites:

|                     |      |      |     |
|---------------------|------|------|-----|
| Health Occupations  | ALH  | A010 | 5   |
| Medical Terminology | ALH  | A111 | 3   |
| Anatomy-Physiology  | BIOL | A221 | 4   |
| Radiologic Physics  | RADT | A100 | 2.0 |

**Subtotal 9.5**

| Course | Units |  |  |
|--------|-------|--|--|
|--------|-------|--|--|

#### FALL

|   |      |      |     |
|---|------|------|-----|
| Patient Care                            | ALH  | A115 | 2.5 |
| Radiation and Imaging Safety            | RADT | A105 | 1   |
| Beginning Radiologic Practice           | RADT | A165 | 1.5 |
| Radiographic Positioning and Critique 1 | RADT | A170 | 3   |
| Clinical Lab 1                          | RADT | A171 | 2   |
| Radiographic Imaging                    | RADT | A180 | 3   |

**Subtotal 13**

#### INTERSESSION

|                |      |      |   |
|----------------|------|------|---|
| Clinical Lab 2 | RADT | A172 | 2 |
|----------------|------|------|---|

**Subtotal 2**

#### SPRING

|   |      |      |   |
|---|------|------|---|
| Human Diseases                          | ALH  | A120 | 2 |
| Radiographic Positioning and Critique 2 | RADT | A175 | 3 |
| Clinical Lab 3                          | RADT | A176 | 7 |
| Radiographic Pathology                  | RADT | A185 | 1 |

**Subtotal 13**

#### SUMMER

|                |      |      |     |
|----------------|------|------|-----|
| Clinical Lab 4 | RADT | A177 | 4.5 |
|----------------|------|------|-----|

**Subtotal 4.5**

#### FALL

|   |      |      |      |
|---|------|------|------|
| Principles of Digital Imaging and Computer Applications | RADT | A265 | 2    |
| Radiographic Positioning and Critique 3                 | RADT | A270 | 2.5  |
| Clinical Lab 5  | RADT | A271 | 10.5 |

**Subtotal 15**

#### INTERSESSION

|                |      |      |   |
|----------------|------|------|---|
| Clinical Lab 6 | RADT | A276 | 2 |
|----------------|------|------|---|

**Subtotal 2**

#### SPRING

|   |      |      |     |
|---|------|------|-----|
| Advanced Radiologic Patient Care        | RADT | A216 | 2   |
| Radiographic Positioning and Critique 4 | RADT | A275 | 3   |
| Clinical Lab 7                          | RADT | A277 | 6   |
| ARRT Board Preparation                  | RADT | A285 | 1   |
| Applied Physics and Fluoroscopy         | RADT | A290 | 2.5 |

**Subtotal 14.5**

**Program Major Units 73.5**

**AS General Education Option 1, 2, or 3 Varies**

**Total Minimum Degree Units 88.5**

#### Radiologic Technology Suggested Elective:

|        |           |      |   |
|--------|-----------|------|---|
| Ethics | PHIL/RLST | A120 | 3 |
|--------|-----------|------|---|

## REAL ESTATE

### REAL ESTATE – BROKER

#### CERTIFICATE OF ACHIEVEMENT

Students who complete the Real Estate-Broker Certificate of Achievement are equipped with immediately marketable skills and also the coursework necessary to sit for the California Real Estate Broker's Examination.

#### Program Outcomes

- Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.
- Communicate effectively in personal organizational and real estate environments.
- Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.
- Be prepared to sit for the California Real Estate Broker's Exam.

| Course                        |      |      | Units        |
|-------------------------------|------|------|--------------|
| Accounting for Small Business | ACCT | A100 | 3            |
| Or                            |      |      |              |
| Financial Accounting          | ACCT | A101 | 4            |
| Business Law                  | BUS  | A110 | 3            |
| Microeconomics                | ECON | A170 | 3            |
| Or                            |      |      |              |
| Macroeconomics                | ECON | A175 | 3            |
| Real Estate Principles        | RE   | A110 | 3            |
| Legal Aspects of Real Estate  | RE   | A120 | 3            |
| Real Estate Practice          | RE   | A130 | 3            |
| Real Estate Appraisal         | RE   | A140 | 3            |
| Real Estate Finance           | RE   | A150 | 3            |
| <b>Total Units</b>            |      |      | <b>24-25</b> |

#### ASSOCIATE IN SCIENCE DEGREE

Complete the Real Estate Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

### REAL ESTATE – SALESPERSON

#### CERTIFICATE OF SPECIALIZATION

This program is designed for those individuals interested in pursuing a career in real estate. Real Estate Salesperson license requirements: Real Estate A110 and A130 are required courses, plus one other real estate elective. All three are required to take the state exam. Check with the California Department of Real Estate for any additional requirements and forms.

#### Program Outcomes

- Function effectively in an entry-level real estate position using the skills, principles, and tools they have acquired.
- Apply the real estate principles they have learned to effectively facilitate real estate transactions in a variety of settings.

| Course                       |    |      | Units    |
|------------------------------|----|------|----------|
| Real Estate Principles       | RE | A110 | 3        |
| Real Estate Practice         | RE | A130 | 3        |
| Legal Aspects of Real Estate | RE | A120 | 3        |
| Or                           |    |      |          |
| Real Estate Appraisal        | RE | A140 | 3        |
| Or                           |    |      |          |
| Real Estate Finance          | RE | A150 | 3        |
| <b>Total Units</b>           |    |      | <b>9</b> |

#### Real Estate - Salesperson Suggested Electives:

|                                       |      |      |   |
|---------------------------------------|------|------|---|
| Accounting for Small Business         | ACCT | A100 | 3 |
| Business Law                          | BUS  | A110 | 3 |
| Introduction to Computer Applications | CIS  | A100 | 3 |
| Microeconomics                        | ECON | A170 | 3 |
| Macroeconomics                        | ECON | A175 | 3 |

## RELIGIOUS STUDIES

### RELIGIOUS STUDIES

#### CERTIFICATE OF SPECIALIZATION

The Religious Studies program at Orange Coast College is designed to give students broad introduction to the academic study of religion. Students working towards an Associate in Arts degree will find Religious Studies courses can be used for some General Education requirements. Students transferring to Religious Studies programs at four-year colleges will have a strong background for upper division work in the field.

#### Program Outcomes

- Students will be able to explain various dimensions of religion, describe a methodology for studying religion, and be able to describe and compare some beliefs and practices of two or more religions.

| Course                            |            |      | Units     |
|-----------------------------------|------------|------|-----------|
| Introduction to Religious Studies | RLST       | A100 | 3         |
| World Religion                    | RLST       | A110 | 3         |
| Philosophy of Religion            | RLST       | A115 | 3         |
| Restricted Electives              | (see list) |      | 6         |
| <b>Total Units</b>                |            |      | <b>15</b> |

#### Religious Studies Restricted Electives - Select six (6) units from the following:

|                                      |      |      |   |
|--------------------------------------|------|------|---|
| History of Christianity              | RLST | A128 | 3 |
| Life and Times of Jesus              | RLST | A130 | 3 |
| History of Judaism                   | RLST | A140 | 3 |
| Mysticism and Meditation             | RLST | A145 | 3 |
| Eastern Thought                      | RLST | A150 | 3 |
| Contemporary Religious Topics: Islam | RLST | A160 | 3 |

## RELIGIOUS STUDIES

### ASSOCIATE IN ARTS DEGREE

The Religious Studies program at Orange Coast College is designed to provide students with a broad introduction to the academic study of religion. Students transferring to Religious Studies programs at four-year colleges will have a strong background for upper division work in the major. Non-majors will find most Religious Studies fulfill area requirements for AA and transfer degrees.

#### Program Outcomes

1. Students will be able to analyze dimensions of various religions utilizing methodologies appropriate to the academic study of religion.

| Course                            |           |      | Units |
|-----------------------------------|-----------|------|-------|
| <b>Core Courses:</b>              |           |      |       |
| Introduction to Religious Studies | RLST      | A100 | 3     |
| World Religion                    | RLST      | A110 | 3     |
| Philosophy of Religion            | RLST/PHIL | A115 | 3     |

**Subtotal** 9

#### Select a minimum of nine (9) units from the following:

|                                      |           |               |   |
|--------------------------------------|-----------|---------------|---|
| Ethics                               | RLST/PHIL | A120          | 3 |
| Introduction to the Bible            | RLST      | A125          | 3 |
| History of Christianity              | RLST      | A128          | 3 |
| Life and Times of Jesus              | RLST      | A130          | 3 |
| History of Judaism                   | RLST      | A140          | 3 |
| Mysticism and Meditation             | RLST      | A145          | 3 |
| Eastern Thought                      | RLST      | A150          | 3 |
| Contemporary Religious Topics: Islam | RLST      | A160          | 3 |
| The Bible as Literature / Honors     | RLST/ENGL | A180 / A141/H | 3 |

**Program Major Units** 18

**AA General Education Option 1, 2, or 3** Varies

**Transferable electives as needed to satisfy unit requirement** Varies

**Total Degree Units** 60

## RESPIRATORY CARE

## RESPIRATORY CARE

### ASSOCIATE IN SCIENCE DEGREE

Respiratory Care is an allied health specialty dealing with the diagnosis, treatment, and management of patients with acute and chronic diseases affecting the pulmonary system. Respiratory Care Practitioners/Respiratory Therapists work in all areas within the hospital, especially within the critical care areas with patients who are in a life-threatening phase of their illness. Additionally, some Respiratory Care Practitioners/Respiratory Therapists work with home care agencies to treat patients in their homes. Duties include analysis of pulmonary functions and arterial blood gases, life support ventilation, CPR, assessment of pulmonary status, airway care, plus other related duties. Specialties in Respiratory Care include adult critical care, neonatal and pediatric critical care, pulmonary function testing, home care and rehabilitation, management, and education.

The Respiratory Care program at Orange Coast College is a two-year Associate in Science Degree program beginning each fall semester. Courses within the program include lectures, skills application of procedures and techniques in a laboratory setting on campus, and approximately 1000 hours of clinical practice. Clinical practice is within area hospitals performing the latest procedures in medicine. There is also a series including discussions with physicians.

The Respiratory Care program at Orange Coast College is fully accredited. Program graduates are eligible for California legal certification (licensure) (RCP), along with Certification (CRT) and Registered Respiratory Therapist (RRT) by the National Board for Respiratory Care. The employment outlook for Respiratory Care Practitioners/Respiratory Therapists is good throughout the United States.

Fully accredited Respiratory Therapist Program by the Commission on Accreditation of Allied Health Education Programs: [www.coarc.com](http://www.coarc.com)

State License: Legally Certified Respiratory Care Practitioner by Respiratory Care Board of California. National Credential: CRT, RRT, CRTT, CPFT, by the National Board for Respiratory Care (NBRC)

#### Program Admission:

1. Allied Health A010 course – application and orientation.
2. The student must complete the general education requirements for Mathematics and English composition for the Associate in Science Degree and the program prerequisites prior to acceptance to the program.

Program requires successful completion of a comprehensive national exam for graduation.

#### Program Outcome

1. To prepare students as competent Respiratory Care Practitioners.

#### Program Prerequisites:

|                           |      |      |     |
|---------------------------|------|------|-----|
| Health Occupations        | ALH  | A010 | 0.5 |
| Medical Terminology       | ALH  | A111 | 3   |
| Anatomy-Physiology        | BIOL | A221 | 4   |
| Introduction to Chemistry | CHEM | A110 | 5   |
| Intermediate Algebra      | MATH | A030 | 4   |
| Or higher                 |      |      |     |

**Subtotal** 16.5

| Course |  |  | Units |
|--------|--|--|-------|
|--------|--|--|-------|

#### FALL

|                                    |      |      |     |
|------------------------------------|------|------|-----|
| Patient Care                       | ALH  | A115 | 2.5 |
| Human Diseases                     | ALH  | A120 | 2   |
| Basic Microbiology                 | BIOL | A114 | 2   |
| Respiratory Anatomy and Physiology | RSPC | A185 | 3   |
| Basic Respiratory Care Equipment   | RSPC | A190 | 3   |
| Respiratory Pharmacology           | RSPC | A195 | 1   |

**Subtotal** 13.5

#### SPRING

|   |      |      |     |
|---|------|------|-----|
| Applied Pharmacology                      | ALH  | A130 | 3   |
| Clinical Lab 1                            | RSPC | A191 | 1.5 |
| Arterial Blood Gases, Theory and Practice | RSPC | A260 | 2   |
| Respiratory Care Procedures               | RSPC | A275 | 3   |
| Polysomnography Basics                    | PSG  | A100 | 1   |

**Subtotal** 10.5

#### SUMMER

|                |      |      |   |
|----------------|------|------|---|
| Clinical Lab 2 | RSPC | A192 | 3 |
|----------------|------|------|---|

**Subtotal** 3

**FALL**

|  |      |      |             |
|--|------|------|-------------|
| Pulmonary Pathology                    | RSPC | A265 | 3           |
| Ventilators and Respiratory Management | RSPC | A270 | 3           |
| Clinical Lab 3                         | RSPC | A276 | 4           |
| Physician Series 1                     | RSPC | A279 | 5           |
| <b>Subtotal</b>                        |      |      | <b>10.5</b> |

AS Degree GE must be complete by the end of year two fall semester.

**INTERSESSION**

|                              |      |      |          |
|------------------------------|------|------|----------|
| Home Care and Rehabilitation | RSPC | A255 | 1        |
| <b>Subtotal</b>              |      |      | <b>1</b> |

**SPRING**

|                               |      |      |           |
|-------------------------------|------|------|-----------|
| Pulmonary Case Assessment     | RSPC | A278 | 1         |
| Critical Care Monitoring      | RSPC | A280 | 1         |
| Pulmonary Function Testing    | RSPC | A285 | 2         |
| Clinical Lab 4                | RSPC | A286 | 3         |
| Clinical Internship           | RSPC | A287 | 2         |
| Neonatal Intensive Care       | RSPC | A290 | 2         |
| Respiratory Care Board Review | RSPC | A296 | 1         |
| <b>Subtotal</b>               |      |      | <b>12</b> |

**Program Major Units** **67**

**AS General Education Option 1, 2, or 3** **Varies**

**Total Degree Units** **82**

**POLYSOMNOGRAPHY CROSS-TRAINING OPTION**

This option is recommended for Respiratory Care graduates who would like to cross-train as Polysomnographic Technologists. Upon completing the cross-training courses, students will earn an additional AS in Polysomnography.

**Program Option Prerequisite:**

Respiratory Care Associate in Science Degree

**Subtotal** **76**

| Course                          |     |      | Units       |
|---------------------------------|-----|------|-------------|
| <b>FALL</b>                     |     |      |             |
| Basic Electroencephalography    | NDT | A110 | 4           |
| Introduction to Polysomnography | PSG | A150 | 3           |
| Polysomnography Testing 1       | PSG | A160 | 2           |
| Polysomnography Clinical 1      | PSG | A165 | 1           |
| Polysomnographic Practice       | PSG | A170 | 5           |
| *Polysomnography Clinical 2     | PSG | A175 | 1           |
| <b>Subtotal</b>                 |     |      | <b>11.5</b> |

**SPRING**

|  |      |      |     |
|--|------|------|-----|
| Child Growth and Development                 | HMDV | A180 | 3   |
| Advanced Electroencephalography              | NDT  | A115 | 4   |
| Introduction to Neuro Anatomy and Physiology | NDT  | A190 | 3   |
| Polysomnography Record Review                | PSG  | A250 | 2.5 |
| Polysomnography Testing 2                    | PSG  | A260 | 2   |
| Polysomnography Clinical 3                   | PSG  | A265 | 2   |
| Physician Lecture Series                     | PSG  | A270 | 1   |
| Polysomnography Internship                   | PSG  | A285 | 2   |

**Subtotal** **19.5**

**Total Units** **107**

\*Required Clinical: course must be taken in sequence. Contact the department for additional information.

**SOCIOLOGY**

**SOCIOLOGY**

**ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Sociology for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Sociology AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

The Sociology program provides students with a core curriculum that instills the knowledge, skills, and practices of sociological content, theory, and methodology. In addition to helping students meet general education and core requirements for transfer to an upper-level Sociology program or to fulfill co-curricular requirements for other disciplines, the courses are also designed to help students understand the structure, processes, and functions of society, the key theoretical approaches and insights that inform sociology, and the role of social theory and research methods in understanding society. Further, the program seeks to foster critical and systemic thinking and increase self-knowledge and awareness of the diversity of the human condition.

**Program Outcomes**

1. Use one of the three main sociological perspectives to explain the development of a social inequality.
2. Describe the advantages and disadvantages of various sociological methods.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course   |      |              | Units      |
|--|------|--------------|------------|
| <b>Core Courses:</b>                               |      |              |            |
| Introduction to Sociology / Honors                 | SOC  | A100 / A100H | 3          |
| <b>Subtotal</b>                                    |      |              | <b>3</b>   |
| <b>List A - Complete two (2) of the following:</b> |      |              |            |
| Introduction to Statistics                         | MATH | A160 / A160H | 4          |
| Or   |      |              |            |
| Statistics for Behavioral Sciences                 | PSYC | A160         | 4          |
| Analysis of Social Problems / Honors               | SOC  | A185 / A185H | 3          |
| Introduction to Research Methods                   | SOC  | A200         | 3          |
| <b>Subtotal</b>                                    |      |              | <b>6-7</b> |

*Continued on next page*

**SOCIOLOGY AA-T DEGREE (CONTINUED)**

**List B - Complete two (2) courses, selecting from List A courses not yet taken and the following:**

|   |      |      |   |
|---|------|------|---|
| Introduction to Gender Studies          | GNDR | A100 | 3 |
| Introduction to Marriage and the Family | SOC  | A110 | 3 |
| Introduction to Race and Ethnicity      | SOC  | A150 | 3 |

**Subtotal 6-7**

**List C - Complete one (1) course from above not yet taken, or choose from the following:**

|                                    |           |              |   |
|------------------------------------|-----------|--------------|---|
| Cultural Anthropology / Honors     | ANTH      | A100 / A100H | 3 |
| Anthropology of Nonverbal Behavior | ANTH      | A105         | 3 |
| Men, Women, and Communication      | CMST/GNDR | A165         | 3 |
| Contemporary Ethnic America        | ETHS      | A100         | 3 |
| The Ethnic Family                  | ETHS/SOC  | A190         | 3 |
| Women, Politics, and Inequality    | GNDR      | A130         | 3 |

**Subtotal 3-4**

**Program Major Units 18-19**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**Required Prerequisites:**

|                              |      |      |   |
|------------------------------|------|------|---|
| Health Occupations           | ALH  | A010 | 5 |
| Anatomy-Physiology           | BIOL | A221 | 4 |
| Child Growth and Development | HMDV | A180 | 3 |

**Subtotal 7.5**

| Course | Units |  |  |
|--------|-------|--|--|
|--------|-------|--|--|

**FALL**

|   |      |      |     |
|---|------|------|-----|
| Patient Care  | ALH  | A115 | 2.5 |
| Medical Terminology                                 | ALH  | A111 | 3   |
| Introduction to Speech-Language Pathology Assistant | SLPA | A100 | 2   |
| Speech, Language, and Hearing Development           | SLPA | A115 | 3   |
| Speech-Language Administrative Procedures           | SLPA | A120 | 2   |

**Subtotal 12.5**

**SPRING**

|   |      |      |   |
|---|------|------|---|
| Introduction to Linguistics                         | ANTH | A190 | 3 |
| Principles and Practices of Teaching Young Children | EC   | A155 | 3 |
| Introduction to Communication Disorders             | SLPA | A140 | 3 |
| Introduction to Phonetics                           | SLPA | A150 | 3 |

**Subtotal 12**

**FALL**

|                                     |      |      |   |
|-------------------------------------|------|------|---|
| Early Childhood Laboratory          | EC   | A156 | 2 |
| Observing and Recording Behavior    | EC   | A165 | 3 |
| Screening and Therapeutic Processes | SLPA | A180 | 3 |
| SLPA Clinical Experience 1          | SLPA | A190 | 3 |

**Subtotal 11**

**SPRING**

|                                       |      |      |   |
|---------------------------------------|------|------|---|
| Human Diseases                        | ALH  | A120 | 2 |
| Introduction to the Exceptional Child | HMDV | A210 | 3 |
| Adult and Geriatric Disorders         | SLPA | A200 | 2 |
| SLPA Clinical Experience 2            | SLPA | A250 | 5 |

**Subtotal 12**

**Program Major Units 55**

**AS General Education Option 1, 2, or 3 Varies**

**Total Degree Units 67**

\*ANTH A190, BIOL A221, and HMDV A180 and in program double count towards General Education Breadth.

**SPEECH-LANGUAGE PATHOLOGY ASSISTANT**

**SPEECH-LANGUAGE PATHOLOGY ASSISTANT**

**ASSOCIATE IN SCIENCE DEGREE**

The Speech-Language Pathology Assistant program will provide the community with professionally trained personnel to assist the speech pathologist in this specialized field and to provide services in multiple settings to a diverse population in the administration of therapeutic and screening services. Employment opportunities include jobs as speech-language pathology assistants in educational institutes, hospitals, private offices, and rehabilitation centers. State of California Department of Consumer Affairs, Speech-Language Pathology and Audiology Board approved for licensure.

**Program Admission**

- Allied Health A010 course – application and orientation.
- The student must complete the general education requirements for Mathematics and English composition for the Associate in Science Degree and the program prerequisites prior to acceptance to the program.

**Program Outcome**

- Graduates of the program will be competent Speech-Language Pathology Assistants meeting the employment needs of the community and participating in professional growth activities.

**THEATRE ARTS**

**THEATRE ARTS**

**ASSOCIATE IN ARTS DEGREE**

Complete eighteen (18) units from the following and the Associate in Arts graduation requirements as outlined in the Graduation Requirements section of the catalog. If a student chooses this degree option, a plan must be developed with a counselor and placed on file prior to petitioning for graduation.



**Program Outcome**

1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors and designers, past and present.
3. Develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.

| Course  |      |      | Units    |
|---|------|------|----------|
| <b>Core Courses:</b>                                  |      |      |          |
| Introduction to Theatre                               | THEA | A100 | 3        |
| Or  |      |      |          |
| Introduction to History and Literature of the Theatre | THEA | A101 | 3        |
| And   |      |      |          |
| Acting Fundamentals                                   | THEA | A106 | 3        |
| Or  |      |      |          |
| Technical Theatre Practicum                           | THEA | A129 | 3        |
| And   |      |      |          |
| Drama Rehearsal and Performance - Beginning           | THEA | A120 | 3        |
| Or  |      |      |          |
| Musical Theatre and Performance - Beginning           | THEA | A126 | 3        |
| Or  |      |      |          |
| Comedy Rehearsal and Performance - Beginning          | THEA | A123 | 3        |
| Or  |      |      |          |
| Elizabethan Play Workshop and Production              | THEA | A172 | 3        |
| <b>Subtotal</b>                                       |      |      | <b>9</b> |

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

\*Courses taken as part of the core cannot be used to satisfy the unit requirement for this section.

|  |      |        |             |
|--|------|--------|-------------|
| Acting Fundamentals                          | THEA | A106*  | 3           |
| Acting 2                                     | THEA | A107   | 3           |
| Theatre Laboratory Level 1                   | THEA | A110   | 3           |
| Theatre Laboratory Level 2                   | THEA | A111   | 3           |
| Theatre Laboratory Level 3                   | THEA | A112   | 3           |
| Theatre Laboratory Level 4                   | THEA | A113   | 3           |
| Acting for Camera and Stage                  | THEA | A115   | 3           |
| Drama Rehearsal and Performance - Beginning  | THEA | A120 * | 3           |
| Comedy Rehearsal and Performance - Beginning | THEA | A123*  | 3           |
| Musical Theatre and Performance - Beginning  | THEA | A126*  | 3           |
| Technical Theatre Practicum                  | THEA | A129*  | 3           |
| OCC Theatre Repertory 1                      | THEA | A131   | 3           |
| OCC Theatre Repertory 2                      | THEA | A132   | 3           |
| OCC Theatre Repertory 3                      | THEA | A133   | 3           |
| OCC Theatre Repertory 4                      | THEA | A134   | 3           |
| Stage Scenery                                | THEA | A175   | 3           |
| Stage Lighting                               | THEA | A176   | 3           |
| Make-Up                                      | THEA | A177   | 3           |
| Stage Costuming                              | THEA | A178   | 3           |
| Advanced Make-Up                             | THEA | A182   | 3           |
| Body Movement for the Actor                  | THEA | A188   | 3           |
| Stage Combat                                 | THEA | A189   | 2           |
| Voice and Articulation                       | THEA | A200   | 3           |
| Acting 3                                     | THEA | A206   | 3           |
| Acting 4                                     | THEA | A207   | 3           |
| Rehearsal and Performance                    | THEA | A215   | 2           |
| Directing                                    | THEA | A275   | 3           |
| Advanced Directing                           | THEA | A285   | 3           |
| <b>Subtotal</b>                              |      |        | <b>9-10</b> |

**Program Major Units 18**

**AA General Education Option 1, 2, or 3 Varies**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

**THEATRE ARTS**

**ASSOCIATE IN ARTS DEGREE FOR TRANSFER (AA-T)**

Students graduating with an Associate in Arts in Theatre Arts for Transfer Degree are well positioned to complete a Bachelor's Degree in a similar major within the California State University system with 60 units of upper-division coursework. Students who complete the Theatre Arts AA-T degree are guaranteed admission to the CSU system, but not to a particular campus or major. Students must maintain a minimum grade point average (GPA) of at least 2.0 in all CSU-transferable coursework. While a minimum 2.0 is required for CSU admission, some majors may require a higher GPA. Please consult a counselor for more information.

**Program Outcomes**

1. Understand and demonstrate the fundamental performance and technical production processes for the theatre arts.
2. Demonstrate knowledge of the historical and cultural dimensions of theatre, including the works of leading playwrights, actors, directors, and designers, develop a clear understanding of the interaction between script, actor, and audience and the areas of scenery, lighting, sound and costume.
3. Students will be eligible and prepared for admission (SB 1440 and Education Code 66746) to California State University system schools.

| Course  |      |      | Units    |
|---|------|------|----------|
| <b>Core Courses:</b>                                  |      |      |          |
| Introduction to History and Literature of the Theatre | THEA | A101 | 3        |
| Acting Fundamentals                                   | THEA | A106 | 3        |
| Drama Rehearsal and Performance - Beginning           | THEA | A120 | 3        |
| Or  |      |      |          |
| Comedy Rehearsal and Performance - Beginning          | THEA | A123 | 3        |
| Or  |      |      |          |
| Musical Theatre and Performance - Beginning           | THEA | A126 | 3        |
| Or  |      |      |          |
| Technical Theatre Practicum                           | THEA | A129 | 3        |
| <b>Subtotal</b>                                       |      |      | <b>9</b> |

**List A - Complete three (3) courses, choosing from above core courses not yet completed and the following:**

|                            |      |      |          |
|----------------------------|------|------|----------|
| Acting 2                   | THEA | A107 | 3        |
| Theatre Laboratory Level 1 | THEA | A110 | 3        |
| Stage Scenery              | THEA | A175 | 3        |
| Stage Lighting             | THEA | A176 | 3        |
| Make-Up                    | THEA | A177 | 3        |
| Stage Costuming            | THEA | A178 | 3        |
| <b>Subtotal</b>            |      |      | <b>9</b> |

**Program Major Units 18**

**CSU or IGETC for CSU 37-39**

**Transferable electives as needed to satisfy unit requirement Varies**

**Total Degree Units 60**

## WELDING TECHNOLOGY

Welding Technology is the application of the art and science of joining metals. Welding technologists have important roles in the fabrication and construction of nuclear and fossil fuel power plants, heavy equipment, agricultural machinery, petrochemical plants, bridges, buildings, floating and underwater vessels, automobiles, appliances, and projects for national security. Specifically anything involving metals, from miniature electronic devices to sophisticated space projects, will require the skills of the expert welding technologist. These highly skilled members of the technological team apply practical working knowledge of welding processes, welding metallurgy and welding code standards in solving problems of welding design and production. The OCC Welding Department is licensed to qualify (certify) welders to code standards. All qualification training and tests are prescribed and follow the guide of the American National Standard Institute (ANSI) codes requirements.

## WELDING TECHNOLOGY

### CERTIFICATE OF ACHIEVEMENT

The Certificate of Achievement program in Welding Technology is for those who desire advanced knowledge of welding for employment as welding technicians,

Welding inspectors, welding engineers, welding supervisors, and advanced welders. Students also completing the required general education requirements and electives may earn the Associate in Science degree. In addition, many OCC welding courses are transferable and can be used by those students who are interested in the welding engineering degree program at Ohio State University. Whatever the case, a person's chances for the job of their choice are much higher when they have the technical background as evidenced by earning our Certificate of Achievement in welding.

#### Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course   | Units |      |              |
|--|-------|------|--------------|
| <b>FALL</b>                                    |       |      |              |
| Freshman Composition                           | ENGL  | A100 | 3            |
| Arc and Oxy-acetylene Welding                  | WELD  | A100 | 3            |
| Or   |       |      |              |
| Arc and Oxy-acetylene Welding                  | WELD  | A101 | 4            |
| Mathematics and Fabrication Layout For Welders | WELD  | A120 | 4            |
| <b>Subtotal</b>                                |       |      | <b>10-11</b> |
| <b>SPRING</b>                                  |       |      |              |
| Advanced Welding                               | WELD  | A200 | 3            |
| Or   |       |      |              |
| Advanced Welding                               | WELD  | A201 | 4            |
| Welding Metallurgy                             | WELD  | A230 | 3            |
| <b>Subtotal</b>                                |       |      | <b>6-7</b>   |
| <b>FALL</b>                                    |       |      |              |
| Welding Specs and Codes                        | WELD  | A220 | 2            |
| Gas Tungsten Arc Welding Level 1               | WELD  | A130 | 3            |
| Or   |       |      |              |
| Gas Tungsten Arc Welding Level 2               | WELD  | A131 | 3            |
| Or   |       |      |              |

|                      |      |      |          |
|----------------------|------|------|----------|
| Pipe Welding Level 1 | WELD | A250 | 3        |
| Or                   |      |      |          |
| Pipe Welding Level 2 | WELD | A251 | 3        |
| Or                   |      |      |          |
| Pipe Welding Level 3 | WELD | A252 | 3        |
| Or                   |      |      |          |
| Pipe Welding Level 4 | WELD | A253 | 3        |
| <b>Subtotal</b>      |      |      | <b>5</b> |

#### SPRING

|                                |      |      |          |
|--------------------------------|------|------|----------|
| Welding Inspection and Testing | WELD | A210 | 4        |
| <b>Subtotal</b>                |      |      | <b>4</b> |

#### SUMMER

|                                     |      |      |              |
|-------------------------------------|------|------|--------------|
| Blueprint Reading for Manufacturing | MACH | A120 | 3            |
| Or                                  |      |      |              |
| Blueprint Reading                   | WELD | A180 | 2            |
| <b>Subtotal</b>                     |      |      | <b>2-3</b>   |
| <b>Total Units</b>                  |      |      | <b>27-30</b> |

#### Welding Technology Suggested Electives:

|  |      |      |     |
|--|------|------|-----|
| Arc and Oxy-acetylene Weld Level 1                   | WELD | A115 | 1-2 |
| Advanced Arc and Oxy-acetylene Weld Practice Level 1 | WELD | A215 | 1-2 |
| Orbital Welding Level 1                              | WELD | A255 | 3   |

### ASSOCIATE IN SCIENCE DEGREE

Complete the Welding Certificate of Achievement and the Associate in Science graduation requirements as outlined in the Graduation Requirements section of the catalog.

## WELD TESTING CERTIFICATES

The Weld Testing Certificates of Specialization will be awarded upon successful completion of a proficiency test for each identified level (e.g., Level I, II, etc.) within a category of welding (i.e., SMAW, FCAW, GTAW, GMAW or Pipe). The indicated Weld Testing class must be repeated for each type of certificate received. Higher levels of certification will potentially lead to better paying jobs within the industry.

## BASIC WELDING (SMAW)

### SKILL CERTIFICATE

This program certifies mastery of basic Shielded Metal Arc Welding (SMAW) Levels I, II, III, or IV.

#### Program Outcome

1. Acquire the necessary skills training for proficiency required for employment.

| Course                        | Units |      |                |
|-------------------------------|-------|------|----------------|
| Arc and Oxy-acetylene Welding | WELD  | A100 | 3              |
| Or                            |       |      |                |
| Arc and Oxy-acetylene Welding | WELD  | A101 | 4              |
| Weld Testing Basic            | WELD  | A105 | .5             |
| <b>Total Units</b>            |       |      | <b>3.5-4.5</b> |

## INTERMEDIATE WELDING (SMAW)

### SKILL CERTIFICATE

This program certifies mastery of intermediate Shielded Metal Arc Welding (SMAW) Levels V or VI.

#### Program Outcome

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be require

| Course                                      |      |      | Units          |
|---|------|------|----------------|
| Arc and Oxy-acetylene Welding               | WELD | A100 | 3              |
| Or  |      |      |                |
| Arc and Oxy-acetylene Welding               | WELD | A101 | 4              |
| Weld Testing Intermediate                   | WELD | A106 | .5             |
| Arc and Oxy-acetylene Weld Practice Level 1 | WELD | A115 | 1-2            |
| <b>Total Units</b>                          |      |      | <b>4.5-6.5</b> |

## ADVANCED WELDING (SMAW)

### CERTIFICATE OF SPECIALIZATION

This Certificate of Specialization certifies mastery of first level advanced welding in Shielded Metal Arc Welding (SMAW) Levels VII, VIII and IX.

#### Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course  |      |      | Units           |
|---|------|------|-----------------|
| Arc and Oxy-acetylene Welding                   | WELD | A100 | 3               |
| Or  |      |      |                 |
| Arc and Oxy-acetylene Welding                   | WELD | A101 | 4               |
| Weld Testing Advanced 1                         | WELD | A107 | .5              |
| Arc and Oxy-acetylene Welding Practice Level 1  | WELD | A115 |                 |
| Or  |      |      | 1-2             |
| Advanced Arc and Oxy-acetylene Weld Lab Level 2 | WELD | A215 |                 |
| Advanced Welding                                | WELD | A200 | 3               |
| Or  |      |      |                 |
| Advanced Welding                                | WELD | A201 | 4               |
| <b>Total Units</b>                              |      |      | <b>7.5-10.5</b> |

## ADVANCED I WELDING (FCAW)

### CERTIFICATE OF SPECIALIZATION

This Certificate of Specialization certifies mastery of first level advanced welding in Flux-Cored Arc Welding (FCAW) Levels I, II, & or IV.

#### Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course   |      |      | Units           |
|--|------|------|-----------------|
| Arc and Oxy-acetylene Welding                  | WELD | A100 | 3               |
| Or   |      |      |                 |
| Arc and Oxy-acetylene Welding                  | WELD | A101 | 4               |
| Weld Testing Advanced 2                        | WELD | A108 | .5              |
| Arc and Oxy-acetylene Welding Practice Level 1 | WELD | A115 | 1               |
| Or   |      |      |                 |
| Advanced Arc & Oxy-acetylene Weld Lab Level 2  | WELD | A215 | 2               |
| Advanced Welding                               | WELD | A200 | 3               |
| Or   |      |      |                 |
| Advanced Welding                               | WELD | A201 | 4               |
| <b>Total Units</b>                             |      |      | <b>7.5-10.5</b> |

## ADVANCED II WELDING (FCAW)

### CERTIFICATE OF SPECIALIZATION

This Certificate of Specialization certifies mastery of second level advanced welding in Flux-Cored Arc Welding (FCAW) Levels V, VI, VII, VIII, or IX.

Students are required to obtain a grade of "C" or better in all required courses.

#### Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course  |      |      | Units           |
|---|------|------|-----------------|
| Arc and Oxy-acetylene Welding                   | WELD | A100 | 3               |
| Or  |      |      |                 |
| Arc and Oxy-acetylene Welding                   | WELD | A101 | 4               |
| Weld Testing FCAW 1                             | WELD | A109 | .5              |
| Or  |      |      |                 |
| Weld Testing FCAW 2                             | WELD | A110 | .5              |
| Arc & Oxy-acetylene Welding Practice Level 1    | WELD | A115 |                 |
| Or  |      |      | 1-2             |
| Advanced Arc and Oxy-acetylene Weld Lab Level 2 | WELD | A215 |                 |
| Advanced Welding                                | WELD | A200 | 3               |
| Or  |      |      |                 |
| Advanced Welding                                | WELD | A201 | 4               |
| <b>Total Units</b>                              |      |      | <b>7.5-10.5</b> |

## GAS METAL ARC WELDING (GMAW)

### CERTIFICATE OF SPECIALIZATION

This Certificate of Specialization certifies mastery of skills necessary for Gas Metal Arc Welding (GMAW) Levels I, II, III, IV or V.

#### Program Outcomes

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

*Continued on next page*

**GAS METAL ARCH WELDING (GMAW) CERTIFICATE  
(CONTINUED)**

| Course                                 |      |      | Units          |
|--|------|------|----------------|
| Arc and Oxy-acetylene Welding<br>Or    | WELD | A100 | 3              |
| Arc and Oxy-acetylene Welding          | WELD | A101 | 4              |
| Weld Testing GMAW 1<br>Or              | WELD | A102 | .5             |
| Weld Testing GMAW 2                    | WELD | A103 | .5             |
| Advanced Welding<br>Or                 | WELD | A200 | 3              |
| Advanced Welding                       | WELD | A201 | 4              |
| Gas Metal Arc Welding Training Level 1 | WELD | A211 | 1              |
| <b>Total Units</b>                     |      |      | <b>7.5-9.5</b> |

**GAS TUNGSTEN ARC WELDING (GTAW)**

**CERTIFICATE OF SPECIALIZATION**

This Certificate of Specialization certifies mastery of skills necessary for Gas Tungsten Arc Welding (GTAW) Level I.

**Program Outcomes**

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course                              |      |      | Units          |
|-------------------------------------|------|------|----------------|
| Arc and Oxy-acetylene Welding<br>Or | WELD | A100 | 3              |
| Arc and Oxy-acetylene Welding       | WELD | A101 | 4              |
| Weld Testing GTAW                   | WELD | A104 | .5             |
| Gas Tungsten Arc Welding Level 1    | WELD | A130 | 3              |
| <b>Total Units</b>                  |      |      | <b>6.5-7.5</b> |

**ORBITAL WELDING**

**CERTIFICATE OF SPECIALIZATION**

Students completing the Certificate of Specialization in Orbital Welding will be prepared for entry-level employment in the piping industry.

**Program Outcome**

1. Perform welds on pipe or tubing using orbital welding equipment to the standards of AWS and ASME Code.

| Course                  |      |      | Units    |
|-------------------------|------|------|----------|
| <b>FALL SEMESTER</b>    |      |      |          |
| Orbital Welding Level 1 | WELD | A255 | 3        |
| <b>Subtotal</b>         |      |      | <b>3</b> |

**SECOND SEMESTER**

|  |      |      |          |
|--|------|------|----------|
| Orbital Welding Level 2                        | WELD | A256 | 3        |
| Mathematics and Fabrication Layout for Welders | WELD | A120 | 4        |
| <b>Subtotal</b>                                |      |      | <b>7</b> |

**SUMMER SEMESTER**

|                   |      |      |          |
|-------------------|------|------|----------|
| Blueprint Reading | WELD | A180 | 2        |
| <b>Subtotal</b>   |      |      | <b>2</b> |

**THIRD SEMESTER**

|                    |      |      |           |
|--------------------|------|------|-----------|
| Welding Metallurgy | WELD | A230 | 3         |
| <b>Subtotal</b>    |      |      | <b>3</b>  |
| <b>Total Units</b> |      |      | <b>15</b> |

**Orbital Welding Suggested Electives:**

|                                  |      |      |   |
|----------------------------------|------|------|---|
| Gas Tungsten Arc Welding Level 1 | WELD | A130 | 3 |
| Gas Tungsten Arc Welding Level 2 | WELD | A131 | 3 |

**PIPE**

**CERTIFICATE OF SPECIALIZATION**

This Certificate of Specialization certifies mastery of skills necessary for Pipe Levels I and/or II.

**Program Outcomes**

1. Acquire the necessary skills training for proficiency in taking a welding qualification test for certification which may be required for employment.
2. Improve or develop additional proficiencies required for professional growth or advancement in their current employment.

| Course                              |      |      | Units           |
|-------------------------------------|------|------|-----------------|
| Arc and Oxy-acetylene Welding<br>Or | WELD | A100 | 3               |
| Arc and Oxy-acetylene Welding       | WELD | A101 | 4               |
| Weld Testing Pipe                   | WELD | A111 | .5              |
| Advanced Welding<br>Or              | WELD | A200 | 3               |
| Advanced Welding                    | WELD | A201 | 4               |
| Pipe Welding Level 1                | WELD | A250 | 3               |
| <b>Total Units</b>                  |      |      | <b>9.5-11.5</b> |

## NONCREDIT CERTIFICATE PROGRAMS

### ALLIED HEALTH

#### PERSONAL CARE AIDE NONCREDIT

##### CERTIFICATE OF COMPLETION

This is an entry-level program designed for those with little or no college experience. Personal Care Aides (PCA) provide assistance to consumers who are sick, injured, mentally or physically disabled, elderly and/or frail. They work in the home and help their clients with daily activities, such as bathing and bathroom functions, feeding, grooming, taking medication, and some housework. Personal Care Aides help clients make and keep appointments with doctors, provide or arrange transportation, make and serve meals, make sure they take their medicine and serve as a companion for their clients. The demand for Personal Care Aides is expected to increase up to 60% by 2019. This course is designed to prepare you to enter the workforce upon successful completion and provide the skills necessary to move upward in the healthcare field, should the student choose this career path.

#### SKILLS ENHANCEMENT FOR CONSUMER AND HEALTH SCIENCE STUDENTS

##### CERTIFICATE OF COMPETENCY

Skills Enhancement for Consumer and Health Science Students offers students the opportunity to develop or enhance the specific written and computational skills required for program success. The courses that comprise the program are intended to be offered as either stand-alone prior to program start or within a particular program in order to promote student success.

##### Program Outcomes

1. Enhance student success for those enrolled in consumer and health science programs.

Select TWO (2) courses from the following:

| Course   |     |       | Hours         |
|--|-----|-------|---------------|
| Professional Writing for Health and Consumer Science - Noncredit | ALH | A004N | 4.5 - 9       |
| Computational Skills for Allied Health Sciences I Noncredit      | ALH | A005N | 4.5 - 9       |
| Computational Skills for Allied Health Sciences II Noncredit     | ALH | A006N | 4.5 - 9       |
| Computational Skills for Allied Health Sciences III Noncredit    | ALH | A007N | 4.5 - 9       |
| Computational Skills for Allied Health Sciences IV Noncredit     | ALH | A008N | 4.5 - 9       |
| <b>Total Hours</b>   |     |       | <b>9 - 18</b> |

##### Program Outcomes

1. The graduates of the program will be prepared for entry-level employment as professional and competent Personal Care Aides to meet the needs of the local health care community and its consumers.

| Course   |     |       | Hours     |
|--|-----|-------|-----------|
| Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Noncredit | ALH | A001N | 36        |
| Personal Care Aide II: Person Centered Care Noncredit                        | ALH | A002N | 27        |
| First Aid and CPR/AED for PCA Noncredit                                      | ALH | A003N | 9         |
| <b>Total Hours</b>   |     |       | <b>72</b> |

### BUSINESS

#### NOT-FOR-PROFIT MANAGEMENT

##### CERTIFICATE OF COMPLETION

Through the Not-for-Profit Management certificate of completion (noncredit) a potential, new or mid-level professional will be prepared to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills. It will prepare these professionals to take on new roles and approaches in the areas of strategic planning, financial management, capacity building, and program creation and evaluation.

##### Program Outcomes

1. Students who complete this certificate will be equipped with the knowledge, skills, and resources to take on the challenges and opportunities of an evolving not-for-profit industry that demands strong management, communication, and critical thinking skills.

| Course  |      |       | Hours      |
|---|------|-------|------------|
| Not for Profit Recordkeeping and Compliance Noncredit | ACCT | A007N | 54         |
| Not-for-Profit Management NC                          | BUS  | A086N | 54         |
| Not-for-Profit Marketing NC                           | BUS  | A087N | 54         |
| <b>Total Hours</b>                                    |      |       | <b>162</b> |

### CHEMISTRY

#### CHEMISTRY SKILLS

##### CERTIFICATE OF COMPETENCY

This certificate addresses skills and competencies generally developed during a student's secondary educational experiences. Students are awarded the Chemistry Skills Certificate as evidence they have passed at least three Chemistry Skills classes, to ensure their competency in the material. Students that complete this certificate have had extended exposure and practice in the areas of applying mathematical principles, problem-solving, and laboratory techniques to chemistry concepts to compensate for skills not learned in high school. This will improve student retention, success, and ability to transfer colleges and get laboratory work.

*Continued on next page*

**CHEMISTRY SKILLS NC CERTIFICATE (CONTINUED)**

**Program Outcomes**

1. Explain and give examples of common problem-solving skill strategies in chemistry.
2. Employ critical thinking and common problem-solving strategies to solve chemistry problems.
3. Learn how to make and record proper observations and measurements with standard laboratory equipment.

Select three (3) courses from the following:

| Course   |      |       | Hours     |
|--|------|-------|-----------|
| Chemistry Skills for Introductory Chemistry Noncredit            | CHEM | A010N | 18        |
| Chemistry Skills for Preparation for General Chemistry Noncredit | CHEM | A030N | 18        |
| Chemistry Study Skills for General Chemistry A                   | CHEM | A080N | 18        |
| Lab Skills for General Chemistry A                               | CHEM | A081N | 18        |
| Chemistry Study Skills for General Chemistry B                   | CHEM | A085N | 18        |
| Lab Skills for General Chemistry B                               | CHEM | A086N | 18        |
| <b>Total Hours</b>   |      |       | <b>54</b> |

academic vocabulary, strengthen academic reading comprehension, learn strategies to improve academic writing, and develop stronger overall reading and writing skills.

Skills developed to focus on those necessary to successfully pass college-level English, including grammar, reading, and paragraph writing. Special emphasis on the development of students who have confidence in writing college-level essays.

**Program Outcomes**

1. Students will demonstrate essay writing skills in support of college-level coursework and produce academic writing that follows proper format and standard English grammatical rules.
2. Students will demonstrate command of reading strategies for reading academic texts.

Select two (2) courses from the following:

| Course                                   |      |       | Hours     |
|--|------|-------|-----------|
| Grammar Within Reach - Noncredit         | ENGL | A001N | 18        |
| Reading Tough Texts - Noncredit          | ENGL | A002N | 18        |
| Paragraphs for Many Purposes - Noncredit | ENGL | A003N | 18        |
| Building A College Essay - Noncredit     | ENGL | A004N | 18        |
| <b>Total Hours</b>                       |      |       | <b>36</b> |

**CONSUMER AND HEALTH SCIENCES**

**RETAIL EMPLOYMENT**

**CERTIFICATE OF COMPLETION**

The completion of the Certificate of Completion in Retail Employment is to prepare students for entry-level retail employment.

**Program Outcomes**

1. The outcome of this certificate is to prepare students for entry level retail employment.

| Course  |     |       | Hours     |
|---|-----|-------|-----------|
| Introduction to the Retail Industry Noncredit | COS | A001N | 12        |
| Retail Opportunities Noncredit                | COS | A002N | 12        |
| <b>Total Hours</b>                            |     |       | <b>24</b> |

**ENGLISH**

**ACADEMIC PREPARATION IN ENGLISH**

**CERTIFICATE OF COMPETENCY**

This Certificate of Competency is a noncredit program designed for those interested in developing greater competency in the skills needed to be proficient writers. It is designed to give students an academic foundation in English reading comprehension and writing skills. Students will explore different types of academic writing, build

**ENGLISH AS A SECOND LANGUAGE**

**ESL SUPPORT FOR FRESHMAN COMPOSITION**

**CERTIFICATE OF COMPETENCY**

Students enrolled in English 100 often need additional assistance. This program offers courses students may select based on individual need. Courses included in the program are ESL A045N, ESL A046N, ESL A047N, ESL A048N, and ESL A049N.

**Program Outcomes**

1. Upon completion of courses in this program, students will be able to apply specific language skills to their assignments in English 100 and other courses requiring advanced abilities.

Select two (2) courses from the following:

| Course   |      |       | Hours     |
|--|------|-------|-----------|
| ESL Support for Freshman Composition: Reading and Vocabulary Noncredit | ENGL | A045N | 36        |
| ESL Support for Freshman Composition: Sentence Structure Noncredit     | ESL  | A046N | 36        |
| ESL Support for Freshman Composition: Spelling Techniques Noncredit    | ESL  | A047N | 36        |
| ESL Support for Freshman Composition: Advanced Pronunciation Noncredit | ESL  | A048N | 36        |
| ESL Support for Freshman Composition: Advanced Grammar Noncredit       | ESL  | A049N | 36        |
| <b>Total Hours</b>   |      |       | <b>72</b> |

## ENGLISH LANGUAGE LEARNING

### ENGLISH LANGUAGE SUPPORT FOR PARENTS

#### CERTIFICATE OF COMPETENCY

This program is designed to help English Learning students with children in the U.S. k-12 school system be more effective advocates for their children's education. The courses will focus on developing students' language skills and cross-cultural expectations of the U.S. K-12 school system.

#### Program Outcomes

1. Students will demonstrate the language skills necessary to advocate for their children's education.

| Course   |     |       | Hours     |
|--|-----|-------|-----------|
| English Language Learning for Parents of K-2nd Graders   | ELL | A041N | 36        |
| English Language Learning for Parents of 3rd-5th Graders | ELL | A042N | 36        |
| <b>Total Hours</b>                                       |     |       | <b>72</b> |

### ENGLISH LANGUAGE SUPPORT FOR U.S. CITIZENSHIP

#### CERTIFICATE OF COMPETENCY

This program is designed for English Language Learners working towards obtaining U.S. citizenship through naturalization. The courses focus on developing students' language skills and understanding of American history, laws and government to help them become more engaged U.S. citizens.

#### Program Outcomes

1. Students will demonstrate basic reading and writing ability.
2. Students will show increased ability to apply English pronunciation rules, active listening techniques and knowledge of non-verbal cues in one-one-one conversations.
3. Students will demonstrate basic understanding of U.S. history, government, and geography.
4. Students will be able to explain and apply the rights and responsibilities of U.S. citizens to real-life situations.

| Course   |     |       | Hours     |
|--|-----|-------|-----------|
| English Language Learning for U.S. Citizenship 1 | ELL | A020N | 36        |
| English Language Learning for U.S. Citizenship 2 | ELL | A021N | 36        |
| <b>Total Hours</b>                               |     |       | <b>72</b> |

## GRAMMAR REVIEW

#### CERTIFICATE OF COMPETENCY

This sequence of grammar review courses is designed for English language learners who want to improve their skills. Specific grammar structures are targeted at each level.

#### Program Outcomes

1. Students will increase their proficiency in targeted grammar structures, both at the sentence level and in longer writings.

| Course                                |     |       | Hours      |
|---------------------------------------|-----|-------|------------|
| Beginning Grammar Review Noncredit    | ELL | A032N | 36         |
| Intermediate Grammar Review Noncredit | ELL | A033N | 36         |
| Advanced Grammar Review 1 Noncredit   | ELL | A062N | 36         |
| Advanced Grammar Review 2 Noncredit   | ELL | A063N | 36         |
| <b>Total Hours</b>                    |     |       | <b>144</b> |

## LANGUAGE TRANSITION TO COLLEGE

#### CERTIFICATE OF COMPETENCY

This program is designed for adult English language learners seeking to transition to college-level credit course work. The Listening/ Speaking course and the Reading/ Writing course may be taken in either order.

#### Program Outcomes

1. Students will demonstrate the English proficiency in listening and speaking needed to succeed in college-level credit courses.
2. Students will demonstrate the English proficiency in reading and writing needed to succeed in college-level credit courses.

| Course   |     |       | Hours     |
|--|-----|-------|-----------|
| Listening and Speaking Transition to College Noncredit | ELL | A092N | 36        |
| Reading and Writing Transition to College Noncredit    | ELL | A093N | 36        |
| <b>Total Hours</b>                                     |     |       | <b>72</b> |

## MULTI-SKILLS ENGLISH

#### CERTIFICATE OF COMPETENCY

This program consists of a series of multi-skills courses designed for English language learners. Students will study the conventions of American English, including listening, speaking, grammar, reading, and writing skills.

#### Program Outcomes

1. Students will demonstrate the English proficiency required to transfer to higher-level credit ESL courses.

| Course                            |     |       | Hours      |
|-----------------------------------|-----|-------|------------|
| Multi-skills English 1A Noncredit | ELL | A012N | 54         |
| Multi-skills English 1B Noncredit | ELL | A013N | 54         |
| Multi-skills English 2A Noncredit | ELL | A022N | 54         |
| Multi-skills English 2B Noncredit | ELL | A023N | 54         |
| <b>Total Hours</b>                |     |       | <b>216</b> |

## ORAL COMMUNICATION

### CERTIFICATE OF COMPETENCY

This Oral Communication certificate consists of two courses: Oral Communication 1 and Oral Communication 2. This program is designed for English language learners who want to improve their oral communication skills.

#### Program Outcomes

- Students will demonstrate the listening and speaking skills required to interact with members of their communities.

| Course                         |     |       | Hours     |
|--------------------------------|-----|-------|-----------|
| Oral Communication 1 Noncredit | ELL | A001N | 36        |
| Oral Communication 2 Noncredit | ELL | A002N | 36        |
| <b>Total Hours</b>             |     |       | <b>72</b> |

## SPEAKING ABOUT READING

### CERTIFICATE OF COMPETENCY

The two courses in the program, Speaking about Fiction and Speaking about Nonfiction, are designed for students who want to practice their listening, speaking, and pronunciation skills. Students will read from a variety of sources and share facts and opinions. Speaking about Fiction and Speaking about Nonfiction may be taken in either order.

#### Program Outcomes

- Students will demonstrate the listening and speaking skills necessary to discuss a variety of readings.

| Course                    |     |       | Hours     |
|---------------------------|-----|-------|-----------|
| Speaking about Fiction    | ELL | A038N | 36        |
| Speaking about Nonfiction | ELL | A039N | 36        |
| <b>Total Hours</b>        |     |       | <b>72</b> |

## WORKPLACE ENGLISH

### CERTIFICATE OF COMPETENCY

This program is designed for English language learners who want to develop the English skills necessary to obtain and/or advance their possibilities in the American workplace. The courses will focus on developing students' language skills and cross-cultural expectations of U.S. working environments.

#### Program Outcomes

- Students will demonstrate the English proficiency to enter or advance in the workplace.

| Course                            |     |       | Hours     |
|-----------------------------------|-----|-------|-----------|
| ESL for the Workplace 1 Noncredit | ELL | A080N | 36        |
| ESL for the Workplace 2 Noncredit | ELL | A081N | 36        |
| <b>Total Hours</b>                |     |       | <b>72</b> |

## KINESIOLOGY

### LIFEGUARD TRAINING, PROFESSIONAL RESCUE

#### CERTIFICATE OF COMPLETION

This noncredit certificate will provide the necessary training in emergency assessment and lifeguard rescue skills to be certified as an American Red Cross lifeguard. Students interested in employment at an aquatics facility, either pool or ocean, will receive the necessary training and certification in lifeguarding and professional rescue for these positions.

#### Program Outcome

- Students will be able to assess emergency situations in a pool or the ocean and identify an action plan for immediate implementation.
- Students will be able to perform water rescues and perform CPR as necessary.

| Course   |     |       | Hours          |
|--|-----|-------|----------------|
| Lifeguard Training, Professional Rescue Noncredit        | KIN | A001N | 22             |
| Aquatic First Aid/CPR/AED for Lifeguard Rescue Noncredit | KIN | A002N | 13             |
| First Aid, CPR/AED First Responder Noncredit             | KIN | A003N | 26             |
| <b>Total Hours</b>                                       |     |       | <b>35 - 61</b> |

Note: Students who have not received standard first aid training will need to complete the American Red Cross First Aid and CPR/AED certification for employment.

## YOGA INSTRUCTOR TRAINING

#### CERTIFICATE OF COMPLETION

Orange Coast College's Yoga Instructor 200-hour certification training provides students with the fundamentals required to teach yoga to a variety of levels and abilities. This program meets the requirements for Yoga Alliance, a professional membership and trade association, to become a registered yoga teacher (RYT). The Yoga Instructor Training program features an inclusive curriculum that focuses on philosophy, anatomy, theory, practice, and teaching. Once completed, the student is prepared for employment in health clubs, spas, yoga/dance studios, hospitals, the health industry, and self-employment as private yoga instructor. Students need to have completed KIN A128 (Hatha Yoga - Level I), KIN A228 (Hatha Yoga - Level II) or have prior yoga/movement experience before enrollment.

#### Program Outcome

- Properly instruct a yoga class for all levels and abilities including the use of prop, utilizing themes and yoga philosophy to enhance classes.
- Understand the history and evolution of yoga.
- Satisfy the 200 hour requirement to qualify for the Yoga Alliance 200-Hour certification.

| Course             |     |       | Hours      |
|--------------------|-----|-------|------------|
| Theory of Yoga     | KIN | A084N | 54         |
| Yoga Methodology   | KIN | A085N | 90         |
| <b>Total Hours</b> |     |       | <b>144</b> |



## MATHEMATICS

### MATH SKILLS DEVELOPMENT

#### CERTIFICATE OF COMPETENCY

The courses in Basic Skills create a foundation for subsequent courses required for an AA, AS degree or CTE program.

Continuing study in math will prepare students for a wide range of careers in technology, the health field, education, research, engineering, and business.

#### Program Outcome

1. Perform operations on real numbers and algebraic expressions.
2. Translate real life problems into algebraic expressions or equations and simplify or solve.

Select two (2) courses from the following:

| Course  |      |       | Hours        |
|---|------|-------|--------------|
| Preparation for Elementary Algebra Bootcamp Noncredit   | MATH | A001N | 27           |
| Preparation for Intermediate Algebra Bootcamp Noncredit | MATH | A002N | 27           |
| Math Jam Basic Math Computational Skills Noncredit      | MATH | A004N | 45           |
| Study Session for Pre-Algebra Noncredit                 | MATH | A009N | 18           |
| Study Session for Elementary Algebra Noncredit          | MATH | A011N | 18           |
| Math Jam for STEM Pathway Noncredit                     | MATH | A082N | 36           |
| Math Jam for SLAM Pathway Noncredit                     | MATH | A086N | 36           |
| <b>Total Hours</b>                                      |      |       | <b>36-81</b> |

## TUTORING SKILLS AND STRATEGIES

### TUTORING SKILLS AND STRATEGIES

#### CERTIFICATE OF COMPLETION

The Certificate of Completion in Tutoring Skills and Strategies program focuses on topics such as communication skills and Socratic Method, learning styles, diversity, learning disabilities, motivation, group tutoring and integrating study skills into content material. This program is intended for students wanting a job as a tutor in an education setting, private tutoring organization or as a private tutor.

#### Program Outcomes

1. Students who complete the program will have the skills necessary to gain employment in the OCC Student Success Center, as well as private tutoring organizations or as a private tutor.

| Course                      |      |       | Hours     |
|-----------------------------|------|-------|-----------|
| Tutoring Skills 1 Noncredit | TUTR | A090N | 14        |
| Tutoring Skills 2 Noncredit | TUTR | A091N | 14        |
| <b>Total Hours</b>          |      |       | <b>28</b> |

## CREDIT COURSE DESCRIPTIONS

### Transfer Courses

All courses numbered A100 or higher are transferable to the California State Universities (CSU).

Courses that are transferable to the University of California are designated 'UC.' Some of these courses have limits on the amount of credit that is granted. See the UC Transferable Course List available in the Counseling Center or Transfer Center for these limitations.

### Honors Courses

All courses designated with an "H", or an "M" in the case of lab courses, are honors courses. Students should be advised that honors courses cover more rigorous content and require additional out-of-class assignments.

### Noncredit Courses

All courses designated with an "N" are noncredit courses.

Noncredit course descriptions are listed in the Noncredit Course Descriptions section at the back of this catalog.

## ACCOUNTING

### Accounting A100 — Accounting for Small Business — 3 units

Accounting for small businesses in services and retail. The course includes basic accounting procedures, preparation and analysis of financial statements, banking, payroll processing, and forms. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Accounting A101 — Financial Accounting — 4 units

Fundamentals of financial accounting relating to corporations. Application of widely used accounting theory and practice for both service and merchandise enterprises. Preparation and analysis of financial statements. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ACCT 110.**

### Accounting A102 — Managerial Accounting — 4 units

**Prerequisite:** Accounting A101.

Introduction to management's use of accounting information for planning, control, and decision-making within an organization. Covers both traditional and contemporary topics, including product costing, overhead, budgeting, cash flow, financial statement analysis, and decision-making tools. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ACCT 120.**

### Accounting A107 — Not for Profit Recordkeeping and Compliance — 3 units

A course utilizing the theory and fundamentals of generally accepted accounting principles and industry-specific guidance in conjunction with legal and regulatory issues needed for managing the recordkeeping and compliance documentation for Not-for-Profit entities. Creation of recordkeeping systems and various financial statements/reports that will help to evaluate accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will include day to day transaction and special project accounting, tax and audit issues, endowments and grants, reporting obligations and other legal considerations. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Accounting A110 — Accounting with QuickBooks and Excel — 3 units

**Prerequisite:** Accounting A101.

Introductory course to accounting information systems which applies accounting principles using general ledger and spreadsheet software. Designed to develop employable accounting analysis skills; evaluate and compare commercial software; and analyze financial reporting. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Accounting A111 — Individual Income Tax — 3 units

Introduction to federal income taxation theory and practice as applied to individuals. Covers gross income, business and personal deductions, exemptions, tax credits, property transactions, and tax computation. Includes individual and group problem-solving and tax return preparation. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### Accounting A112 — Accounting with QuickBooks — 2 units

**Prerequisite:** Accounting A100 or A101.

QuickBooks is a complete computerized accounting system for small businesses. Topics include a review of basic accounting concepts, preparation of business reports and graphs, and the creation of a company using QuickBooks accounting. Covers creation and operation of a detailed accounting system for new and existing businesses. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

### Accounting A114 — Volunteer Income Tax Assistance (VITA) — 1 unit

**Advisory:** Accounting A111.

This hands on course provides training and an experiential service learning opportunity in the preparation of federal and state individual income tax returns. After attending training and review classes and passing the IRS and state individual income tax exams, student volunteers will provide free tax assistance to qualifying community residents. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

### Accounting A116 — Business Taxation — 3 unit

**Prerequisite:** Accounting A100 or A101.

**Advisory:** Accounting A111.

Topics will include rules related to the organization, life, and dissolution of corporations, partnerships, S-corporations, and LLCs. Tax research and planning issues are considered. Lecture. This course may also be offered online. **Transfer Credit: CSU.**

### Accounting A118 — Accounting Ethics — 4 units

**Prerequisite:** Accounting A101 or A102.

Designed to expose students to a comprehensive coverage of ethical and professional issues encountered by accounting professionals. Prepares students to meet part of the ethics requirement for becoming a Certified Public Accountant in the State of California. Primarily focuses on ethics pertaining to the Accounting profession. Study of the ethical framework includes the American Institute of Certified Public Accountants (AICPA) Code of Professional Ethics, Audit Responsibilities and Accounting Fraud, Legal and Regulatory Obligations, Earnings Quality, Corporate Governance, and International Financial Reporting. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### Accounting A119 — Payroll — 3 units

**Prerequisite:** Accounting A100 or A101.

Creation of a payroll cycle, recording of payroll information, payroll transmittal and verification with Output reports that reflect both Federal and State of California's laws and policies. Prepares students for FPC Designation Exam. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Accounting A199 — Current Topics in Accounting — 1-4 units

Course covers topics currently receiving attention in the Accounting industry. Units vary according to the topic selected, semester offered, and the number of meetings scheduled. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

### Accounting A210 — Cost Accounting — 3 units

**Prerequisite:** Accounting A102.

Covers cost accounting concepts and practices. Includes the determination, analysis, and control of product costs (materials, labor, and overhead) through traditional and advanced costing systems. Other managerial tools such as budgeting and break-even analysis and cost accounting on government contracts are also considered. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Accounting A212 — Intermediate Accounting 1 — 3 units****Prerequisite:** Accounting A101

An intensive study and application of Generally Accepted Accounting Principles (GAAP) and International Accounting Standards (IAS) for asset valuation, income measurement, and financial statement presentation for business organizations, including the processes through which GAAP and IAS have evolved. The emphasis in this course is on the basic financial statements and related footnotes, the time value of money, the valuation and presentation of assets, current liabilities, and related income statement accounts, and other special accounting topics. International accounting standards (IAS) will be presented parallel to GAAP due to the convergence of both sets of standards within the next five years. Suitable for CPA Exam preparation. Lecture. **Transfer Credit: CSU.**

**Accounting A213 — Intermediate Accounting 2 — 3 units****Prerequisite:** Accounting A101

Financial accounting theory and practice. Reviews and builds upon concepts learned in earlier financial accounting courses. Emphasizes preparation and analysis of more complex accounting issues for financial statements of corporations, including the underlying principles involved. Lecture. **Transfer Credit: CSU.**

**Accounting A215 — Governmental Accounting — 3 units****Prerequisite:** Accounting A100 or Accounting A101.

This course covers fund accounting, budget and control issues, revenue and expense recognition, and issues of reporting for governmental agencies. Many of the topics covered may be used to prepare for portions of the CPA exam. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Accounting A216 — Not-for-Profit Accounting — 3 units****Prerequisite:** Accounting A100, A101

A course utilizing the theory and fundamentals of accounting for the administration of not-for-profit organizations and governmental entities. Application of accounting principles for both not-for-profit organizations and government entities. Preparation and analysis of various financial statements and introduction to the required not-for-profit federal, state and local tax filings. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture.

**Transfer Credit: CSU.****Accounting A218 — Auditing — 3 units****Prerequisite:** Accounting A101, A102**Advisory:** Accounting A212.

Examines the use of financial statement audits and details the audit process. Topics include professional responsibilities of auditors, audit design, sampling approaches, substantive testing, testing controls, and audit report formulation and communication. Lecture. **Transfer Credit: CSU.**

**Accounting A220 — Data Analytics for Accounting — 3 units****Advisory:** Accounting A101.

The advent of data analytics offers both challenges and opportunities for CPAs. The challenges include undertaking appropriate training to develop the skills needed to initiate and support data analytics activities, as well as altering the present audit model to include appropriate audit analytics techniques. The opportunities include a technology rich audit model that provides for greater thoroughness, efficiency, and accuracy, as well as new business opportunities to provide data analytics expertise to CPAs' clients and organizations. CPAs, whether working in public practice or industry, will enhance their career opportunities through the acquisition of additional data analytics expertise. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU**

**AIRLINE AND TRAVEL CAREERS****Airline and Travel Careers A117 — Aviation Management — 3 units**

This course is designed for students interested in management and operations in travel. Preparation for demands of schedules, Official Airline Guide, federal agencies, airport operations, airline deregulation, mergers and acquisitions. Study of management practices in the travel industry with innovative insight into the processes behind running successful airline and airport operations. Examine the concepts of Crew Resource Management (CRM), Human Factors and decision-making. The role of crew supervision, training, leadership styles and management oversight will be studied in both single and multi crew aircraft situations. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Airline and Travel Careers A119 — Travel Safety Inflight and Ground — 1.5 units**

Travel safety and security to include ground and in-flight equipment, passenger psychology, airport security, federal regulations, safety precautions while traveling, anti-terrorism and hijacking discussion. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Airline and Travel Careers A120 — Airline Service Excellence — 1.5 units**

Examines the priority of customer service and satisfaction in the airline industry. Students will investigate how airlines differentiate service to be competitive and will use their findings to develop a personal approach to customer care. Lecture. **Transfer Credit: CSU.**

**Airline and Travel Careers A136 — Corporate/Contract Flight Attendant — 1.5 units**

This course provides flight attendant training specific to Corporate Aviation. Instruction includes emergency procedures, in-flight medical emergencies, irregular in-flight emergencies including fire, smoke and cabin emergencies, hands-on modular training for cabin safety and flight attendant management. Lecture. **Transfer Credit: CSU.**

**Airline and Travel Careers A137 — Operations, Terminology, and Safety — 3 units**

Preparation for stringent demands of airline travel career training and FAA exams to include industry terminology, airline codes, schedules, Official Airline Guide, federal agencies, airport operations, history, airline deregulation, mergers and acquisitions and their effects. This course examines travel safety and security. Topics include safety regulations of the Federal Aviation Administration, the Department of Transportation and airlines themselves. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Airline and Travel Careers A139 — Flight Attendant Qualifications and Opportunities — 3 units****Prerequisite:** Airline and Travel Careers A137

This course provides hands-on training to qualify as a Flight Attendant for both Commercial and Corporate structure. Instruction will follow strict FAA guidelines; indoctrination training, general emergency training, aircraft ground and differences training, including competency checks and testing. Identify flight attendant and inflight service team qualifications and opportunities for employment including base stations, responsibilities, salary schedule, and benefits. Examine the priority of customer service and satisfaction in the airline industry. Students will study standards to current performance, public opinion, and service principles. They will investigate how airlines differentiate service to be competitive and will use their findings to develop a personal approach to customer care. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**ALLIED HEALTH****Allied Health A010 — Health Occupations — .5 units**

Introduction to the allied health careers and programs at Orange Coast College including presentations of each allied health program and School of Allied Health Professions application. Required for admission to most allied health programs. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture.

**Allied Health A111 — Medical Terminology — 3 units****Advisory:** Biology A221.

Development of a medical vocabulary emphasizing building of terms utilizing prefixes, combining forms and suffixes. Includes symptomatic, therapeutic, diagnostic, operative and related diagnostic testing terms. Students learn the meaning & spelling of medical terms with application of terms to comprehend medical record documents. This course may also be offered online. Lecture. **Transfer Credit: CSU. Credit: CSU.**

**Allied Health A112 — Introduction to Autism Spectrum Disorders and Applied Behavioral Analysis — 2 units**

This course will provide an overview of the foundations of Autism Spectrum Disorders in children, Applied Behavioral Analysis treatment, and evidence-based intervention for treatment. This will include collecting Antecedent-Behavior-Consequence ABC data, and learning operations to increase/strengthen behavior and weaken/decrease behavior. Lecture. **Transfer Credit: CSU.**

**Allied Health A115 — Patient Care — 2.5 units**

**Prerequisite:** Allied Health A010 and A111 or concurrent enrollment;

**Advisory:** English as a Second Language A051; non-native speakers must complete (exemption based on assessment results).

This course must be taken within six months prior to first clinical entry. Content includes orientation to clinical setting including communication, legal & ethical issues, healthcare finance, patient care techniques, CPR, (HCP level), blood borne pathogen training, MSDS, HIPAA training, body mechanics for patient ambulation, emergency interventions, medical asepsis, aspects of death & dying and employment as a healthcare professional. Lecture, Lab. **Transfer Credit: CSU.**

**Allied Health A120 — Human Diseases — 2 units**

**Advisory:** Allied Health A111 and Biology A221.

The study of disease processes and diseases affecting each body system. Includes etiology, pathophysiological mechanisms, methods of diagnosis, manifestations, and treatment of each disease. Recent completion of human anatomy and physiology is recommended before attempting this class. Lecture. **Transfer Credit: CSU.**

**Allied Health A130 — Applied Pharmacology — 3 units**

**Advisory:** Biology A221.

Basic principles of pharmacology; drug classifications; methods and routes of administration; legal aspects of drug administration; pharmacokinetics: action, indication, contraindication, hazards, metabolism, and excretion. Use of drugs in the treatment of various disease processes and body systems. Lecture. **Transfer Credit: CSU.**

**Allied Health A199 — Current Issues in Allied Health — .5 units**

This course deals with current issues in the allied health profession. Topics vary. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**ANTHROPOLOGY**

**Anthropology A100 — Cultural Anthropology — 3 units**

The analysis of social structure, family, kinship, belief, and rite. The determinants of culture and personality. The social analysis of three societies. The methods and perspectives of anthropology. This course may also be offered online. Lecture **Transfer Credit: CSU, UC. C-ID ANTH 120.**

**Anthropology A100H — Honors Cultural Anthropology — 3 units**

The analysis of social structure, family, kinship, belief, and rite. The determinants of culture and personality. The social analysis of three societies. The methods and perspectives of anthropology. Lecture. **Transfer Credit: CSU, UC. C-ID ANTH 120.**

**Anthropology A102 — Native American — 3 units**

The course provides students with an introduction to the development of Native North American cultures prior to the introduction of European Civilization in the Western Hemisphere. Students will explore the cultural conflicts generated by the European invasion and the position of Native North American life in contemporary America. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Anthropology A105 — Anthropology of Nonverbal Behavior — 3 units**

An analysis and individual awareness of nonverbal behavior in human interaction with emphasis on Western cultural patterns. Attention is given to the various levels of segments of nonverbal human interaction, including gesture, spatiality, body positions, and expression laughter. Foundations and developmental patterns of nonverbal dimensions are explore. Same as Sociology A105. Students completing Anthropology A105 may not receive credit for Sociology A105. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Anthropology A185 — Physical Anthropology — 3 units**

As an introductory survey course, the class will cover three major areas in particular: 1) evolutionary theory, 2) the theories of human origin and evolution based upon comparative anatomy, biochemical studies and the fossil record, and 3) the origin and evolution of human culture and social organizations as revealed by the archaeological record and biochemical variations in modern humans, individual adaptations and growth and development studies. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ANTH 110.**

**Anthropology A185H — Physical Anthropology Honors — 3 units**

As an introductory survey course, the class will cover three major areas in particular: 1) evolutionary theory, 2) the theories of human origin and evolution based upon comparative anatomy, biochemical studies and the fossil record, and 3) the origin and evolution of human culture and social organizations as revealed by the archaeological record and biochemical variations in modern humans, individual adaptations and growth and development studies. Lecture. **Transfer Credit: CSU, UC. C-ID ANTH 110.**

**Anthropology A185L — Physical Anthropology Laboratory — 1 unit**

**Prerequisite:** Anthropology A185 or concurrent enrollment.

This course covers laboratory exercises on human genetics, comparative primate anatomy, morphological characteristics of hominin fossils, and techniques of forensic anthropology. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC. C-ID ANTH 115L.**

**Anthropology A187 — Introduction to Primate Studies — 3 units**

**Advisory:** English A099 eligibility.

This is an introductory course that will explore the evolution of primate behavior and morphology, with special attention to nonhuman primates. The course will enhance the understanding of human evolution by emphasizing nonhuman primate research. Topics include primate taxonomic classifications, social behaviors, foraging behavior, mating behavior, cognition, conservation, fossil record, and ecological conditions. Students will be introduced to the scientific method and behavioral observation methods. This course may include a zoo trip. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Anthropology A190 — Introduction to Linguistics — 3 units**

This course uses an anthropological approach to understand language by exploring the following core areas: the biocultural basis of language, structural linguistics, historical linguistics, and sociocultural linguistics. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Anthropology A280 — Introduction to Archaeology — 3 units**

**Advisory:** English A100.

A study of the basic principles of archaeological research and cultural evolution based on technological change. Artifact types, site composition, and dating techniques are discussed as they relate to the various cultures both prehistoric and historic in the Old and New World. The cultural evolution of humans is then traced using artifact assemblages as the key to understanding cultural growth. Lecture. **Transfer Credit: CSU, UC. C-ID ANTH 150.**

**Anthropology A285 — World Ethnology — 3 units**

A survey of primitive, peasant and contemporary cultures representing major world areas. Different levels of cultural development with emphasis on the interaction of environment, technology, social system, and culture history. The major theories of culture will be explored. Lecture. **Transfer Credit: CSU, UC.**

**ARCHITECTURAL TECHNOLOGY**

**Architectural Technology A101 — Introduction to Environmental Sustainability — 1 unit**

This course is an overview to environmental sustainability and will provide a fundamental understanding of the cultural, man-made and natural factors involved in creating ecological balance and ethical stewardship of natural resources. Focus will be on the building and design related aspects of sustainability. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A102 — Introduction to Environmental Studies — 3 units**

This course is designed to present an overview of the environmental studies field to students from multiple disciplines. A basic understanding of issues related to the environmental components of air, soil and water; historic development of ecological issues; economic, political, and cultural concepts; regulations, and technology will be presented. An overview of career opportunities and paths within the environmental industry will also be covered. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A104 — Intro to FrameCAD Steel Framing — 1 unit**

Introduction to FrameCAD Steel Framing is an overview of integrated steel panelization design and fabrication. Instruction includes entry level use of FrameCAD Structure and FrameCAD Detailer software as well as file export to FrameCAD Factory and machine. The class will produce and assemble a small sample project using the OCC FrameCAD F325iT. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A105 — Architectural Drawing and Design Visualization 1 — 2 units**

This introductory course in architectural visualization techniques will focus on how to communicate a three-dimensional design using a two-dimensional medium. Subjects and techniques presented will include orthographic projection, paralines, plan views, elevations, sections, basic perspective drawing, rendering materials and tonal values, and an introduction to SketchUp and hand modeling. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology A107 — Tiny House Design — 1 units**

Tiny House Design is a 5 week seminar course that introduces design concepts, codes, budgeting, and building strategies unique to Tiny Houses. The course is packed with guest speakers, hands-on demonstrations, and information resources. Students will plan out their own project and are encouraged to bring lots of ideas and questions. A field trip to experience a tiny house build will also be scheduled. No prior experience needed. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A110 — Introduction to Architecture — 2 units**

This introductory course explores the professional and academic aspects of architecture and related professions. Lectures will include licensing, educational choices, history, practice, design, theory, structures, and personal goal setting; guest speakers and an office visit will give students a firsthand chance to observe multiple sides of the profession. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Architectural Technology A110H — Introduction to Architecture Honors — 2 units**

This introductory course explores the professional and academic aspects of architecture and related professions. Lectures will include licensing, educational choices, history, practice, design, theory, structures, and personal goal setting; guest speakers and an office visit will give students a firsthand chance to observe multiple sides of the profession. Lecture. **Transfer Credit: CSU, UC.**

**Architectural Technology A115 — Architectural Design and Theory 1 — 4 units**

**Advisory:** Architectural Technology A105.

This beginning architectural design course includes the perceptual and physical study of three dimensional design theories, principles and compositional techniques used in the creation and manipulation of architectural form, space, and light. Focus will be on fundamental design skills and will progress to a complete architectural design project using models, drawings, and graphics to study and communicate the design. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Architectural Technology A121 — FrameCAD Studio 1 — 2 units**

**Advisory:** Architectural Technology A104.

FrameCAD Studio 1 is a project-based course that develops design skills to produce a steel panel project using FrameCAD software. Basic steel frame design concepts will be covered as well as use of FrameCAD Structure and FrameCAD Detailer. Students will also receive basic machine safety and steel panel assembly experience. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A122 — FrameCAD Studio 2 — 2 units**

**Advisory:** Architectural Technology A121.

FrameCAD Studio 2 is a project-based intermediate course that develops design skills to produce a steel panel project using FrameCAD software. Students will be encouraged to design a project of choice and will work collaboratively to design and prepare each project for production. This is a continuation of FrameCAD Studio 1 and FrameCAD Structure and FrameCAD Detailer software will be used to design the projects and export to FrameCAD Factory software for production. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A141 — Introduction to Resource Management — 3 units**

This course introduces the principles of environmental resource management. An overview of the global aspects of resources and waste, creative strategies for reclaiming resources, and an introduction to community and industry opportunities and skills needed for employment in green industries, sustainable advocacy and education will be presented and explained. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A142 — Environmental Advocacy — 3 units**

Providing an overview of "throw away" culture, this course explores the economic motivations behind consumerism and how to develop ways to reach Zero Waste environmental goals. Issues covered include environmental waste assessment, environmental advocacy, consumer laws and mindsets, governmental policies, outreach, and youth campaigns. Students will examine a wide range of current environmental practices and will develop the skills and knowledge to pursue careers related to recycling and resource management. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A143 — Resource Management and Zero Waste for Communities — 3 units**

This course will identify how resource management and zero waste policies and programs are developed within a community, what type of planning and facilities are needed, and how to finance the systems. Students will also learn business recycling tools, best practices for proposals and contracts, enforcement options, design for resource recovery parks, performance reporting and financial records, Extended Producer Responsibility and Local Producer Responsibility policies, and development of local markets and uses. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A144 — Resource Management and Zero Waste for Business — 3 units**

This course will include a global overview of environmental resource management standards and provide hands-on knowledge and application tools for students to assess and propose resource management strategies for regional businesses, industries, and institutions. Studies and activities will include zero waste program design, implementation strategies, waste reduction and resource management practices, market and economic drivers and incentives, and regulatory policies. Case studies and projects will focus on local practices and community networking. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A150 — CAD 2-D for Architecture — 2 units**

This course introduces Computer Aided Drafting (CAD) as used to produce 2-dimensional architectural drawings. PCs with AutoCAD will be used and instruction will focus on computer drawing a simple project to include the following drawing types: floor plan, site plan, elevation, and enlarged section/details. Students should have basic knowledge of computer operation and file management. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A155 — BIM 1 for Architecture — 2 units**

This course introduces Building Information Modeling (BIM) as used to produce a 3-dimensional architectural model with detailed construction information. PCs with Autodesk Revit will be used and instruction will focus on computer modeling a simple project and extracting construction documentation. Students should have basic knowledge of computer operation and file management. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A156 — BIM 2 for Architecture — 2 units**

**Advisory:** Architecture Technology A155 (BIM 1) or comparable skills with BIM as determined by instructor.

This course introduces Building Information Modeling (BIM) as used to produce a 3-dimensional architectural model with detailed construction information. PCs with Autodesk Revit will be used and instruction will focus on computer modeling a simple project and extracting construction documentation. Students should have basic knowledge of computer operation and file management as well as construction. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A157 — BIM Structural/MEP — 2 units**

**Advisory:** Architecture Technology A156

This course uses Building Information Modeling (BIM) with multidisciplinary applications (Structural, Mechanical, Electrical, and Plumbing) and project management tools to create an integrated 3-dimensional architectural model. PCs with Autodesk Revit and other software will be used and instruction will focus on coordinating one or more disciplines in a collaborative environment. **ADVISORY:** Architectural Technology A156 OR equivalent skills. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A158 — BIM Project Integration — 2 units**

**Advisory:** Architecture Technology A157.

This course uses Building Information Modeling (BIM) in conjunction with prototyping and manufacturing software (such as Fusion 360 or FrameCAD) to integrate design, construction, and manufacturing applications for a small project. Autodesk Revit, Fusion 360, FrameCAD Structure and/or other software will be used in a collaborative team environment. **ADVISORY:** Architectural Technology A156 OR equivalent skills. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A160 — 3-D Modeling: SketchUp 1 — 2 units**

This course introduces SketchUp 3-D Modeling as used for architectural design visualization. Computers with SketchUp Pro will be used and instruction will focus on computer modeling a rectilinear design and exporting images and animation for design presentation. Students should have basic knowledge of computers and file management. This course may also be offered online. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology A162 — 3-D Modeling: Rhino 1 — 2 units**

This course introduces 3-D Modeling for architectural design visualization using Rhino or 3-D Studio Max software. Hands-on instruction will focus on digitally modeling a design with rectilinear and non-rectilinear geometry and exporting images for design presentation. Students should have basic knowledge of computers and file management. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A163 — 3-D Modeling: 3-D Modeling: Rhino 2 — 2 units**

**Advisory:** Architectural Technology A162  
This course introduces fundamental skills of coding and 3-D computational design using Rhino software with additional plug-ins. Hands-on instruction will focus on parametrically modeling and testing design variations with rectilinear and non-rectilinear geometry, including preparing files for fabrication and presentation. Students should have basic knowledge of 3-D modeling. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A165 — Presentation Graphics — 2 units**

This course is for architecture/design students who want to improve their graphic communication skills. Emphasis is on improving personal presentations and portfolios using Adobe Creative Suite: Photoshop, Illustrator, In-design, and/or Acrobat. Students should have knowledge of computer operation and file management and projects to bring in. This course may also be offered online. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology A167 — Presentation Video — 1 unit**

This course is for architecture/design students and professionals who want to use digital video to present creative projects. Emphasis will be on narrative story-telling and communicating a message using Windows Moviemaker or Apple iMovie. Students should have knowledge of computer operation and file management and provide a USB drive. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology 170 — Introduction to Design Fabrication — 1 unit**

This is a limited introduction to computer-assisted design fabrication, including simple operations and shop safety. Students will have the opportunity to use laser cutters, CNC routers, robotics, a 3-D printer, etc. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology A171 — Design Fabrication 1 — 2 units**

This course introduces digital fabrication techniques for architecture and design, including shop safety. Emphasis is given to design iteration and fabricating basic projects using computer-assisted equipment (laser cutters, CNC routers, robotics, 3-D printers and scanners, etc. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A172 — Design Fabrication 2 — 2 units**

**Advisory:** Architectural Technology A171.

This course promotes intermediate digital fabrication techniques for architecture and design. Emphasis is given to independent project design and construction using computer-assisted equipment (laser cutters, CNC routers, robotics, 3-D printers and scanners, etc.). Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A180 — Architectural Construction Documents — 4 units**

**Advisory:** Architectural Technology A105, and A115.

A basic course focusing on representation skills as applied to digital and physical construction models and documents for a wood frame structure. Further emphasis is on architectural symbols and conventions, specifications, building codes, products, materials, equipment, and the development of a student-designed structure. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A185 — Environmental Design Systems — 4 units**

**Advisory:** Architectural Technology A180.

This intermediate design course focuses on the environmental, cultural, and physical forces that effect architecture. Students will research and utilize design approaches and building components/systems that respond to human needs and the natural and built environments. Study topics will include site design and cultural context, environmental/climate responsive approaches to design, maintaining structural design integrity, incorporating life safety and access, and ecologically minded approaches to design. Lecture, non-lecture. **Transfer Credit: CSU.**

**Architectural Technology A190 — Environmental Studies Practicum — 1.5-2.5 units**

**Advisory:** Architecture Technology A141, A142, A143, A144.

This course provides environmental studies students with a practicum cooperatively planned by a private, public or non-profit agency and environmental studies faculty. The focus is on providing students with an opportunity to apply environmental studies theory and zero waste applications in a realistic work setting and includes preparation and assistance in locating internship opportunities that may take place locally, nationally, or internationally. Lecture, 60-120 hours field study. **Transfer Credit: CSU.**

**Architectural Technology A196 — Green Building Codes — 1.5 units**

A complete analysis of the California Green Building Code. Special local Green Building ordinances are also covered along with a comparison of the International Green Building Code. Same as Construction Technology A196; students completing Architecture A196 may not receive credit for Construction Technology A196. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A197 — California Energy Code — 1.5 units**

A complete analysis of the California Energy Code. Special local Energy Code ordinances are also covered along with a comparison of the International Energy Code. Explanation of the State's energy and compliance forms. Same as Construction Technology A197; students completing Architecture A197 may not receive credit for Construction Technology A197. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A199 — Current Topics in Architecture — .5-4 units**

Current topics in Architecture may include cultural topics as well as architectural technology topics and could rotate through a variety of topics, such as field studies, design/build projects, design studies, and construction studies. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A201 — Design/Build 1 for Architecture — 2 units**

This learn-by-doing course involves the design and construction of a transportable structure. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A201H — Design/Build 1 for Architecture Honors — 2 units**

This learn-by-doing course involves the design and construction of a transportable structure. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A202 — Design/Build 2 for Architecture — 4 units**

**Advisory:** Architectural Technology A180.

This learn-by-doing course involves the design and construction of a structure or interior project. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A202H — Design/Build 2 for Architecture Honors — 4 units**

**Advisory:** Architectural Technology A180.

This learn-by-doing course involves the design and construction of a structure or interior project. Students will work in teams with an instructor. Projects will vary and are likely to involve off-campus assembly. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A203 — Design/Build 3 Architecture — 4 units**

**Advisory:** Architectural Technology A180.

This learn-by-doing course involves the design and construction of a small structure with an emphasis on integrating digital fabrication and/or manufacturing techniques. Students will work in teams with an instructor. Projects will vary and could involve off-campus assembly. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A205 — Architectural Drawing and Design Visualization 2 — 3 units**

**Advisory:** Architectural Technology A105.

This advanced course builds on a basic understanding of design communication and adds complexity and design intention to two- and three-dimensional visual design communication skills. A continuation of Architecture A105, this advanced studio builds on a basic understanding of design communication, strengthening complexity and design intention in two and three-dimensional visualization techniques; including freehand sketching, graphic conventions, modeling, perspective and orthographic drawings, shade/shadow, color rendering, graphic presentations, and portfolio development. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Architectural Technology A 210 — Environmental Design Field Studies — 2 units**

The course is an active, on-site study of Architecture, Design, and Planning with an emphasis on sustainable environmental practices. Areas to be studied will be optimized based on the offered location site and will include a study of architectural design, planning and development patterns, analysis of resources, sustainable building techniques, sustainable lifestyle practices and culture, and may include design and/or construction of an improvement project. Students will participate in project-based learning opportunities and community service (where possible) and a multi-night field trip or travel abroad will be required. Lecture, Field study. **Transfer Credit: CSU.**

**Architectural Technology A215 — Architectural Drawing and Design Theory 2 — 4 units**

**Advisory:** Architectural Technology A115.

This intermediate architectural design course teaches theories, principles, methods, and means to the creation of architectural space by manipulation of form, space, and light. Focus is on the critical consideration and communication of spatial sequence and organization, composition, hierarchy, structure, and meaning as an expression of human, aesthetic, and environmental determinants. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Architectural Technology A220 — Building Materials and Systems — 4 units**

**Advisory:** Architectural Technology A180.

This advanced course focuses on the materials, building systems, design, and construction methods used for non-residential construction. The course will include field studies and hands-on projects that explore the principles and properties of various building materials and systems and sustainable considerations. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A225 — Land and Building Development — 3 units**

A general survey of land development principles and procedures used prior to the actual construction of structures. Site analysis and planning, mapping, regulatory controls, obtaining entitlements, grading, road and street designs, utility systems, principles of real property value, and project financing will be covered. Same as Construction Technology A225. Students completing Architectural Technology A225 may not receive credit for Construction Technology A225. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A230 — Architectural Design and Theory 3 — 5 units**

**Prerequisite:** Architectural Technology A215.

**Advisory:** Architectural Technology A205.

This advanced architectural design course is a continuation of Arch A215, dealing with theories, principles, methods and means used in the creation of architectural space by manipulation of form, space & light in an urban context. Focus is on the conceptual design process of establishing and challenging design criteria, communication and editing of design narrative, and portfolio development. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Architectural Technology A230H — Architectural Design and Theory 3 Honors — 5 units**

**Prerequisite:** Architectural Technology A215.

**Advisory:** Architectural Technology A205.

This advanced architectural design course is a continuation of Arch A215, dealing with theories, principles, methods and means used in the creation of architectural space by manipulation of form, space & light in an urban context. Focus is on the conceptual design process of establishing and challenging design criteria, communication and editing of design narrative, and portfolio development. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Architectural Technology A241 — FrameCAD Workshop 1 — 2 units**

**Advisory:** Architectural Technology A104.

FrameCAD Workshop 1 is a project-based course that develops beginning level production skills needed to produce a steel panel framing system using FrameCAD software and a FrameCAD F325iT machine. Students will be introduced to FrameCAD machine operation and safety and will be able to visit a steel frame project or production facility. Students will assist in running production jobs and gain experience in panel assembly and workflow. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A242 — FrameCAD Workshop 2 — 2 units**

**Advisory:** Architectural Technology A104 and A241.

FrameCAD Workshop 2 is a project-based continuation of Workshop 1 that develops intermediate level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in running production jobs and learning about panel assembly and fabrication workflow on the machine. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A243 — FrameCAD Workshop 3 — 2 units**

**Advisory:** Architectural Technology A104, A241 and A242.

FrameCAD Workshop 3 is a project-based continuation of FrameCAD Workshop 2 that develops advanced level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in coordinating production jobs, panel assembly, and fabrication workflow on the machine. Lecture, Lab. **Transfer Credit: CSU.**

**Architectural Technology A250 — Building Codes and Standards — 2 units**

Introduction to the codes and standards prevalent in the Southern California area. Concentration is on Title 24 and Americans With Disabilities Act regulations, and the Uniform Building Code and local enforcement as applied to building design. Lecture. **Transfer Credit: CSU.**

**Architectural Technology A290 — History of Architecture 1 — 3 units**

The class is an introductory study of the development of architecture and urban environments from primitive shelters through the Early Baroque. The lectures and presentations focus on environments, architects, people of influence, and architectural movements of significance. Emphasis is placed on socio-political, economic, technological, and cultural influences in the evolution of architectural history. Lecture. **Transfer Credit: CSU, UC.**

**Architectural Technology A290H — History of Architecture 1 Honors — 3 units**

The class is an introductory study of the development of architecture and urban environments from primitive shelters through the Early Baroque. The lectures and presentations focus on environments, architects, people of influence, and architectural movements of significance. Emphasis is placed on socio-political, economic, technological, and cultural influences in the evolution of architectural history. Lecture. **Transfer Credit: CSU, UC.**

**Architectural Technology A296 — History of Architecture 2 — 3 units**

Introductory study of the history of world architecture and urbanism from the late 17th century to the present. Lectures and presentations focus on the architecture of various regions and historical periods, highlighting architects, buildings and environments of significance. Special emphasis is placed on the architecture of the 20th century and socio-political, economical, technological, cultural and global influences in the evolution of architecture. Lecture. **Transfer Credit: CSU, UC.**

**Architectural Technology A296H — History of Architecture 2 Honors — 3 units**

Introductory study of the history of world architecture and urbanism from the late 17th century to the present. Lectures and presentations focus on the architecture of various regions and historical periods, highlighting architects, buildings and environments of significance. Special emphasis is placed on the architecture of the 20th century and socio-political, economical, technological, cultural and global influences in the evolution of architecture. Lecture. **Transfer Credit: CSU, UC.**

**ART**

**Art A100 — Survey of Western Art from Prehistory through Gothic — 3 units**

This course provides an overview of western art and architecture from prehistory through the medieval period. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 110.**

**Art A100H — Survey of Western Art from Prehistory through Gothic Honors — 3 units**

This course provides an overview of western art and architecture from prehistory through the medieval period. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 110.**

**Art A101 — Survey of Western Art from Renaissance to Modern — 3 units**

This course provides an overview of art and architecture from the Renaissance to the Contemporary period. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 120.**

**Art A101H — Survey of Western Art from Renaissance to Modern Honors — 3 units**

This course provides an overview of art and architecture from the Renaissance to the Contemporary period. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Art A102 — Survey of Modern and Contemporary Art — 3 units**

This course provides an overview of modern and contemporary art and architecture from the late 19th century to the present. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Art A103 — Survey of Asian Art — 3 units**

This course provides a select overview of art and architecture from India, Southeast Asia, China, Korea, and Japan from pre-history to modern times. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 130.**

**Art A107 — Introduction to Art — 3 units**

This course provides a general introduction to art that offers a look at works of art through the study of theory, terminology, themes, design principles, media, techniques, with an introduction to the visual arts across time and diverse cultures. Topics will include drawing, painting, sculpture, film arts, printmaking, and architecture Gallery/museum visits are required. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Art A108 — Women in Art — 3 units**

Women artists and the image of women in art from the Paleolithic period to the present day. Art criticisms, the feminist art movement, and the status of contemporary women artists. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Art A109 — Ancient Greek Art and Architecture — 3 units**

A study of Ancient Greek art and architecture beginning with prehistory and ending with the Hellenistic period. This course will relate artistic styles and major developments with the social and political events of the period. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Art A109H — Ancient Greek Art and Architecture Honors — 3 units**

A study of Ancient Greek art and architecture beginning with prehistory and ending with the Hellenistic period. This course will relate artistic styles and major developments with the social and political events of the period. May be taken for grades or on a pass-no pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Art A110 — Color and Design: Two-Dimensional — 3 units**

Introduction to the concepts, applications, and historical references related to two-dimensional art and composition, including the study of the basic principles and elements of line, shape, texture, value, color and spatial illusion. Development of a visual vocabulary for creative expression through lecture presentations, studio projects, problem solving, and written assignments. Required for art majors and certificate programs. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 100.**

**Art A111 — Color and Design: Three-Dimensional — 3 units**

Introduction to the concepts, applications, and historical references related to three-dimensional design and spatial composition, including the study of the elements and organizing principles of design as they apply to three-dimensional space and form. Development of a visual vocabulary for creative expression through lecture presentations and use of appropriate materials for non-representational three-dimensional studio projects. Required for art majors and recommended for certificate programs. Lecture, Lab **Transfer Credit: CSU, UC. C-ID ARTS 101.**

**Art A114 — Art of the Ancient Americas — 3 units**

**Advisory:** English A100.

Survey of visual culture within the historical context of select ancient civilizations in Mexico, Central America, and South America up to European contact. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 145.**

**Art A115 — Art of Africa, Oceania, and Indigenous North America — 3 units**

**Advisory:** English A100.

Survey of visual culture within select regions in Africa, Oceania, and indigenous North America. Lecture. **Transfer Credit: CSU, UC. C-ID ARTH 140.**

**Art A116 — Furniture Making and Design — 4 units**

The basic rules of furniture design and production with emphasis in wood selection, hand tool use, and a review of woodworking machinery. Advanced students will design and build more complex furniture pieces using more advanced techniques. Same as Construction A116. Students completing Art A116 may not receive credit for Construction A116. Lecture, Lab. **Transfer Credit: CSU.**

**Art A118 — Product Illustration 1 — 2 units**

For the beginner through semi-professional levels of drawing skill. Principles of line, shade, shadow, highlight, reflection, color, materials and graphic presentation. Sketching and rendering using various media and papers. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Art A119 — Product Illustration 2 — 2 units**

**Prerequisite:** Art A118.

Continuation of Product Illustration 1 to include more detailed renderings. May be taken for grades or on a pass/no-pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Art A120 — Beginning Drawing — 3 units**

Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 110.**

**Art A120H — Beginning Drawing Honors — 3 units**

Introduction to principles, elements, and practices of drawing, employing a wide range of subject matter and drawing media. Focus on perceptually based drawing, observational skills, technical abilities, and creative responses to materials and subject matter. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 110.**

**Art A121 — Life Drawing 1 — 3 units**

**Prerequisite:** Art A120 or A120H.

Introduction to drawing the human figure from observation using a wide variety of drawing media and techniques. Topics include an introduction to human anatomy and the historical and contemporary roles of figure drawing in the visual arts. Students in this course will learn both descriptive and interpretive approaches to drawing the figure. Required of art majors. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 200.**

**Art A122 — Human Anatomy for Artists — 3 units**

**Advisory:** Art A120.

A drawing and study course using the human figure as a model. Emphasis will be on human anatomy and how it relates to drawing the figure. This course is recommended for art majors. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A124 — Advanced Drawing — 3 units**

**Prerequisite:** Art A120.

Designed as a continuation of Art A120, Exploration of artistic concepts, styles, and creative expression related to intermediate-level drawing, focusing on complex subject matter and concepts using a variety of drawing mediums, techniques, and methodologies. Students in this course will build on fundamental drawing skills to develop personalized approaches to content and materials in exercises covering multiple historical and contemporary approaches to drawing. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 205.**

**Art A125 — Perspective Drawing — 3 units**

Drawing of three-dimensional objects using perspective as a tool. Emphasis on fundamentals and different procedures used. Emphasizes methods which are directly related to the artist's needs including short-cuts. Recommended for art majors and certificate programs. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A130 — Painting 1 — 3 units**

**Prerequisite:** Art A110 and A120.

Introduction to the basic craft of painting focusing on the examination of selected materials, perceptual skills, and techniques used to explore elemental and theoretical design practices while rendering landscape, still life, and figurative compositions. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ARTS 210.**

**Art A131 — Painting 2 — 3 units**

**Prerequisite:** Art A130.

A continuation of Art A130 with emphasis on personal expression. Alternate painting mediums introduced. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A132 — Painting 3 — 3 units**

**Advisory:** Art A131.

A continuation of Art 131 with emphasis on personal expression in one painting style and methodology. Conceptual approaches and theme development will be taught. Lecture, Lab. **Transfer Credit: CSU.**

**Art A133 — Painting 4 — 3 units**

**Advisory:** Art A132.

A continuation of student painting and conceptual skills with emphasis on materials of painting production and their application to the practice of painting. **Advisory:** Art A132. Lecture, Lab. **Transfer Credit: CSU.**

**Art A135 — Digital Painting — 3 units**

**Prerequisite:** Art A110 and A120.

An introduction to digital painting focusing on techniques for creating digital artwork for the entertainment industry. Students will also be introduced to industry standard digital painting hardware and software commonly used within the entertainment and other commercial art industries. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**



**Art A141 — Sculpture 1 — 3 units**

Introduction to three-dimensional sculptural principles, techniques, and concepts utilizing a wide range of materials and practices. Various sculpture methods are practiced with attention to creative self-expression and historical context. Exploration of sculptural material and concepts, technical experiences may include modeling, casting and fabricating with sculptural media. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A142 — Life Sculpture 1 — 3 units**

**Prerequisite:** Art A110.

Exploration of figurative sculpture from the human model. Emphasizing anatomical structure and expression. Experiences will include armature building, clay modeling, Kiln firing, glazing and staining of the finished sculpture. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A143 — Story Illustration Techniques — 3 units**

**Prerequisite:** Art A121.

**Advisory:** Art A120.

Principles of Illustration applied to various drawing and painting media. Imaginative application of theories and techniques that produce original illustrations with clear communication of concept. Lecture, Lab. **Transfer Credit: CSU.**

**Art A144 — Illustration 2 – Sequential Illustration — 3 units**

**Prerequisite:** Art A143 or concurrent enrollment.

Sequential Illustration with an emphasis on advanced visual storytelling techniques and the development of a personal style. Application of principles of concept, character and background design. Lecture, Lab. **Transfer Credit: CSU.**

**Art A145 — Exhibition Design 1 — 3 units**

Includes the solving of design problems related to gallery and museum exhibits. Emphasis on spatial planning, crowd flow and thematic presentation based on curatorial criteria. Development of skills related to art handling, lighting and signage graphics. Development of skills for framing, pedestal construction and model making for exhibition presentation. Recommended for all visual art and architecture students. Lecture, Lab. **Transfer Credit: CSU.**

**Art A147 — Jewelry 1 — 3 units**

Introduction to a wide range of methods, techniques, and materials used to create jewelry and small-scale metal artwork and objects. Includes examination of the history and contemporary practices of jewelry making and small metal casting / fabrication with a global cultural perspective. Lecture, Lab. **Transfer Credit: CSU.**

**Art A148 — World History of Ceramics — 3 units**

**Advisory:** Completion of any level ceramics course or concurrent enrollment.

The World History of Ceramics provides us with a foundation of information dating as far back as the Old Stone Age, commonly known as the Paleolithic era. Most every culture has produced some type of fired clay object, ranging from utilitarian ware, religious icons, musical instruments, play toys and wall coverings in the form of tile. The tactile versatility, permanence and historical significance are all reasons why ceramics should be considered a phenomenon. This course will cover the evolution of clay and the production of pottery made by early man, Greek, Islamic, Pre-Columbian and Asian cultures right up to the time of Post Modern ceramics. Lecture. **Transfer Credit: CSU.**

**Art A150 — Ceramics 1 — 3 units**

Introduction to ceramics materials, concepts, and processes including basic design principles, creative development, hand-building, throwing, glaze techniques, firing and ceramic terminology. The course covers aesthetics and creative development of clay objects examining historical, contemporary, and personal modes of expression across cultures. Various glazing and firing techniques will include Stoneware, Porcelain and Earthenware. Transfer Credit: CSU, UC. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A151 — Ceramics 2 — 3 units**

**Prerequisite:** Art A150.

Students will be introduced to the Potters Wheel and to various wheel thrown techniques. Students will be familiarized with functional Ceramics, studio organization and advanced technical language. The study of selected historic and contemporary information will be covered. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A152 — Intermediate Ceramic Design — 3 units**

**Prerequisite:** Art A151.

This third semester ceramics course is an exploration in surface, form, and researching the interface of clay and glaze. Combinations of various forming techniques in handbuilding and wheel thrown form will be executed. Lecture, Lab. **Transfer Credit: CSU.**

**Art A153 — Ceramics and Its Narrative — 3 units**

**Prerequisite:** Art A152.

A formal, critical look at ceramics through its social, political, and contemporary historical value. Students will design objects that are narrative driven. Lecture, Lab. **Transfer Credit: CSU.**

**Art A162 — Applied Arts 1 — 3 units**

**Prerequisite:** Art A111.

Beginning applied arts/crafts. Traditional and contemporary concepts and processes will be explored with emphasis on design principles in the development and fabrication of aesthetic forms based on function. The student will work with paper, fiber, wood, and metal to create unique works of art and function. Lecture, Lab. **Transfer Credit: CSU.**

**Art A170 — Printmaking 1 — 3 units**

Introduction to the basic materials, equipment, and processes of printmaking, including relief (linocut and woodcut), intaglio (drypoint, etching, and collagraph), planography (lithography and monotype), and stencil (screenprint). Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A171 — Printmaking 2 — 3 units**

**Prerequisite:** Art A170.

Further development of formal, technical, and conceptual skills in printmaking. Emphasis on color printing and combinations of print techniques as well as development of personal handling of the media. Rotating concentration of specific print processes such as intaglio, relief and planographic. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A172 — Applied Arts 2 — 3 units**

**Prerequisite:** Art A162.

Intermediate Applied Arts/Crafts. A more advanced approach to traditional and contemporary concepts and processes in the craft field that continues to build an education in functional art and design. More advanced techniques and sophisticated approaches to self-expression within the craft field will be explored. Emphasis will continue to be placed on the application of design principles to the development of aesthetic functional forms that are expressive and meet the needs of the assignments. The aim of this course is to help students realize the potential of their creative concepts and continue to develop the skills necessary to make these concepts into tangible forms based on function. Further emphasis will be placed on the current permeable boundaries between fine arts and crafts disciplines. The course also hopes to instill the desire to further explore and engage in the crafts as a vehicle for artistic expression. Lecture, Lab. **Transfer Credit: CSU.**

**Art A175 — Screen Process Printing 1 — 3 units**

Theory and practice of screen process printing; construction of the screen, techniques of photo stencil making, color registration, and printing on various surfaces pertinent to fine art and commercial application. Emphasis on execution of original designs and understanding of contemporary applications. Lecture, Lab. **Transfer Credit: CSU.**

**Art A176 — Screen Process Printing 2 — 3 units**

**Prerequisite:** Art A175.

A screen printing course for artists and the art student. Theory and practice of screen-process printing; techniques of stencil making, registration, and printing on various surfaces pertinent to fine art and commercial application. Lecture, Lab. **Transfer Credit: CSU.**

**Art A180 — Professional Studies — 2.5 units**

An exploration and identification of areas of employment and professional activity in art making. Presentation techniques including a portfolio of art work, personal artistic statement, and critiques and reports reflecting an understanding of the information presented through guest lecturers, films and field trips. Lecture, Lab. **Transfer Credit: CSU.**

**Art A220 — Figure Composition — 3 units**

**Prerequisite:** Art A121.

An advanced drawing and painting course. The primary focus is pictorial composition. Creative solutions to the posed model situations are emphasized. Design of the picture plane using traditional compositional devices will be taught. Examples from old master art reproductions and their art history will be an integral part of the class. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A235 — Experimental Painting — 3 units**

**Advisory:** Art A110.

Exploration and presentation of painting using contemporary mixed media and materials in non-traditional contexts for the purpose of developing individual expressive directions. Experimentation with various painting supports and non-traditional media. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A236 — Life Painting 1 — 3 units**

**Prerequisite:** Art A121.

A course in figure painting using the live model. Various painting media and analysis of light, shade, and color will be covered. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A237 — Life Painting 2 — 3 units**

**Prerequisite:** Art A236.

An intermediate course and a continuation of A236 with emphasis on visual devices used by artists in a variety of styles. An additional emphasis on personal expression, painting style, and methodology. Lecture, Lab. **Transfer Credit: CSU.**

**Art A241 — Sculpture 2 — 3 units**

**Prerequisite:** Art A141.

Advanced study in the creative use of techniques and materials of sculpture with an emphasis on metal manipulation, mold making and casting, additive sculpture, and assemblage as performed in fine and applied arts. Focus is on portfolio building for career or transfer. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A242 — Advanced Sculpture New Media — 3 units**

**Prerequisite:** Art A141.

**Advisory:** Art A241.

Advanced study in the creative use of techniques and materials of sculpture with an emphasis on new digital and physical techniques and concepts in sculpture including public art, performance, installation, and sculpture in the entertainment industry. Lecture, Lab. **Transfer Credit: CSU**

**Art A244 — Metal Casting and Forming — 3 units**

**Prerequisite:** Art A141.

**Advisory:** Art A241.

An introduction to various processes in metalworking for sculpture and industry. Activities will include direct and indirect techniques of developing wax models to be used in the lost wax metal casting process. Students will design unique sculptural forms which will be cast in metal using either plaster investment or ceramic shell molds. Students will fabricate metal forms using techniques of forging and forming. Course emphasis will be placed on the safe and proper use of hand and power tools and upon a variety of foundry and metal-forming practices such as: mold making, sprue and gating systems, mold dewaxing, metal pouring procedures, forging, fastening, cold finishing, metal finishing, and coloring techniques Lecture, Lab. **Transfer Credit: CSU**

**Art A245 — Exhibition Design 2 — 3 units**

**Prerequisite:** Art A145.

Continued coursework in the solving of design problems related to gallery and museum exhibits. Emphasis on spatial planning, crowd flow and thematic presentation based on curatorial criteria. Development of skills related to art handling, lighting and signage graphics. Development of skills for framing, pedestal construction and model making for exhibition presentation. Assignment of specific responsibilities in design and management Recommended for all visual art and architecture students. Lecture, Lab. **Transfer Credit: CSU.**

**Art A247 — Jewelry 2 — 3 units**

**Prerequisite:** Art A147.

Further development of hand wrought jewelry fabrication techniques to include explorations in casting, hollow form construction, linking devices and lapidary. Emphasis will also be on individual student's field of interest. Lecture, Lab. **Transfer Credit: CSU.**

**Art A249 — Digital Sculpture with ZBrush — 3 units**

This is an introductory course in digital sculpting introducing the student to the Pixologic ZBrush 3D Digital Sculpting application. The ZBrush application can simulate traditional sculpting in clay by using a stylus and tablet to create high resolution digitally sculpted models. These models are often used in creating illustrations and 3D models for film, game, and animation productions. Lecture, Lab. **Transfer Credit: CSU.**

**Art A251 — Character Design — 3 units**

**Prerequisite:** Art A120 and A121.

An introduction to techniques and strategies used for developing characters for the entertainment industry focusing on animation and game design. Assignments will explore how the story affects the design and development of characters both individually and in groups. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Art A252 — Prop and Vehicle Design — 3 units**

**Prerequisite:** Art A120.

**Advisory:** Art A125 and A135.

This course explores the process of designing compelling props and vehicles for entertainment projects. Students will learn how to visually develop concepts from initial sketches to final renderings of objects from the everyday mundane to the fantastic. Emphasis is placed on principles of three-dimensional drawing and the application of design research. Lecture, Lab. **Transfer Credit: CSU.**

**Art A253 — Prop and Vehicle Design — 3 units**

**Prerequisite:** Art A120.

**Advisory:** Art A125 and A135.

This course explores the process of designing compelling environments for illustration and entertainment projects. Students will develop strategies to understand, evaluate and create a variety of environments for film, animation, interactive, immersive, and real-world themed environments. Topics covered include visual composition, perspective drawing, cinematography, architectural styles, and user/guest experience. Lecture, Lab. **Transfer Credit: CSU.**

**Art A255 — Entertainment Art Project — 3 units**

**Prerequisite:** Art A135.

**Advisory:** Art A251.

This course covers the design and production of a faculty-supervised project for portfolio development to be used in the entertainment industry. Students will learn how to visually develop an idea for production in Animation, Film or Games. Areas covered by this course include story/concept development, art direction, and the design and illustration of props, vehicles, environments, and characters necessary for world building. Lecture, Lab. **Transfer Credit: CSU.**

**Art A263 — Watercolor 1 — 3 units**

**Advisory:** Art A110.

Watercolor, gouache, and ink wash painting as used in fine art, illustration, graphic novels and architectural renderings. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A269 — Cartooning 1 — 3 units**

A basic course in cartooning for students interested in learning how to cartoon without any previous formal art training. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Art A270 — Cartooning 2 — 3 units**

**Prerequisite:** Art A269.

A continuation of Cartooning 1 with an emphasis on developing drawing skills, story idea interpretation, and a professional approach to cartooning. Lecture, Lab. **Transfer Credit: CSU.**

**Art A286 — Book Arts — 2 units**

An exploration into historical and modern approaches in the making, construction and binding of artists' books. Preliminary exercise and experiments with different types of bindings will lead the student to a final project in book form. Lecture, Lab. **Transfer Credit: CSU, UC.**

**ASTRONOMY**

**Astronomy A100 — Introduction to Astronomy — 3 units**

Introduction to the origin, evolution and structure of the solar system, stars, galaxies and the Universe. Milestones in the science of astronomy from ancient times to the space age. Historical development of astronomical ideas leading to current models. Special focus on the latest discoveries from both ground and space-based instruments. Consideration of current controversies in astronomy and the future of astronomical research. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Astronomy A100H — Introduction to Astronomy Honors — 3 units**

Introduction to the origin, evolution and structure of the solar system, stars, galaxies and the Universe. Milestones in the science of astronomy from ancient times to the space age. Historical development of astronomical ideas leading to current models. Special focus on the latest discoveries from both ground and space-based instruments. Consideration of current controversies in astronomy and the future of astronomical research. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Astronomy A100L — Introduction to Astronomy Laboratory — 1 unit**

**Prerequisite:** Astronomy A100, A101, A102, A103 or concurrent enrollment.

A laboratory course designed for non-science majors. It will provide practical experience with the scientific method through outdoor astronomical observations and indoor analysis of experimental data. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Astronomy A100M — Introduction to Astronomy Laboratory Honors — 1 unit**

**Prerequisite:** Astronomy A100H or concurrent enrollment.

A laboratory course designed for non-science majors. It will provide practical experience with the scientific method through outdoor astronomical observations and indoor analysis of experimental data. Lab. **Transfer Credit: CSU, UC.**

**Astronomy A101 — Planetary Astronomy — 3 units**

An introduction to the current solar system. A comparative study will be made of the planets and their satellites, dwarf planets, asteroids, and interplanetary debris. An overview of the formation, evolution and structure of the solar nebula will be presented. Current topics on interplanetary missions, extrasolar planets, and extraterrestrial life will be discussed. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Astronomy A102 — Stellar Astronomy — 3 units**

A detailed study of the formation, structure, and evolution of the sun and stars, including an overview of binary systems, variable stars, supernovae, white dwarfs, neutron stars, black holes, and other stellar phenomena. A survey of particle physics and special and general relativity will also be included. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Astronomy A103 — Cosmology — 3 units**

An introduction to the origin and evolution of the Universe with emphasis on the cosmological models. Types of galaxies and their distribution in the universe, gravitational lensing, dark matter, and dark energy will be examined. An overview of particle physics and special and general relativity will be included. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Astronomy A200 — Introduction to Astrophysics — 4 units**

**Prerequisite:** Physics A185 or Physics A185H  
**Advisory:** Physics A285.

An introduction to astrophysics for science students. Emphasis on applying physical principles to gain a quantitative understanding of astrophysical phenomena. Topics covered include celestial mechanics; electromagnetic radiation; spectroscopy; stellar structure, evolution, and remnants; galaxies; and cosmology. Lecture. **Transfer Credit: CSU, UC.**

**ATHLETICS**

*Formerly Physical Education*  
**Also see Kinesiology**

**INTERCOLLEGIATE CONDITIONING**

**Athletics A109 — Sports Conditioning — .5-2.5 units**

*Formerly Physical Education A109*  
This course is designed to develop fundamental skills and techniques specifically for athletic competition. Workouts and drills are held on athletic fields and in the fitness facilities. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Athletics A119 — Athletic Team Training -.5-5 units**

*Formerly Physical Education A119*  
Course designed for students who are interested in improving their skills for competitive athletic performance. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Athletics A129 — Fitness for Performance — .5-2.5 units**

*Formerly Physical Education A129*  
Designed to enhance all components of physical fitness: muscular strength and endurance, cardio-respiratory endurance, flexibility, and reduce body fat while reducing the risk of injury by using a variety of fitness regimens in order to improve performance. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**ATHLETICS — INTERCOLLEGIATE COED**

**Athletics A222 — Pep Squad — 3 units**

*Formerly Physical Education A222*  
Practice, participation and competition on cheer, dance and stunt teams for OCC. Includes development of skills, both individual and group, for successful public performance. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**ATHLETICS — INTERCOLLEGIATE MEN**

**Athletics A250 — Baseball Team — 3 units**

*Formerly Physical Education A250*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A251 — Basketball Team — Men's — 3 units**

*Formerly Physical Education A251*  
This course is for students who have successfully auditioned for the OCC Intercollegiate Men's basketball team; eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. Students may enroll in this course four times. Lab. **Transfer Credit: CSU, UC.**

**Athletics A252 — Crew Team — Men's — 3 units**

*Formerly Physical Education A252*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A253 — Cross Country Team — Men's — 3 units**

*Formerly Physical Education A253*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A254 — Football Team — 3 units**

*Formerly Physical Education A254*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A255 — Golf Team — Men's — 3 units**

*Formerly Physical Education A221*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A257 — Soccer Team — Men's — 3 units**

*Formerly Physical Education A257*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A258 — Swimming Team — Men's — 3 units**

*Formerly Physical Education A258*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A259 — Tennis Team — Men's — 3 units**

*Formerly Physical Education A259*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A260 — Track and Field Team — Men's — 3 units**

*Formerly Physical Education A260*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A261 — Volleyball Team — Men's — 3 units**

*Formerly Physical Education A261*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A263 — Water Polo Team — Men's — 3 units**

*Formerly Physical Education A263*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**ATHLETICS — INTERCOLLEGIATE WOMEN**

**Athletics A235 — Basketball Team — Women's — 3 units**

*Formerly Physical Education A235*  
This course is for students who have successfully auditioned for the OCC Intercollegiate Women's basketball team; eligibility auditions will be held during the first week of class. May be taken for grades or on a pass, no-pass basis. Students may enroll in this course four times. Lab. **Transfer Credit: CSU, UC.**

**Athletics A236 — Cross Country Team — Women's — 3 units**

*Formerly Physical Education A236*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A238 — Crew Team — Women's — 3 units**

*Formerly Physical Education A238*  
Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A239 — Golf Team — Women's — 3 units**

*Formerly Physical Education A239*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU.**

**Athletics A240 — Soccer Team — Women's — 3 units**

*Formerly Physical Education A240*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A241 — Fastpitch Team — 3 units**

*Formerly Physical Education A241*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A242 — Swimming Team — Women's — 3 units**

*Formerly Physical Education A242*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A243 — Tennis Team — Women's — 3 units**

*Formerly Physical Education A243*

Auditions will be held during the first week of class. May be taken for grades or on a credit-no credit basis. This course may be taken four times. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A244 — Track and Field Team — Women's — 3 units**

*Formerly Physical Education A244*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A245 — Volleyball Team — Women's — 3 units**

*Formerly Physical Education A245*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A246 — Water Polo Team — Women's — 3 units**

*Formerly Physical Education A246*

Eligibility audition will be held during the first week of class. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Athletics A247 — Sand Volleyball Team — Women's — 3 units**

Eligibility auditions will be held during the first week of class. This course is designed for advanced sand volleyball players with a desire to participate on the intercollegiate sand volleyball team. May be taken for grades or on a pass, no-pass basis. Lab. **Transfer Credit: CSU.**

**AVIATION MAINTENANCE TECHNOLOGY**

*(Formerly Aviation Technology)*

**Aviation Maintenance Technology A140 — Helicopter Theory and Operations — 3 units**

Rotary wing aircraft development, technology, and construction. Federal Aviation Administration (FAA) requirements for operation and maintenance. Survey of helicopter industry. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A150 — General Maintenance Records — FAA — 4 units**

Mechanic's privileges & limitations, maintenance forms and records, non-destructive testing, precision measurement, record keeping and ground operations. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A151 — General Electricity — FAA — 3 units**

Aircraft basic electricity, basic troubleshooting, and aircraft batteries. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A152 — General Airframe and Powerplant Fuel Systems — FAA — 2 units**

Theory of fuel systems and lines and fittings. Practical experience in repair, check, service, overhaul, testing, and troubleshooting of fuel systems and system component parts. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A153 — General Materials, Processes, and Welding — FAA — 3 units**

Materials used in aircraft, cleaning of parts, hardware and other fastener identification, and aircraft welding. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A154 — General Weight and Balance, Math and Physics — FAA — 3 units**

Theory and practical experience in a variety of aircraft math, physics, and weight and balance calculations, and varied problems. Practical experience in weight and balance of aircraft. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A155 — General Blueprint Reading and Drafting — FAA — 2 units**

Fundamental theory of aviation blueprints and drafting. Practical experience in blueprint reading, drawing, sketches of repairs, alterations, schematics, and varied uses of graphs and charts. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A160 — Airframe and Powerplant Electricity — FAA — 6 units**

**Advisory:** Aviation Maintenance Technology A151. Fundamental theory relating to aircraft electrical systems, ice and rain, and fire protection systems. Practical experience in disassembly, repair, overhaul, inspection, testing of electrical components and systems. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A161 — Airframe Sheet Metal and Composite Structural Repair — FAA — 5.5 units**

**Advisory:** Aviation Maintenance Technology A153. Fundamental theory relating to aircraft structures. Practical experience in sheet metal, composites, wood, riveting, fabric, inspection, and painting. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A162 — Airframe Assembly and Rigging, Pneumatics and Environmental Control Systems — FAA — 3 units**

**Advisory:** Aviation Maintenance Technology A153. Fundamental theory of assembly, cabin control systems, and rigging. Practical experience in rigging, assembly, disassembly, repair, overhaul, testing, inspection, and operation of component parts. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A163 — Airframe Hydraulics and Landing Gear — FAA — 4.5 units**

**Advisory:** Aviation Maintenance Technology A150 and A152. Fundamental theory of hydraulic, pneumatic, and landing gear systems. Practical experience in disassembly, repair, overhaul, test, inspection, and operation of component parts. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A170 — Powerplant Reciprocating Engines -FAA — 6 units**

**Advisory:** Aviation Maintenance Technology A150 and A153. Fundamental theory of aircraft reciprocating engines. Practical experience in overhauling, repair, assembly, testing, and troubleshooting various powerplants. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A171 — Powerplant Fuel Metering, Exhaust and Induction Systems -FAA — 4 units**

**Advisory:** Aviation Maintenance Technology A152. Aircraft reciprocating engine fuel metering, induction, cooling, and exhaust systems. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A172 — Powerplant Propeller and Lubricating Systems — FAA — 4 units**

**Advisory:** Aviation Maintenance Technology A170. Fundamental theory of propellers and lubrication system components. Practical experience in overhauling, repairing, testing, and troubleshooting different types of systems and components. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A173 — Powerplant Gas Turbine Engines — FAA — 6 units**

**Advisory:** Aviation Maintenance Technology A150 and A153. Fundamental theory and overhaul of turbine engines, starting systems, and system components. Practical experience in disassembly, repair, overhaul, inspection, and testing of turbine engines and components. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology  
A174 — Powerplant Ignition  
Systems — FAA — 2.5 units**

**Advisory:** Aviation Maintenance Technology A151.  
Fundamental theory of ignition systems and practical experience in disassembly, repair, overhaul, inspection, and testing of ignition components. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology  
A180 — Airframe and Powerplant  
Instrumentation — FAA — 2.5 units**

A survey and limited practical experience of basic instrumentation systems used in private, corporate, and commercial aircraft. Included are aircraft nomenclature, acronyms, and use of computer-based training systems. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology  
A181 — Airframe Communication and  
Navigation Systems — FAA — 2 units**

**Advisory:** Aviation Maintenance Technology A180.  
Survey of avionic systems used in navigation and communication and use of computer-based flight management systems, flight deck orientation, and theory of flight. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A182 —  
Avionics Installation Practices — 4 units**

**Advisory:** Aviation Maintenance Technology A151.  
Schematic reading, use of multimeter, Series and parallel circuits. Avionics terminology, system interfacing, Avionics install standard practices. Diagnostic test equipment and fault finding logic tree techniques to a systems level. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology  
A184 — Avionics Installation and  
Troubleshooting — 4 units**

**Advisory:** Aviation Maintenance Technology A182.  
A course in aircraft radio navigational and communication systems. Bench test, installation and ramp test of transmitter and receiver systems and their operating principles. Systems include VHF Comm, VOR, ILS, and Transponder. Students are required to bring hand tools. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Maintenance Technology  
A188 — G.R.O.L. and Avionics Rules  
and Regulations — 1.5 units**

Federal Communication Commission General Radiotelephone Operations License (G.R.O.L.) exam preparation. Federal Aviation Administration rules and regulations as they apply to maintenance of avionics systems. Lecture. **Transfer Credit: CSU.**

**Aviation Maintenance Technology A290  
— Helicopter Maintenance — 4 units**

Maintenance of helicopters, helicopter rotor systems, power trains, unique system features, instrumentation, and design construction. Practical experience in dismantling, inspection, repair, assembly, testing, and troubleshooting a variety of helicopters and system components. Lecture, Lab. **Transfer Credit: CSU.**

to meet the specific requirements of FAR 61.109 (Private Pilot), FAR 61.65 (Instrument) and FAR 61.129 (Commercial) licensing. Flight time and instructor fees are billed separately from ground school courses. In all APT Flight Lab classes, fees are \$125 per hour for primary training aircraft, \$155 per hour for complex training aircraft, and flight instructor fees are \$60 per hour in college owned aircraft. Minimum cost to meet the requirements of FAR 61.109 in college owned aircraft is approximately \$5500. However, most students require training beyond the minimum hours required in FAR 61.109, which increases total cost. Aircraft and instructor fees are subject to change.

College owned aircraft are currently being used for training under flight labs APT A120, APT A121, APT A122, APT A123 and APT A124. Total cost to meet the minimum requirements of FAR 61.65 is approximately \$8000. Most students require training beyond the minimum hours required of FAR 61.65. This will increase total cost. Fees are subject to change. Estimated cost to meet the minimum aeronautical experience requirements of FAR 61.129 is \$21,000. Aircraft and instructor fees are subject to change. At the completion of APT A120, (35 hours), APT A121,(74 hours), APT A122, (120 hours), APT A123 (variable hours), and APT A124 (variable hours) students should have acquired the 250 minimum hours of total flight time required for licensing as a commercial pilot. Total program cost is approximately \$34,000.

FAA Certified Advanced Aviation Training Devices (AATD) may be used to accrue aeronautical experience requirements of FAR 61.109, FAR 61.65, and FAR 61.129. Costs for students to use college-owned AATD's will be \$60 per hour and flight instructor fees are \$60 per hour. Prices for AATD's and instructor fees are subject to change. The amount of aeronautical experience the FAA will accept in AATD's will be dependent on the airman certificate sought. Refer to FAR 61.109, FAR 61.65, and FAR 61.129 for more information regarding the approved usage of AATD's for aeronautical experience.

Flight training is conducted in accordance with an FAA approved part 141 syllabus provided by the vendor. Veteran students using GI Bill Education Benefits are limited to a maximum amount of flight and ground training hours. Training expenses incurred beyond the maximum approved hours will be at the student's expense. Refer to the program requirements as outlined in the course syllabus.

All flight lab students are required to obtain a second-class medical certificate in order to qualify for flight lab participation and program certification.

Additional costs include but are not limited to, second-class medical certificate, pilot supplies, program materials, airport badge, no show fees and check-rides. These fees are not included in the total program cost and must be paid separately by the student.

All APT courses are financial aid eligible and VA benefit eligible if the student is enrolled with Aviation Science as their declared program of study (major).

All students, including VA benefit eligible students, are responsible to complete scheduled flight times. Students that fail to "show" for a scheduled flight time assume all fees incurred with the "no show" designation, and will be responsible for fees owed to the scheduled flight time provider.

For additional information regarding Aviation Pilot Training courses, contact the instructor or Division Dean of Technology (714) 432-5194. For additional information regarding Veterans Administration benefits contact the Veterans Services Office at (714) 432-0202 ext. 26376.

**Aviation Pilot Training A110 — Introduction  
to Airport Operations — 3 units**

This course provides students with an introduction to airport operations and operations management. Students will learn about the daily responsibilities of airport operations managers to include airfield inspections, aircraft ramp handling, passenger terminal operations, airport security and cargo handling. In addition the student will be introduced to airport licensing requirements, airport operational administration and performance and environmental planning factors to include noise abatement. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A115 — Introduction  
to Flight Operations — 3 units**

This course provides an introduction to airline and corporate flight operations and operations management to include the economic structure of the airlines, airline organization and management, forecasting, scheduling, marketing and fleet selection. In addition, corporate flight operations and the impact of general aviation on the nation's air transportation system are explored. The course also introduces the student to the world of flight operations management to include dispatch, crew scheduling, airframe scheduling and flight following. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A120 — Private  
Pilot Flight Lab — 1 unit**

During this course the student obtains the foundation for all future aviation training. The student will receive training in the maneuvers and procedures necessary for him/her to meet the standards contained in the FAA Private Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A121 — Instrument  
Pilot Flight Lab — 1 unit**

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Instrument Rating Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course the student will have gained the aeronautical experience necessary to attain the addition of an Instrument Rating for the Private Pilot Certificate. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**AVIATION SCIENCE**

In order to attain licensing as a pilot, students are required to satisfy aeronautical experience requirements as outlined in applicable subparts of the Federal Aviation Regulations (FAR). The majority of this experience must be accumulated in actual aircraft. Flight training is necessary for students

**Aviation Pilot Training A122 — Commercial Pilot Flight Lab — 1 unit**

**Prerequisite:** Private Pilot certificate will be verified by the instructor on the first class meeting.

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Commercial Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A123 — Private Pilot Advanced Flight Lab — 1 unit**

Flight training in selected areas for the purpose of gaining proficiency in required pilot operations for various certificates and ratings. In addition, flight lab courses allow the student to accrue the necessary flight hours for certification and licensing as a commercial, instrument pilot. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A124 — Advanced Commercial Pilot Flight Lab — 1 unit**

**Prerequisite:** Private Pilot certificate will be verified by the instructor on the first class meeting.

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Commercial Pilot Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course the student will have gained the aeronautical experience necessary to attain the addition of an Commercial Rating for the Private Pilot Certificate. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A126 — Multi-Engine Aircraft Operations Lab — 1 unit**

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the Commercial Practical Test Standards Airplane Multi-Engine Land. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the additional rating of Commercial Pilot, Airplane Multi-Engine Land. This course is offered on a pass/no-pass basis only. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A127 — Advanced Instrument Pilot Flight Lab — 1 unit**

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Instrument Rating Practical Test Standards. Additionally, the student will receive training in safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the addition of an Instrument Rating for the Private Pilot Certificate. This lab course is offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A128 — Flight Instructor Flight Lab — 1 unit**

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Certified Flight Instructor Practical Test Standards. Additionally, the student will receive training in fundamentals of instructions, safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the Flight Instructor - Airplane Rating. All training is conducted in accordance with CFR 14, Federal Aviation Regulation Part 61 and under a syllabus of instruction approved under CFR 14, Federal Aviation Regulation Part 141. This course will be offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A129 — Advanced Flight Instructor Flight Lab — 1 unit**

The student will receive training in the maneuvers and procedures necessary to meet the standards contained in the FAA Certified Flight Instructor Practical Test Standards. Additionally, the student will receive training in fundamentals of instructions, safety awareness, crew resource management, and aeronautical decision-making. At the successful completion of this course, the student will have gained the aeronautical experience necessary to attain the Flight Instructor - Airplane Rating. All training is conducted in accordance with CFR 14, Federal Aviation Regulation Part 61 and under a syllabus of instruction approved under CFR 14, Federal Aviation Regulation Part 141. This course will be offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A130 — Private Pilot Aviation Ground School — 5 units**

**Prerequisite:** ESL score of 51/55 or higher.

Entry level course for commercial pilot training program. Covers basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors and cross country navigation procedures. Provide introductory material on radio navigation, radio communications procedures, human factors and aviation safety. Meets the preparation requirements for the FAA Private Pilot computerized knowledge examination. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A131 — Introduction to Unmanned Aircraft Systems — 3 units**

This course provides an overview of Unmanned Aircraft Systems (UAS). Topics include the development and history of UAS, current and upcoming operational regulations, airspace classifications, sources of weather, loading and performance, radio communications, airport operations, maintenance and inspection procedures, industry and societal implications, career outlooks, ethical considerations, and basic components required to operate a UAS. The course will also introduce hands-on UAS flight and operation principles through PC-based simulation. All training is conducted in accordance with Federal Aviation Regulations (FAR) Part 107. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A132 — Aviation Navigation — 3 units**

**Prerequisite:** Aviation Pilot Training A130 or current Private Pilot Certificate This advisory will be validated in class during the first week of the course.

This course provides academic background for pilots preparing for the FAA Commercial Pilot license and FAA Instrument rating. The course will cover basic visual navigation, instrument navigation, use of Global Positioning Systems and an introduction to Flight Management Computers. Current Private Pilot Certificate will be verified by the Instructor at the first class meeting. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A133 — Aviation-Meteorology — 3 units**

Entry level course for commercial pilot training program. This course will cover the forces which generate and affect weather, weather systems, aviation weather services and cross country weather planning procedures. The course will also provide detailed material on aviation weather hazards and aviation meteorological reports. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A134 — Instrument Pilot Aviation Ground School — 3 units**

**Prerequisite:** Aviation Pilot Training A130 or current Private Pilot Certificate. This advisory will be validated in class during the first week of the course.

Provides academic background for Private Pilots preparing for the FAA Instrument Rating. Covers principles of instrument flight, aircraft performance, Federal Aviation Regulations, aviation weather factors and IFR cross country navigation procedures. Provides material on Instrument Approach Procedures, IFR operational procedures, human factors and aviation safety. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61. All flight training labs are conducted in accordance with an approved FAR Part 141 syllabus. Meets the preparation requirements for the FAA Instrument rating computerized knowledge examination. Current Private Pilot Certificate will be verified by the instructor at the first class meeting. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A138 — Aerodynamics — 3 units**

Course covers the basic principles of flight theory in both low and high speed regimes. Airflow theory, airfoil design, high lift devices, induced and parasitic drag, stall patterns, climb and sink performance, thrust and power, control & stability in the subsonic, transonic, and supersonic conditions. Extensive discussion of stall/spin aerodynamics and recovery techniques. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A139 — Commercial Pilot Aviation Ground School — 3 units**

**Prerequisite:** Aviation Pilot Training A130 or current Private Pilot Certificate with Instrument rating. Provides academic background for Private Pilots preparing for the FAA Commercial Pilot license. Covers transport category aircraft performance considerations, advanced weight and balance, multi-engine aerodynamics, and Federal Aviation Regulations applicable to Commercial pilots. Meets the preparation requirements for the FAA Commercial Pilot computerized knowledge examination. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A140 — Flight Instructor Ground School — 3 units**

**Advisory:** Aviation Pilot Training A139.

Academic preparation for written and practical examinations for Certificated Flight Instructor, Airplane. Covers basic aerodynamics, aircraft performance, Federal Aviation Regulations, aviation weather factors and cross country navigation procedures. Provides in depth instruction in the fundamentals of teaching and learning and ground and in-flight instructional techniques. Meets the preparation requirements for the FAA Flight Instructor computerized knowledge examination and Fundamentals of Learning computerized knowledge examination. All training is conducted in accordance with Federal Aviation Regulation (FAR) Part 61 and Part 141. Students satisfying the pilot certificate prerequisite must present proof to the instructor during the first week of the course. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A141 — Instrument Flight Simulator Lab — 2 units**

Course provides simulator instruction to be given concurrent with instrument flight lessons contained in APT A134. Course provides preparation for the Federal Aviation Agency (FAA) practical examination for the Instrument Rating. This course is offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A144 — Aviation Flight Coordinator — 3 units**

**Prerequisite:** Aviation Pilot Training A130.

This course provides an overview of the corporate aviation industry and levels of customer service. Students will be introduced to basic principles of flight and aviation operations which include: the coordination of aircraft schedules, mechanical requirements, weather, customs requests, and government regulations associated with chartered aviation operations. Subjects presented provides a comprehensive course of training for students who wish to enter the corporate aviation workplace as an entry-level flight coordinator. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A145 — Airline Transport Pilot Ground School — 3 units**

**Prerequisite:** Aviation Pilot Training A130.

**Advisory:** Aviation Pilot Training A139.

An advanced course which prepares pilots or aircraft dispatchers for the Airline Transport Pilot FAA knowledge test. The course covers those areas of aeronautical knowledge defined under Federal Aviation Regulation Part 61.155 with an emphasis on aircraft loading, weight and balance, use of charts, graphs, tables, formulas and computations, and their effect on aircraft performance. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A146 — Advanced Aircraft and Engines — 3 units**

**Advisory:** Aviation Pilot Training A130.

Advanced course which prepares pilots or aircraft dispatchers for the Airline Transport Pilot FAA knowledge test. Course covers those areas of aeronautical knowledge defined under Federal Aviation Regulation Part 61.155 with an emphasis on aircraft loading, weight and balance, use of charts, graphs, tables, formulas and computations, and their effect on aircraft performance. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A150 — Aircraft Dispatcher — 5 units**

**Prerequisite:** Aviation Pilot Training A133, A134 and A139.

**Co-requisite:** Aviation Pilot Training A132 and A145.

An aircraft dispatcher is licensed airman that is certified by the Federal Aviation Administration. The job is highly technical as he/she is jointly responsible with the captain for the safety and operational control of the flight or flights under his or her guidance. FAR 121.533 states that both the airline captain and the dispatcher are held jointly responsible for the safety of the flight. In cooperation with the pilot, the flight dispatcher furnishes a flight plan that enables the aircraft to arrive at its destination on schedule with the maximum payload and the least operating cost. According to Bureau of Labor Statistics, there is a projected growth of 11%-20% for the next ten years. Also recommended by Aviation Science Advisory Committee. State and/or Federal licensing and/or certification. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A151 — Unmanned Aircraft Systems Lab — 3 units**

**Co-requisite:** Aviation Pilot Training A131.

**Advisory:** Aviation Pilot Training A130.

Commercial UAS operators are becoming a new occupation within the aviation industry. The purpose of UAS is widespread and may decrease unnecessary risks to pilots in certain environments. The Unmanned Aircraft Systems industry is expected to generate an estimated 100,000 jobs and \$82.1 billion in economic impact in the next decade according to the Association for Unmanned Vehicle Systems International (AUVSI). Additionally, the Federal Aviation Administration (FAA) predicts 10,000 unmanned aircraft systems could be airborne in the U.S. skies by 2020. Transfer Status: CSU. Lab. **Transfer Credit: CSU.**

**Aviation Pilot Training A180 — Basic Air Transportation — 3 units**

Provides an analysis of the airline industry by providing historical background information on the evolution of the United States air transportation system along with a current analysis of the airlines, air traffic control system, business aviation and general aviation. The goal is to prepare students for entry into the airline industry through an analysis of market factors that influence airline operations as well as fleet planning, route planning, strategic planning and labor issues. Lecture. **Transfer Credit: CSU.**

**Aviation Pilot Training A192 — Human Factors and Crew Resource Management — 3 units**

Course encompasses a wide range of knowledge, skills and attitudes including communications, situational awareness, problem solving, decision making, and teamwork; together with the entire attendant sub-disciplines which each of these areas entails. CRM can be defined as a management system which makes optimum use of all available resources — equipment, procedures and people — to promote flight safety and enhance the efficiency of flight operations. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**BIOLOGY****Biology A020 — Making Connections in Cell and Molecular Biology — 1 unit**

**Co-requisite:** Biology A180.

This course allows further connections with lecture and lab material with problem-solving approaches to application questions, science writing skills, and data analysis. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Biology A100 — Introduction to Biology — 4 units**

A general study of life processes with emphasis on biological chemistry, cells, molecular biology, heredity, ecology, evolution, and the diversity of life. Suitable as a general education elective for the non-science major. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A100H — Introduction to Biology Honors — 4 units**

A general study of life processes with emphasis on biological chemistry, cells, molecular biology, heredity, ecology, evolution, and the diversity of life. Suitable as a general education elective for the non-science major. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A101 — The Biology of Cooking — 3 units**

**Advisory:** Biology A100, Chemistry A100, AP Chemistry or AP Biology.

Ever wondered why grilled meat tastes so good? Why meringues are made with egg whites and not egg yolks? Why tomatoes are considered a fruit instead of a vegetable? These questions (and more!) will be answered in demonstration-filled classes as we use the reagents of the kitchen to teach the basic principles of biology and the scientific method. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A114 — Basic Microbiology — 2 units**

Microbiology as applied to disease, treatment, immunity and the environment. Introduction to history, theory, and techniques of microbiology as applied to microbial nutrition, disease, immunity, control and the environment. Lecture, Lab. **Transfer Credit: CSU.**

**Biology A115 — Introduction to the Biology of Animals — 3 units**

Introduces the diversity and biology of animals in a manner appropriate for students who have little to no background in science. Topics include an introduction to the anatomy, physiology, ecology, evolutionary biology, systematics, life history, and cell biology of animals. Suitable as a non-lab general education elective for the non-science major. Lecture. **Transfer Credit: CSU, UC.**

**Biology A125 — Human Biology — 3 units**

A transferable general education biology course for students not majoring in the life sciences. Emphasis on relationships of biology to human beings with emphasis on molecular genetics, heredity, major body systems, disease, and human interactions with the environment. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Biology A172 — Nature of Birds — 2 units**

An introductory course to bird identification, their life, and their habitats. Emphasis will be on the physical characteristics of birds, how birds evolved, their classification, diet, behavior, reproduction strategies, flight mechanics, migration patterns, and characteristics of their natural habitat. There will be at least four field trips. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Biology A180 — Cell & Molecular Biology — 4 units**

*Formerly Biology A181*

**Prerequisite:** Chemistry A130 or higher, or concurrent enrollment in Chemistry A180 or higher. Chemistry A180 qualifying exam does not substitute for Chemistry A130 prerequisite or Chemistry A180 Co-requisite. Non-native speaking students must be eligible to enter English as a Second Language A031 or A035.

Designed for the major in the biological sciences and pre-health profession majors. Emphasizing central concepts of biology, including biochemistry, cell biology, membrane dynamics, molecular genetics, classical genetics, and biotechnology. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BIOL 190..**

**Biology A182 — Zoology — 3 units**

**Prerequisite:** Math A030 or A045.

**Advisory:** Biology A180

Includes basic aspects of phylogeny, morphology, physiology and behavior of vertebrate and invertebrate animals. Emphasizes comparing the variety of mechanisms animals have evolved to solve common biological problems. Lecture. **Transfer Credit: CSU, UC.. C-ID BIOL 150.**

**Biology A182H — Zoology Honors — 3 units**

**Prerequisite:** Math A030 or A045.

**Advisory:** Biology A180

Includes basic aspects of phylogeny, morphology, physiology, and behavior of vertebrate and invertebrate animals. Emphasizes comparing the variety of mechanisms animals have evolved to solve common biological problems. Lecture. **Transfer Credit: CSU, UC.**

**Biology A182L — Zoology Lab — 1 unit**

**Prerequisite:** Biology A182, or concurrent enrollment and Math A030 or A045.

**Advisory:** Biology A180 or any college-level Biology or Chemistry course.

A laboratory course emphasizing animal phylogeny, anatomy, and physiology using representative types. Field trip required. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BIOL 150.**

**Biology A183 — Botany — 3 units**

**Prerequisite:** Math A030.

Includes the dynamics of plants and their processes with particular emphasis on the structure and function of living plants. Lecture. **Transfer Credit: CSU, UC. C-ID BIOL 155.**

**Biology A183L — Botany Lab — 1 unit**

**Prerequisite:** Biology A183, or concurrent enrollment and Math A030.

A course in the dynamics of plants and their processes with particular emphasis on the structure and function of plants. Field trip required. Lab. **Transfer Credit: CSU, UC. C-ID BIOL 155.**

**Biology A185 — Diversity of Organisms — 5 units**

**Prerequisite:** Biology A180 or A180H.

An introduction to the evolution, ecology, physiology, anatomy, and life history of all major groups of organisms, including bacteria, archaea, fungi, plants, animals, other eukaryotes, and viruses. Students also develop their scientific experimentation skills, including statistical data analysis and writing. Field trip required. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BIOL 140.**

**Biology A210 — General Microbiology — 5 units**

Fundamentals of bacteriology, mycology, protozoology, and virology. Includes food, water and medical microbiology, factors in resistance, infection, and disease. Human normal flora and the immune response are included. Microbial ecology, genetics, and bioenergetics are covered. Recommended for biological science majors. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A220 — Human Anatomy — 5 units**

Structural organization of the human body: gross and microscopic structure of the integumentary, skeletal, muscular, nervous, sensory, endocrine, cardiovascular, lymphatic, respiratory, digestive, excretory, and reproductive systems from cellular to organ system levels of organization. Taught from a functional perspective, it emphasizes the relationship of structure (Anatomy) to function (Physiology). Laboratory participation is required. This course is primarily intended for nursing, allied health, kinesiology, and other health-related majors. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BIOL 110B.**

**Biology A221 — Anatomy-Physiology — 4 units**

Anatomy and physiology as a combined discipline. Designed for Career and Certificate Programs. Suitable as a general education elective for the non-science major. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A225 — Human Physiology — 5 units**

**Prerequisite:** Chemistry A110 or A130 or equivalent.

**Advisory:** Biology A220 or A221.

This course studies the physiological principles, function, integration and homeostasis of the human body at all levels of biological organization with an emphasis on the relationship of structure (Anatomy) and function (Physiology). Basic concepts and practical applications are stressed. Laboratory participation is required. This course meets requirements for pre-nursing, physical therapy and physical education majors. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BIOL 120B.**

**Biology A280 — Evolutionary Ecology — 4 units**

**Prerequisite:** Biology A180.

**Advisory:** Biology A182 and A183, or A185.

For majors in the biological sciences. Evolutionary and ecological principles and their relevance at several levels of organization. Includes principles governing classification of life, principles of evolution, conditions for life, adaptations to the environment, analysis of ecological niches, population, and community/ecosystem ecology from an evolutionary viewpoint. Field trips are required for this course. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Biology A281 — Biochemistry — 2 units**

**Prerequisite:** Biology A180 and Chemistry A220.

An introduction to the chemistry of biology. This course is designed to satisfy transfer requirements for some biology majors. Lecture. **Transfer Credit: CSU, UC.**

**Biology A282 — Molecular Biology — 2 units**

**Prerequisite:** Biology A180 and Chemistry A220.

An introduction to molecular biology emphasizing gene structure and function. This course is designed to satisfy transfer requirements for some biology majors. Lecture. **Transfer Credit: CSU, UC.**

**Biology A283 — Genetics — 4 units**

**Prerequisite:** Biology A180 and Chemistry A180 or higher.

This course covers the principles of Mendelian inheritance; gene transmission in prokaryotes and eukaryotes; recombination and mutation; gene regulation, replication, and expression; cell division; and biochemical genetics. Additional emphasis is placed on problem solving. Lecture. **Transfer Credit: CSU, UC.**

**BROADCASTING ARTS**

**Broadcasting Arts A105 — Broadcast Journalism — 3 units**

An overview of television news, broadcast production, and writing. Practical in-studio experience with on-air news reporting and on-camera interview techniques. Lecture. **Transfer Credit: CSU.**

**Broadcasting Arts A205 — Remote Broadcasting — 3 units**

**Prerequisite:** Film & Television A155

**Advisory: Broadcasting Arts A105** or Film & Television A194.

This advanced course provides students with real-world broadcast production experience through the use of remote live television production equipment. Students will gain a hands-on approach to producing both live and recorded productions. Studio and location shooting of multi-camera productions and video editing activities are performed in this course. Lecture, Lab. **Transfer Credit: CSU.**

**BUSINESS**

**Business A100 — Introduction to Business — 3 units**

A survey of the many dimensions of business with a focus on careers: organization, management, marketing, legal aspects, international business, business climate, financial operations, the banking system, and investments. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID BUS 110.**



**Business A100H — Introduction to Business Honors — 3 units**

A survey of the many dimensions of business with a focus on careers: organization, management, marketing, legal aspects, international business, business climate, financial operations, the banking system, and investments. Lecture. **Transfer Credit: CSU, UC. C-ID BUS 110.**

**Business A101 — Social Media for Business — 3 units**

This course is designed to understand social media concepts and strategies to promote an idea or business. This course includes a review of basic marketing concepts, social media methods and the development of a social media strategy. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A110 — Business Law — 3 units**

Focuses on the legal and regulatory environment of business and management, including the legal system and methods of resolving disputes. The court system, trials and appeals, the Constitution, crimes and torts, contracts, product liability, employment, antitrust, law and ethics, corporate social responsibility, stakeholder relationships, ethical decision making, sole proprietorships, partnerships, limited partnerships, limited liability partnerships, limited liability companies, corporations, corporate structure and governance and international perspectives will be examined. Case studies will be presented. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID BUS 125.**

**Business A110H — Business Law Honors — 3 units**

Focuses on the legal and regulatory environment of business and management, including the legal system and methods of resolving disputes. The court system, trials and appeals, the Constitution, crimes and torts, contracts, product liability, employment, antitrust, law and ethics, corporate social responsibility, stakeholder relationships, ethical decision making, sole proprietorships, partnerships, limited partnerships, limited liability partnerships, limited liability companies, corporations, corporate structure and governance and international perspectives will be examined. Case studies will be presented. This course may also be offered online. **Transfer Credit: CSU, UC.**

**Business A118 — Introduction to International Business — 3 units**

Provides an overview of international business. Explores political, financial, and legal environments of selected countries and their impacts on firms' international business activities. Emphasis is given to business practices and comparative cultural topics. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Business A118H — Introduction to International Business Honors — 3 units**

Provides an overview of international business. Explores political, financial, and legal environments of selected countries and their impacts on firms' international business activities. Emphasis is given to business practices and comparative cultural topics. Lecture. **Transfer Credit: CSU.**

**Business A120 — Personal Financial Success — 3 units**

Personal financial planning addressing the fundamentals of career planning, budgeting, investments, housing, insurance, taxation, estate planning, retirement planning, consumer credit, and spending. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A134 — Excel 1 — 2 units**

Topics include spreadsheet concepts, model building, formula development, formula functions, charts, and list functions. Provides preparation for students seeking Microsoft Office Specialist (MOS) core certification. Same as Computer Information Systems A134. Students completing Business A134 may not receive credit for Computer Information Systems A134. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A138 — Business English — 3 units**

Principles of editing written communication applicable to business. Emphasis on fundamentals of grammar and sentence structure. Recommended for all business majors. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A139 — Business Communication — 3 units**

**Prerequisite:** English A100 or qualifying placement score.

Designed to develop writing skills necessary for effective business communications. Emphasizes skill in applying, planning, writing, and verbalizing business communication techniques. Students will need a fundamental knowledge of English and the mechanics of writing. This course may also be offered online. Lecture. **Transfer Credit: CSU. C-ID BUS 115.**

**Business A242 — Introduction to Entrepreneurship — 3 units**

*Formerly Business A242*

This course helps students explore, identify, and develop feasible business opportunities and innovations. Students will determine the feasibility of opportunities through evaluating the marketplace, the product/service, profitability, financial requirements, and possible outcomes. Students could start and operate a business where a business plan is not required. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU**

**Business A185 — Public Relations — 3 units**

*Formerly Business A140*

**Advisory:** English A100.

Introduction to the basic principles, components, and techniques of effective public relations. Topics include publicity and promotion, advertising, media and community relations, and approaches to problem solving. Same as Communication Studies A185. Students completing Business A185 may not receive credit for Communication Studies A185. Lecture. **Transfer Credit: CSU.**

**Business A186 — Not for Profit Management — 3 units**

A course utilizing the many dimensions of business in conjunction with regulatory issues required for the challenges and opportunities of Not-for-Profit entities with a focus on communication and critical thinking skill development for leaders. Explores areas of strategic planning, financial management, capacity building, program evaluation, data management and analysis, legal and ethical issues of compliance, fundraising, governance practices, and volunteer and board development in their relation to the accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will also include community outreach, endowments, and grants, reporting obligations and other legal considerations. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU**

**Business A187 — Not for Profit Marketing — 3 units**

A survey of the major marketing and branding topics especially for Not-for-Profit entities and new to mid-level professionals. Explores external communications, message development, and conveying the message and mission of the Not-for-Profit. Topics will include communication across a variety of platforms, social and digital media, public events, and one-on-one networking, and fundraising. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU**

**Business A200 — Business Finance — 3 units**

**Advisory:** Accounting A100.

Provides students with the fundamentals of financial management. The course addresses financial organizations, financial analysis and planning, working capital, the budgeting process, sources of financing, mergers and acquisitions, and cash flow analysis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Business A210 — Securities Investment — 3 units**

Basic concepts of investing in stocks and bonds with emphasis on market mechanics, types of orders, role of market professionals, margin accounts, selling short, commissions, and choosing a broker. Comprehensive study of approaches to price patterns, value investing, and the development of a rational investment philosophy. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A212 — Practical Investment Management — 3 units**

Modern stock and bond portfolio management practices and techniques. Focus is on risk management strategies, ethical issues, and industry standards as they relate to conflicts of interest, performance measurement, and presentation of results. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A234 — Excel 2 — 2 units**

**Advisory:** Business A134 or Computer Information Systems A134.

Create templates and macros using Visual Basic for Applications to automate Excel tasks, formula auditing, data validation, complex problem solving, importing data, routing changes, PivotCharts, PivotTables, and trendlines. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. Same as Computer Information Systems A234. Students completing Business A234 may not receive credit for Computer Information Systems A234. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A239 — Professional Communication — 3 units**

Study of communication functions, choices, and roles for professionals in business. Practice in using verbal, nonverbal, and writing skills to communicate one-on-one, electronically, and in groups. Same as Management A239. Students completing Business A239 may not receive credit for Management A239. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Business A240 — Entrepreneurship — 3 units**

This course examines essential activities required for launching a new business venture. Some of the topics students are exposed to include: feasibility analysis, components of a business plan, business model, intellectual property, marketing, ethics, taxes, break-even analysis, and etc. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**CARDIOVASCULAR TECHNOLOGY**

**Cardiovascular Technology A100 — Introduction to Electrocardiography — 2 units**

**Prerequisite:** Biology A221 or A220 and A225.

Electrocardiographic interpretation and testing procedures for the ECG technician. Includes anatomy and electrophysiology of the cardiac conduction system; basic cardiac arrhythmias including sinus, atrial, junctional, and ventricular arrhythmias and heartblocks. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A130 — Introduction to Invasive Cardiology — 3 units**

**Prerequisite:** Cardiovascular Technology A160.

Introduction to the concepts of cardiac catheterization primarily for diagnosis of coronary artery disease. Includes hemodynamics, cardiovascular radiologic safety, aseptic and sterile field maintenance, pressure monitoring equipment, catheters, and contrast used for catheterization. Catheterization techniques, drug pharmacology used in the procedures and complications of cardiac catheterization. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A150 — Advanced Electrocardiography — 2 units**

**Prerequisite:** Cardiovascular Technology A100 or concurrent enrollment.

Advanced procedures in electrocardiographic testing, including stress testing, Holter monitoring, and pacemakers. Advanced arrhythmias including ventricular conduction disturbances effects of drugs, electrolyte imbalances, myocardial infarction, and cardiac pharmacology. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A160 — Cardiac Anatomy/Pathophysiology — 3 units**

**Prerequisite:** Allied Health A111 and Biology A221.

Cardiac anatomy, physiology, and pathology. Includes cardiovascular structures, hemodynamics, cardiac output and blood pressure, coronary artery disease and myocardial infarction, valvular diseases, infectious diseases, cardiac tumors and myopathies, and congenital heart disease. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A170 — ECG Clinical Experience — 5 units**

**Prerequisite:** Allied Health A115 and Cardiovascular Technology A160.

Assigned clinical practice within a health care facility in areas of routine ECG testing, stress testing, monitor technician, Holter monitoring, and pacemaker evaluation. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU.**

**Cardiovascular Technology A190 — Introduction to Sonography and Imaging Physics — 3 units**

**Prerequisite:** Cardiovascular Technology A160.

Introduction to ultrasound physics & instrumentation for cardiac and vascular anatomy, visualized on 2-dimensional and 3-dimensional ultrasound imaging. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A200 — Introduction to Electrocardiography — 3 units**

**Prerequisite:** Cardiovascular Technology A160.

**Co-requisite:** Cardiovascular Technology A205

Theory, equipment, and procedures for echocardiography to include M-mode, 2D, and Doppler. Recognition of specific echocardiographic patterns and abnormalities. Relates anatomical cardiac images to echocardiographic images. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A205 — Introduction to Echocardiography Lab — 1 unit**

**Co-requisite:** Cardiovascular Technology A200.

Skill development in using echocardiographic imaging equipment, machine adjustments, and obtaining correct views on M-mode, 2-dimensional, Doppler and color flow echocardiograms under direct supervision. Includes exercises in recognition of cardiac anatomy and pathology found in diagnostic ultrasound imaging evaluation for cardiac function. Lab. **Transfer Credit: CSU.**

**Cardiovascular Technology A210 — Echocardiography Clinical Lab 1 — 5 units**

**Prerequisite:** Cardiovascular Technology A160

**Co-requisite:** Cardiovascular Technology A200 and A205.

Experience in echocardiography in a clinical facility to include conferences or lectures by physicians, sonographers, and guest lecturers to relate patient clinical presentations to diagnostic findings. Offered on a pass/no-pass basis only. 24 hours clinical, 18 hours discussion/seminar. **Transfer Credit: CSU.**

**Cardiovascular Technology A220 — Ultrasound Sonographic Physics and Instrumentation — 3.5 units**

**Prerequisite:** Cardiovascular Technology A150.

The study of physical principles and instrumentation of diagnostic medical sonography, echocardiography, vascular ultrasound and peripheral vascular ultrasound. It includes sonographic equipment design, instrumentation and sonographic imaging application. Lecture, Lab. **Transfer Credit: CSU.**

**Cardiovascular Technology A240 — Invasive Cardiology Clinical Lab 1 — 5 units**

**Co-requisite:** Cardiovascular Technology A130.

Clinical practice within a cardiac catheterization laboratory to include performances of patient monitoring, data collection, and recognition of anatomical and hemodynamic abnormalities for coronary artery disease. Course includes one hour of discussion-seminar with physician lecturers each week. Offered on a pass/no-pass basis only. 25 hours clinical. **Transfer Credit: CSU.**

**Cardiovascular Technology A250 — Advanced Echocardiography — 3 units**

**Prerequisite:** Cardiovascular Technology A200 and A205.

**Co-requisite:** Cardiovascular Technology A255.

Advanced theory, equipment, and procedures in echocardiography, including Doppler, color flow Doppler in adults, pediatric and fetal echocardiography. Further development of techniques and evaluation of disease states using exercise stress, TEE, pharmacological stress, and contrast echocardiographic studies. Lecture. **Transfer Credit: CSU.**

**Cardiovascular Technology A255 — Advanced Echocardiography Lab — 1 unit**

**Prerequisite:** Cardiovascular Technology A200 and A205.

**Co-requisite:** Cardiovascular Technology A250.

Skill development in advanced echocardiographic techniques under direct supervision. Includes spectral Doppler, color flow Doppler, pediatric, stress/pharmacological stress, TEE, and further evaluation of adult echocardiography. Computer lab modules for advanced echocardiographic techniques and Registry Exam Review. Lab. **Transfer Credit: CSU.**

**Cardiovascular Technology A260 — Cerebrovascular and Peripheral Ultrasound — 2.5 units**

**Prerequisite:** Cardiovascular Technology A200.

**Co-requisite:** Cardiovascular Technology A250 and A255.

Diagnosis and scanning techniques in the evaluation of cerebrovascular disease by ultrasound and Doppler testing. Includes normal anatomy and physiology of the cerebrovasculature, ultrasound instrumentation, and examination techniques relating to pathologies. Lecture, Lab. **Transfer Credit: CSU.**

**Cardiovascular Technology A265 — Echocardiography Clinical Lab 2 — 6 units**

**Prerequisite:** Cardiovascular Technology A210.

**Co-requisite:** Cardiovascular Technology A250 and A255.

Experience in echocardiography and cerebral vascular ultrasound in an assigned clinical facility to include conferences, physician lectures, and seminars relating to actual patient situations or examinations for diagnostic findings. Successful clinical performance evaluation and submission of written patient case study. Offered on a pass/no-pass basis only. 27 hours clinical, 18 hours discussion/seminar. **Transfer Credit: CSU.**

## CHEMISTRY

**Chemistry A020 — Problem Solving in Organic Chemistry 1 — 1 unit****Prerequisite:** Chemistry A185**Co-requisite:** Chemistry A220

This course covers problem-solving skills and strategies that enhance success in Chemistry A220. Topics include problems in organic chemical structure, nomenclature, reactions and reaction mechanisms. Lecture. Not applicable to AA/AS degree.

**Chemistry A025 — Problem Solving in Organic Chemistry 2 — 1 unit****Prerequisite:** Chemistry A220**Co-requisite:** Chemistry A225

This course covers problem-solving skills and strategies that enhance success in Chemistry A225. Topics include problems in organic chemical structure, nomenclature, reactions and reaction mechanisms. Lecture. Not applicable to AA/AS degree.

**Chemistry A100 — Principles of Chemistry — 3 units**

Non-mathematical chemistry for students not majoring in science. Emphasis on relationship of chemistry to the human body with particular attention to drugs of all kinds, food, metabolism, cancer and environmental contaminants. Includes concepts of structure of matter, bonding, acid-base chemistry, organic chemistry and thermodynamics. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Chemistry A110 — Introduction to Chemistry — 5 units****Prerequisite:** Mathematics A010 or higher with grade of 'C' or better.

An introduction to the basic principles of inorganic, organic and biochemistry. Not intended for students planning to take Chemistry A180 or A130. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID CHEM 102.**

**Chemistry A130 — Preparation for General Chemistry — 4 units****Prerequisite:** Mathematics A030 or higher (or appropriate placement).**Advisory:** Eligibility for English as a Second Language A160 or English A099.

Introduction to the principles, calculations, and laboratory techniques of chemistry for students planning to take Chemistry A180. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Chemistry A180 — General Chemistry A — 5 units****Prerequisite:** Math A030 or higher with grade of 'C' or better, and Chemistry A130 or higher (or appropriate placement) with grade of 'C' or better based on chemistry assessment plus one year of high school chemistry.

This course studies gases, solutions, reactions, bonding theories, acid-base, and redox theory. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID CHEM 110, CHEM 120S.**

**Chemistry A185 — General Chemistry B — 5 units****Prerequisite:** Chemistry A180 with grade of 'C' or better.

Study of non-ideal solutions, chemical equilibria, thermodynamics, kinetics and nuclear chemistry. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID CHEM 120S**

**Chemistry A220 — Organic Chemistry A — 3 units****Prerequisite:** Chemistry A185 with grade of 'C' or better.

A study of organic compounds and their reactions from the standpoint of structure, mechanisms and kinetics. Introduction to spectroscopic methods of identification. Lecture. **Transfer Credit: CSU, UC. C-ID CHEM 150.**

**Chemistry A220L — Organic Chemistry Laboratory A — 2 units***Formerly Chemistry A221***Prerequisite:** Chemistry A185.

Theory and techniques of separation, purification, synthesis and analysis of organic compounds including instrumental methods of chromatography and spectroscopy. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID CHEM 150.**

**Chemistry A225 — Organic Chemistry B — 3 units****Prerequisite:** Chemistry A220.

Further study of the structures, reactions, mechanisms and kinetics of organic compounds. Introduction to biologically important compounds and natural products. Lecture. **Transfer Credit: CSU, UC.**

**Chemistry A225L — Organic Chemistry Laboratory B — 2 units***Formerly Chemistry A226***Prerequisite:** Chemistry A220 and A220L.

Further applications of laboratory theory and techniques in the synthesis and analysis of organic compounds including instrumental methods of chromatography. Lecture, Lab. **Transfer Credit: CSU, UC.**

## CHINESE

**Chinese A180 — Elementary Chinese 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Mandarin Chinese, with an introduction to cultures related to the Chinese language. This course is equivalent to two years of high school Chinese. Lecture. **Transfer Credit: CSU, UC.**

**Chinese A185 — Elementary Chinese 2 — 5 units****Prerequisite:** Chinese A180.

Continuation of Chinese A180 with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Chinese language. This course is equivalent to three years of high school Chinese with a grade of "C" or better. Lecture. **Transfer Credit: CSU, UC.**

## COMMUNICATION STUDIES

*Formerly Speech Communications***Communication Studies A100 — Interpersonal Communication — 3 units***Formerly Speech Communications A100*

Teaches effective communication skills through the study of self-concept, listening, perception, language usage, persuasion, and nonverbal communication. Emphasis is on developing and applying good communications skills and overcoming the barriers to effective communication. Writing and speaking skills are emphasized and evaluated. Lecture. **Transfer Credit: CSU, UC. C-ID COMM 130.**

**Communication Studies A105 — Intrapersonal Communications — 3 units***Formerly Speech Communications A105*

Designed to teach students effective communication processes with and about oneself. Emphasis is on developing a greater self-awareness and self-esteem by studying cognitive science, whole brain learning, language and symbolic processing, perception, and nonverbal communication skills. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Communication Studies A109 — Social Media Strategies — 3 units**

Students will gain the knowledge and skills to effectively meet the growing need for Social Media technology within organizations. Students will learn the basics of content creation; determine which platform best meets the needs of organizations and their targeted audiences; and, learn how to measure social media success. Students will analyze, think critically, discuss, research, and develop social media technology while understanding ethics and etiquette. Lecture. **Transfer Credit: CSU.**

**Communication Studies A110 — Public Speaking — 3 units***Formerly Speech Communications A110*

Designed to teach students how to overcome stage fright and to develop organizational, research, and delivery skills. Students will learn to outline, write, and deliver various types of speeches. An emphasis is placed on speaking, listening, and critical thinking skills. Lecture. **Transfer Credit: CSU, UC.**

**Communication Studies A120 — Reader's Theater and Oral Interpretation — 3 units***Formerly Speech Communications A120*

Explores the oldest performance tradition, storytelling, and focuses on the principles and methods of effective oral interpretation. Through analysis of poetry, plays and stories, in both individual and group performance, the student will learn to edit and construct a script, and to perform successfully. Lecture. **Transfer Credit: CSU, UC.**

**Communication Studies A150 — Forensics Workshop — 1-4 units****Advisory:** Communication Studies A110 or A220.*Formerly Speech Communications A150*

Speech competition in debate, extemporaneous, impromptu, persuasive speaking, informative speaking, reader's theatre, and interpretation events. May be taken for 1, 2, 3 or 4 units depending on the number of hours and the number of events and tournaments in which the student participates. Lecture, Lab. **Transfer Credit: CSU. C-ID COMM 160B.**

**Communication Studies A155 — Intercultural Communications — 3 units**

*Formerly Speech Communications A155*

The study, practice, and application of communication theories as they relate to different cultural, subcultural, ethnic, and racial groups. Emphasis on interpersonal effectiveness, including skills in nonverbal processing, assessment of different cultural interactional patterns, and the reduction of racism and ethnocentrism. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID COMM 150.**

**Communication Studies A165 — Men, Women, and Communication — 3 units**

*Formerly Speech Communications A165*

Major issues will be addressed regarding communication behaviors and communication conflicts between men and women of all gender orientations. Study will focus on problem analysis specific to gender self-awareness, gender conflict and how gender is communicated and constructed in our daily lives. Same as Gender Studies A165. Students completing Communication Studies A165 may not receive credit for Gender Studies A165. Lecture. **Transfer Credit: CSU.**

**Communication Studies A170 — Nonverbal Communication — 3 units**

*Formerly Speech Communications A170*

The analysis and application of nonverbal cues and their effect on interpersonal and intercultural communication. Emphasis is on developing effective communication skills as they relate to physical appearance and dress, body movement, face and eye communication, vocal cues which accompany spoken words, and the use of environment and space. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Communication Studies A180 — Introduction to Mass Communications — 3 units**

*Formerly Mass Communications A100*

A survey of major mass mediums and their influence on the artistic and cultural expression of contemporary society. Appreciate the aesthetics of and evaluate radio, television, film, print media, and Internet. Advertising, PR, media law and ethics are covered. Students learn analytical skills to help become critical consumers/developers of media. Lecture. **Transfer Credit: CSU, UC. C-ID JOUR 100.**

**Communication Studies A185 — Public Relations — 3 units**

*Formerly Mass Communications A140*

**Advisory:** English A100.

Introduction to the basic principles, components, and techniques of effective public relations. Topics include publicity and promotion, advertising, media and community relations, and approaches to problem solving. Same as Business A185. Students completing Communication Studies A185 may not receive credit for Business A185. Lecture. **Transfer Credit: CSU.**

**Communication Studies A220 — Essentials of Argumentation — 3 units**

*Formerly Speech Communications A130*

Theory and practice of argumentation and persuasion with emphasis on critical thinking skills as they apply in listening, speaking, and writing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC C-ID COMM 120.**

**Communication Studies A236 — Directed Practice for Social Media Strategist — 2 units**

**Prerequisite:** Communication Studies A109 and Communication Studies A185 or Business A185 and English A123 and Marketing A100

A supervised internship classroom-based learning and experience in a work setting where social media is an essential component of the overall organizational strategy. This 120-hour unpaid, or 150-hour paid work experience course is designed to assist students to acquire the knowledge and skills to analyze, create, implement, and evaluate social media technology. At least 4 courses within the Social Media Strategist career program must be taken. Non-lecture. **Transfer Credit: CSU.**

**Communication Studies A240 — Media Literacy — 3 units**

An introduction to the critical consumption of media. Focuses on ability to access, analyze, & evaluate media messages. Develop tools to evaluate credibility, truth & accuracy through critical examination of news, opinion, advertising, PR, entertainment, and social media. Explore political/ economic/social contexts of media production & consumption. May be offered online. Lecture. **Transfer Credit: CSU.**

**COMPUTER AND HIGH TECHNOLOGY**

**Computer and High Technology A100 — Computer Use in Technology — 3 units**

An introduction to the current state of computer hardware and software and software technology for the student enrolled in technical courses. An overview for the person who wants to understand computers and automation in industry. Not a programming course. Lecture. **Transfer Credit: CSU.**

**COMPUTER INFORMATION SYSTEMS**

**Computer Information Systems A090 — Beginning Computer Keyboarding 1 — 1.5 units**

The student will develop basic keyboarding skills on a computer keyboard using correct stroking techniques on letter, number, and symbol keys. Emphasis on developing accuracy and speed. No credit will be given to students who can already type 30 words per minute. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture, Lab.

**Computer Information Systems A091 — Keyboarding Speed and Accuracy — 1.5 units**

**Prerequisite:** Computer Information Systems A090.

Development of keyboarding skill on a microcomputer for students who know how to type by touch. Speed and accuracy development using a variety of learning aids and software for diagnostic, prescriptive drills. May be taken concurrently with another typing course if desired. Offered on a pass/no-pass basis only. This course may also be offered online. Lecture, Lab.

**Computer Information Systems A092 — Beginning Computer Keyboarding 2 — 1.5 units**

**Prerequisite:** Computer Information Systems A090.

Keyboarding on the computer for students who can type by touch control and know alphabetic, numeric, and symbolic keys presented in Computer Information Systems A090. Emphasis on speed and accuracy on straight copy material, introduction to MS Word, formatting of memos, personal letters, business letters, one-page reports, and simple tables. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture, Lab.

**Computer Information Systems A100 — Introduction to Computer Applications — 3 units**

**Advisory:** Computer Information Systems A090 or equivalent.

Introductory computer course for MS Windows and applications. Students learn about the computer operating system and software applications for word processing, spreadsheets, multimedia presentations, Internet, and social networking tools. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Computer Information Systems A106 — Introduction to Linux: LPI Certification Preparation — 3 units**

**Advisory:** Computer Information Systems A110.

This course provides an overview of the Linux operating system through the basic administration level. The student will be introduced to the configuration of Linux software and hardware, User and Group creation and management, process management, Linux rights and security. This course prepares the student for the Linux Professional Institute Linux Server Professional Server Certification. This course may be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A110 — PC Concepts: A+ Certification Preparation — 4 units**

Introduces the hardware and operating system concepts of a personal computer and the broad range of hardware and software technologies. Provides preparation for students seeking A+ Certification sponsored by the Computing Technology Industry Association and certifies the competency of entry-level service technicians in the computer industry. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A111 — Introduction to Computer Information Systems — 3 units**

Introductory course in the applications of information systems in business. Students will learn about Information Systems, hardware and software components, networks, ethics and security issues, e-commerce, and web page design. Use of spreadsheet and database management software to create computer-based solutions to business problems. Meets the lower division computer requirement for business majors at some CSU and UC campuses. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID BUS 140, ITIS 120.**

**Computer Information Systems  
A112 — Educational Applications  
of Technology — 2 units**

Provides the student with the educational applications of technology, including multimedia, Internet skills, graphics, research, video, audio, presentation and computer skills, basic networking processes, downloads, software resources, basic troubleshooting skills, digital cameras, scanners, and basic hardware and software evaluations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A123  
—Web Page Design 1 — 2 units**

This course will provide a practical understanding of the HTML tags to design a web page. Notepad and other software tools will be used to teach text formatting commands, background formatting, hyperlinks, e-mail links, tables, forms, image maps, and style sheets. Students will also learn to insert various types of images, videos, and sound files into a web page. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A128 —  
Introduction to Dreamweaver — 2 units**

**Advisory:** Computer Information Systems A123.

Students will use the Dreamweaver program to effectively create, manage and maintain web sites. Students will work in an environment that integrates visual and code editing tools. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A129  
—Web Page Design 2 — 2 units**

**Advisory:** Computer Information Systems A123.

This course covers creating and using Cascading Style Sheets for formatting web pages. Intended for students who know how to create web pages using HTML. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A132 —  
Business Multimedia and Graphics — 2 units**

The student will use Adobe Studio MX and Adobe PhotoShop to create, modify, implement and manage web pages and sites that utilize multimedia interactivity and graphics for personal, business and educational use. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems  
A133 — PowerPoint — 1 unit**

Demonstrates how proven, effective presentation techniques can blend with the technology of computer-generated graphics to create dynamic, colorful, and exciting multimedia presentations. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems  
A134 — Excel 1 — 2 units**

Topics include spreadsheet concepts, model building, formula development, formula functions, charts, and list functions. Provides preparation for students seeking Microsoft Office Specialist (MOS) core certification. Same as Business A134. Students completing Computer Information Systems A134 may not receive credit for Business A134. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A135 —  
Introduction to Microsoft Access — 2 units**

An introductory course in database management using Microsoft Access. Concepts include creating and managing tables, query techniques, creating forms and reports, and integrating Access with other programs. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A137  
— Microsoft Outlook — 2 units**

**Advisory:** Keyboarding competency of 25 words a minute for 3 minutes with no more than 1 error per minute.

The basics of communicating by e-mail. Students will use basic computer concepts for learning Microsoft Outlook. Other topics include the use of the calendar, weather, management of contacts, tasks, notes, appointments, mail merge, scheduling, integrating Outlook with other applications, and working in the cloud. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A149  
— Office Procedures — 2 units**

**Advisory:** Computer Information Systems A092.

Personal qualities and office skills required of an office assistant in a high tech, multicultural labor force. Office applications generated with Microsoft Office, enhanced verbal and written communications skills, reprographics, telephone and mail procedures, records management, time and stress management, office ethics, and career planning. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A160 —  
Introduction to UAS Automation— 4 units**

**Advisory:** Computer Information Systems A090 or A100 or A111 or Computer Science A122.

This course introduces students to the automation of Unmanned Aircraft Systems (UAS), including UAS flight control, camera and video capturing, telemetry data analysis and mission management. Throughout the semester, students will work in teams to plan, design and automate Unmanned Aircraft System missions by learning and using Software Development Kits (SDKs) of industry leading UAS providers. UAS projects will include behaviors such as path-following, random roaming with obstacle avoidance and telemetry data collection and analysis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A162 —  
Fundamentals of Information Security — 3 units**

**Advisory:** Computer Information Systems A110 or A191.

This course provides the fundamental knowledge necessary for a student to become proficient in the field of Information Security. This course will prepare the student for a wide variety of security responsibilities. The curriculum covers a wide range of security concepts, including: General Security Concepts, Communication Security, Infrastructure Security, Basics of Cryptography, and Operational and Organizational Security. This course covers CompTIA's Security+ content and provides preparation for students seeking the CompTIA Security+ Certification. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A163 —  
Windows Desktop Administration — 3 units**

**Advisory:** Computer Information Systems A110.

Provides students with the knowledge required to work in enterprise environments that use Microsoft Windows desktop operating systems. Students will learn to install, deploy, and upgrade the Windows operating system, including ensuring hardware and software compatibility, configure pre-installation and post-installation system settings, security features, network connectivity applications and mobile computing. Students will also be able to maintain systems, including monitoring for and resolving performance and reliability issues. Will help prepare students for the Microsoft Certified IT Professional (MCITP) exams. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A171 —  
Introduction to JavaScript — 2 units**

**Advisory:** Computer Information Systems A123.

For students who already know how to create Web pages using HTML, this course introduces the fundamentals of JavaScript, a scripting language used to create interactive Web pages. Students will create dynamic Web pages using dialog boxes, forms, menus, rollover buttons, and image manipulation. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems  
A176 — Database Design and  
Data Warehousing— 3 units**

**Advisory:** Computer Information Systems A182 or equivalent.

Covers the terminology, technology and software used to design and implement a Microsoft SQL Server database. Student will learn to design, create and maintain a database to handle LOB (Line of Business) and DW (Data Warehousing) applications. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A177 — Business Intelligence and Data Mining — 3 units**

**Advisory:** Computer Information Systems A176 or equivalent.

Covers the terminology, technology and software used to build a data warehouse model and prepare that model for data mining. Students will learn how to design and process a data warehouse database using SSIS (Sql Server Integration Services), and format a cube in SSAS (SQL Server Analysis Services) in preparation for data mining operations. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A191 — Network and Communications Technologies — 4 units**

**Advisory:** Computer Information Systems A110.

Provides an introduction to an overview of the field of networking, data communications and connectivity, with an emphasis on terminology, hardware, and software associated with the various components of a network. Provide preparation for students seeking the Network + Certification. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A192 — Network Systems Administration — 3 units**

**Advisory:** Computer Information Systems A110 and A191.

Covers terminology, technology, topologies and software used in the Microsoft Windows servers. Students will learn to create user accounts, implement different levels of security, apply diagnostics and back up and maintain the software. Will help prepare students for the Certified IT Professional (MCITP) exams. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A193 — Network Infrastructure Administration — 3 units**

**Advisory:** Computer Information Systems A192.

Provides students with knowledge required to setup, configure, and support network infrastructures using the TCP/IP protocol. Topics include IP addresses, point-to-point tunneling protocols, DNS and DHCP services. Will help prepare students for the Certified IT Professional (MCITP) exams. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A194 — Network Directory Services Administration — 3 units**

**Advisory:** Computer Information Systems A192.

Provides a study of the procedures necessary to plan, implement, and troubleshoot directory service infrastructures, including forests and domains, DNS, site topology and replication, and directory strategies. Will help prepare students for Certified IT Professional (MCITP) exams. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A196 — Network Enterprise Administration — 4 units**

**Advisory:** Computer Information Systems A192.

Provides the knowledge and skills to design a security framework for small, medium, and enterprise networks. It focuses on providing secure access for local and remote users accessing resources using both public and private networks. Helps prepare students for Microsoft Windows Microsoft Certified Systems Engineer (MCSE) exams. This course may also be offered online. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A197 — Introduction to Networking (Cisco 1) — 3 units**

**Advisory:** Computer Information Systems A191.

Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU. C-ID ITIS 150.**

**Computer Information Systems A198 — Routing and Switching Essentials (Cisco 2) — 3 units**

**Advisory:** Computer Information Systems A197.

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course covers Cisco's CCNA content and provides preparation for students seeking the Cisco CCNA Certification. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A199 — Current Topics in Computer Applications — 1-4 units**

Covers topics currently receiving attention in the computer industry. Units vary according to topic selected, semester offered, and the number of meetings scheduled. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A223 — Javascript 2 — 2 units**

**Advisory:** Computer Information Systems A129 and A171.

For students who already know how to create web pages using HTML and understand JavaScript, this course covers advanced features of Front-End development. Topics include closures, advanced Javascript OOP patterns, utilizing jQuery, manipulating Document Object Model (DOM), and writing AJAX scripts. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A227 — Javascript 3 — 2 units**

**Advisory:** Computer Information Systems A223.

For students with advanced Javascript knowledge. The course will cover the latest technology to build complex Web apps. Topics include TypeScript foundations and AngularJS 2. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A232 — Digital Video for Business: Adobe Premiere Pro — 3 units**

**Advisory:** Computer Information Systems A100.

Using Adobe Premiere Pro, Photoshop and After Effects students will acquire practical and current knowledge to acquire, modify and implement digital video, audio, multimedia and graphics for business, educational personal use. Includes: video, audio and digital acquisition methods, hardware and software evaluation and output to varied media. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A234 — Excel 2 — 2 units**

**Advisory:** Computer Information Systems A134 or Business A134.

Create templates and macros using Visual Basic for Applications to automate Excel tasks, formula auditing, data validation, complex problem solving, importing data, routing changes, PivotCharts, PivotTables, and trendlines. Provides preparation for students seeking Microsoft Office Specialist (MOS) certification. Same as Business A234. Students completing Computer Information Systems A234 may not receive credit for Business A234. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Computer Information Systems A261 — Fundamentals of Wireless Networking — 3 units**

**Advisory:** Computer Information Systems A197 and A198.

This course provides a complete foundation of knowledge for entering into or advancing in the wireless networking industry. Students will learn to design and construct wireless networking infrastructures, interoperate with other wireless networks, and design and build a wireless antenna. By using the designs and best practices learned in this course students will be able to implement a secure wireless network. This course covers Cisco's Wireless LAN Certification content and provides preparation for students seeking a Cisco Wireless certification. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A262 — Fundamentals of Voice over IP Protocols — 3 units**

An introduction to Voice over IP (VoIP). Topics include VoIP architecture, components and functionality. Additional focus will be given to VoIP signaling, call control, voice dial plans, configuring voice interfaces and dial-peers, and implementing quality of service technologies in a VoIP environment. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A263 — Introduction to the Internet of Things — 3 units**

**Advisory:** Computer Information Systems A110 and Computer Information Systems A191.

The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. This course will prepare students to install, configure and maintain these devices. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A265 — Enterprise Router Configurations 1 — 3 units**

**Advisory:** Computer Information Systems A198.

The course focuses on advanced installation, configuration, and troubleshooting routers. Student will be introduced to routing protocols using Juniper Networks routing platforms. Students develop real-world case studies. Significant time will be allocated for hands-on experience. Provides preparation for students seeking Juniper certification. This course may be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A267 — Scaling Networks (Cisco 3) — 3 units**

**Advisory:** Computer Information Systems A198.

Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A268 — Connecting Networks (Cisco 4) — 3 units**

**Advisory:** Computer Information Systems A267.

Discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and LAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPsec and virtual private network (VPN) operations in a complex network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A280 — Information and Storage Management — 3 units**

**Advisory:** Computer Information Systems A110 and A191.

The course provides a comprehensive introduction to information storage technology which enables students to make more informed decisions in an increasingly complex IT environment. It builds a strong understanding of underlying storage technologies and prepares Student to learn advanced concepts, technologies and products. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A281 — Cloud Infrastructure and Services — 3 units**

**Advisory:** Computer Information Systems, A110 or A191.

This course educates students about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating to cloud computing. The course covers technologies required to build classic, virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop and application virtualization. Additional areas of focus are backup/recovery, business continuity, security, and management. Students will learn about the key considerations and steps involved in transitioning from the current state of a data center to a cloud computing environment. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A282 — Ethical Hacking and Network Defense — 3 units**

**Advisory:** Computer Information Systems A261 and A191.

Students will learn how hackers attack computers and networks, and how to protect Windows and Linux systems. Legal restrictions and ethical guidelines will be taught and enforced. Students will perform many hands-on labs; attacking and defending, using port scans, footprinting, buffer overflow exploits, SQL injection, privilege escalation, Trojans, and backdoors. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A285 — VMware View: Installation, Configuration, and Management — 3 units**

**Advisory:** Computer Information Systems A110 or A191.

Students will learn the concepts and capabilities of virtual desktops with a focus on the installation, configuration, and management of virtual desktops and thin clients using tools such as VMWare. This course will provide applications-oriented administrators with the knowledge and skills to virtualize applications with VMware ThinApp, modify parameters to handle special circumstances, and choose the best deployment and updating processes for organizational environments. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A286 — VMware, vSphere: Installation, Configuration, and Management — 3 units**

**Advisory:** Computer Information Systems A110 and A191.

Students will learn the concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of virtual infrastructure using tools such as VMWare®. This course covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, virtual switching, virtual system management, and engineering for high availability. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Information Systems A290 — Small/Home Office: Case Study 1 — 3 units**

**Advisory:** Computer Information Systems A191 or A261, and A263.

Challenges students to apply network concepts learned in previous courses to a case-study based problem in Small Office / Home Office environments. Includes various responsibilities and tasks required for a service engineer to design and execute a successful implementation. Prepares individuals for careers as a Network Engineer in the IT industry. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**COMPUTER SCIENCE****Computer Science A122 — Programming Concepts and Methodology 1 — 3 units**

**Advisory:** Computer Information Systems A090 or A100 or A111.

Introduction to the discipline of Computer Science using a high-level language utilizing programming and practical hands-on problem solving. The first course for students seeking the Computer Science AS-T transfer degree. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID COMP 122.**

**Computer Science A131 — Python Programming 1 — 4 units**

**Prerequisite:** Computer Science A170.

**Advisory:** Computer Information Systems A090 or A100 or A111.

Introduction to fundamental concepts and techniques for writing software in the Python programming language. Covers the syntax and semantics of data types, expressions, exceptions, control structures, input/output, methods, classes, and pragmatics of Python programming. This course may be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID COMP 112.**

**Computer Science A132 — Programming Concepts and Methodology 2 — 4 units**

**Prerequisite:** Computer Science A122.

Application of software engineering techniques to the design and development of large programs; data abstraction and structures and associated algorithms. The second course for students seeking the Computer Science AS-T transfer degree. This course may be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID COMP 132.**

**Computer Science A140 — Introduction to C#.NET Programming — 4 units**

**Advisory:** Computer Information Systems A100 or A111.

Provides students with a background in the object-oriented approach of the C#.NET language. Emphasis is on variables, methods, control structures, arrays, objects, classes, file I/O, database and Windows Forms. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Computer Science A142 — Introduction to Visual Basic.NET Programming — 4 units**

**Advisory:** Computer Information Systems A100 or A111.

An object-oriented approach to the Visual Basic .NET language with an emphasis on programming fundamentals: variables, expressions, methods, control structures, arrays, objects, classes, file I/O, database, Windows and Web Forms. Provides preparation for students Microsoft certification. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Computer Science A150 — C++ Programming Language 1 — 4 units**

**Prerequisite:** Computer Science A131 or A140 or A142 or A170.

First course in ANSI/ISO Standard C++ programming language. Topics include data types, strings, operators, expressions, control flow, input/output, functions, pointers, arrays, preprocessor, streams, enumerated data type, dynamic memory allocation, objects, classes, vectors, inheritance, object-oriented design and recursion. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A170 — Java Programming 1 — 4 units**

**Advisory:** Computer Information Systems A090 or A100 or A111.

A first Computer Science course taught using the Java programming language. Students will build Java applications. Emphasis will be placed on programming fundamentals such as variables, selection and loops as well as object-oriented programming concepts including classes and inheritance. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Computer Science A200 — Data Structures — 4 units**

**Prerequisite:** Computer Science A250.

A study of data abstraction and algorithm analysis. Data structures include lists, stacks, queues, trees, tables, and graphs. Algorithms include searching, sorting, pattern-matching, tree traversal, and balancing. This is a core course for students who want to study advanced programming, computer science, or engineering. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A216 — Computer Architecture — 4 units**

**Prerequisite:** Computer Science A150 and A170.

A course in the architecture of computers. Topics will include Boolean algebra and computer arithmetic, digital logic, micro and macro architecture, Assembly language, performance, datapath and control, memory hierarchies, interfacing and peripherals, and multiprocessing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A220 — Software Engineering — 4 units**

**Prerequisite:** Computer Science A150 and A170.

Introduction to the concepts, methods, and current practice of software engineering. Study the lifecycle of a software system. Employ engineering methods, processes, techniques, and measurement. Use of tools to manage software development. Project work is required to illustrating the various elements. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A231 — Python Programming 2 — 4 units**

**Prerequisite:** Computer Science A131.

Advanced Python programming. Covers classes, modules, using the Python standard library and using third-party libraries. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A242 — Computer Organization and Assembly Language — 3 units**

**Advisory:** Computer Science A122 or A131 or A140 or A150 or A170.

Introduction to the organization and behavior of real computer systems at the assembly-language level. Topics include studying the mapping of statements and constructs in a high-level language onto sequences of machine instructions, as well as the internal representation of simple data types and structures, and examining numerical computation to note various data representation errors and potential procedural errors. Lecture. **Transfer Credit: CSU, UC. C-ID COMP 142.**

**Computer Science A250 — C++ Programming Language 2 — 4 units**

**Prerequisite:** Computer Science A150 and A131 or A140 or A170.

Second course in ANSI/ISO Standard C++ programming language. Topics include sorting and searching, data structures, operator overloading, memory management, exception handling, name scope management, polymorphism, templates, STL containers, STL algorithm and iterators, GUI relational database and functional programming. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A257 — Boolean Algebra and Logic — 3 units**

**Prerequisite:** Computer Science A131 or A140 or A150 or A170.

An introduction to the discrete structures used in Computer Science. Topics covered include basic logic, proof techniques, relations, Boolean algebra, logic gates, languages and grammars, finite-state machines, and Turing machines. Lecture. **Transfer Credit: CSU, UC.**

**Computer Science A262 — Discrete Structures — 3 units**

**Prerequisite:** Computer Science A122 or A131 or A140 or A150 or A170.

An introduction to the discrete structures used in Computer Science with an emphasis on their applications. Topics covered include: Functions, relations and sets; basic logic; proof techniques; basics of counting; graphs and trees; and discrete probability. Lecture, Lab. **Transfer Credit: CSU, UC C-ID COMP 152.**

**Computer Science A263 — Probability and Statistics for Computer Science — 4 units**

**Prerequisite:** Computer Science A262 and Math A180.

Introduction to probability and statistics with an emphasis on their applications in Computer Science. Topics include continuous and discrete probability distributions, linear and logistic regression, creating models to use for predictive inference, and programmatic analysis of data. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Computer Science A272 — Java Programming 2 — 4 units**

**Prerequisite:** Computer Science A170.

A second course in the Java programming language. Topics include object-oriented design, inheritance, interfaces, abstract and anonymous inner classes, recursion, I/O & exceptions, generics, Java collections, stacks, queues, lists, trees, lambda expressions and streams. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Computer Science A273 — Mobile Application Development in Android — 4 units**

**Prerequisite:** Computer Science A250 or Computer Science A272, or concurrent enrollment.

This course covers how to develop applications for smartphones and tablets with the Android open-source platform. Topics include the Model-View-Controller architecture, designing and handling user input, defining activity layouts, application events, displaying images, managing navigation and core device features, such as GPS, accelerometers and touch gestures. Students will leverage and expand their Java programming knowledge to build mobile applications from start to finish. Lecture, Lab. **Transfer Credit: CSU.**

**Computer Science A280 — Current Topics in Computing — 1-4 units**

Course covers topics currently receiving attention by the computer industry. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**CONSTRUCTION TECHNOLOGY**

**Construction Technology A100 — Principles of Construction — 1.5 units**

An introductory course to construction covering, hand and power tools, building code development and applications, blueprints, license and contract law, jobsite safety and construction trades. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**



**Construction Technology A112 — Stair Framing — 2.5 units**

Topics of instruction include stair design, building codes, calculations, layout and construction. Practical instruction is given in the use of tools and materials through construction laboratory work. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A114 — Cabinet Making — 4 units**

Introduction to wood as a building material. Introduction to basic wood and machine tools to bring forth the structural and visual potential of the material. The basic skill set includes two-dimensional design and drawing concept development, furniture history, and studio practices. Two items are selected by the staff as a platform for skill mastery demonstration. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A116 — Furniture Making and Design — 4 units**

The basic rules of furniture design and production with emphasis on wood selection, hand tool use, and a review of woodworking machinery. Advanced students will design and build more complex furniture pieces using more advanced techniques. Same as Art A116. Students completing Construction A116 may not receive credit for Art A116. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A125 — Additions and Remodeling — 5 units**

An introductory course to the fundamentals of residential remodeling and additions. Topics of instruction include: planning and design, blueprint reading, permit process, and building codes. Practical instruction is given in the use of tools and materials through hands on laboratory work. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A126 — Steel String Guitar Making and Design 1 — 4 units**

This course teaches the theories, design, methods, and means of building a steel string acoustic guitar. Focus is on the primary aspects of guitar design and the structural elements. Students will also learn the more intricate details involving the process of guitar making and finishing strategies. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A127 — Steel String Guitar Making and Design 2 — 4 units**

**Prerequisite:** Construction Technology A126.  
Students will learn advanced theories, designs, methods, and means of building a steel string acoustic guitar. The focus is on detail aspects of the building process and instrument performance properties. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A150 — Electronics for Electricians — 4 units**

Introduction to basic DC and AC circuits and electronic devices. Covers history of electronics, basic electricity, math, circuit theory, circuit components, digital electronics, schematics, test equipment. Labs will cover practical applications of all covered topics. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A154 — Residential Drywall and Taping — 1.5 units**

The study of various aspects of interior drywall, including layout and installation of drywall, cornerbead and bullnose trim. Students will learn how to estimate drywall projects. They will tape the interior of a house using hand tools. Students will be introduced to professional tools such as Bazooka™, 7 & 12 inch boxes, corner angles and corner finishers, mud runners and hand tools, texture application using a 10 gallon texture sprayer and smaller hoppers. Students will apply several different textures such as knockdown, orange peel, splatter and roller finish. Patch and drywall repair to match existing finishes. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A155 — Structured Wiring Installation — 2 units**

**Advisory:** Construction Technology A275.  
Wiring for interior low voltage systems, including layout and construction methods, code requirements, both sizing and installation standards, emphasis on material conservation practices and compliance with the National Electrical Code. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A156 — National Electrical Code — 2 units**

This course is designed to provide those currently working in the electrical field with training that will keep them current with NEC standards that are updated every three years. Hours earned in this course may be applied toward the mandatory 32 hours of training required for license renewal. Lecture. **Transfer Credit: CSU.**

**Construction Technology A157 — Photovoltaic System Installation — 4 units**

Presents principles of Photovoltaic Systems and incorporates hands-on activities for all topics. Solar Energy fundamentals and applications, electricity and safety basics, PV modules, system components, system sizing, electrical design, mechanical design and performance analysis and troubleshooting. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A158 — Photovoltaic System Installation 2 — 4 units**

**Prerequisite:** Construction Technology A157.  
Continuation of Photovoltaic Systems principles. Incorporates hands-on activities for all topics, Solar Energy fundamentals and applications, electricity and safety basics, PV modules, system components, system sizing, electrical design, mechanical design and performance analysis and troubleshooting. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A161 — Solar Water and Pool Heating Installation — 4 units**

Technologies for Solar Water Heating and Solar Swimming Pool Heating for residential, commercial and agricultural applications. Solar concepts, system types and system components. Solar collector mounting, component installation, checkout and start-up procedures. Pool systems components, installation, operation, and economics. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A165 — Construction Safety/CAL OSHA — 3 units**

Regulations related to general construction safety. Meets the requirements and follows the guidelines for 30-hour OSHA Construction Outreach Training. U.S. Department of Labor cards will be issued upon successful completion of this course. Lecture. **Transfer Credit: CSU.**

**Construction Technology A170 — Introduction to Construction — 3 units**

Fundamentals of the construction industry; terminology and procedures; an overview of trades, skills, and processes. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Construction Technology A180 — Building Construction 1 — 5 units**

**Advisory:** Construction Technology A190 or A195 or concurrent enrollment.  
Technical and practical experience to complete floor and wall framing of a house including underpinning, wall layout, and wall construction up to the ceiling joists. Estimating of materials, basic surveying, and concrete foundation formwork are also covered. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A185 — Building Construction 2 — 5 units**

**Advisory:** Construction Technology A180 and A190 or A195.  
The study of roof design and cutting. The use of the framing square in roof layout. Pre-fabrication techniques in housing with field research assignments. Frame estimating for the building trades and the application of various roofing materials are also covered. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A189 — Blueprint Reading — 1.5 units**

Develop blueprint reading skills in all aspects of residential construction to acquire a realistic understanding of prints and sketches as a means of communication in construction. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU.**

**Construction Technology A190 — Blueprint Reading and Drafting — 4 units**

Develop blueprint reading and drafting skills in all aspects of residential construction to acquire a realistic understanding of prints and sketches as a means of communication in construction. Lecture. **Transfer Credit: CSU.**

**Construction Technology A194 — Introduction to Building Codes — 1.5 units**

An introductory course in Building Codes. Covers building code development from model codes to state code adoptions. Topics include residential building, plumbing, mechanical and green codes.. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU.**

**Construction Technology A195 — Building Code and Law — 3 units**

An analysis of the International Residential Code, and city and county related building codes. Special ordinances and land usage are also covered. Lecture. **Transfer Credit: CSU.**

**Construction Technology A196 — Green Building Codes — 1.5 units**

A complete analysis of the California Green Building Code. Special local Green Building ordinances are also covered along with a comparison of the International Green Building Code. Same as Architectural Technology A196; students completing Construction Technology A196 may not receive credit for Architectural Technology A196. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Construction Technology A197 — California Energy Code — 1.5 units**

A complete analysis of the California Energy Code. Special local Energy Code ordinances are also covered along with a comparison of the International Energy Code. Explanation of the State's energy and compliance forms. Same as Architectural Technology A197; students completing Construction Technology A197 may not receive credit for Architectural Technology A197. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Construction Technology A198 — Energy Audit — 3 units**

This course introduces the student to energy conservation methods for residential HVAC systems. It covers energy auditing procedures used to analyze the performance of residential buildings and the relationship to HVAC system design, including installation techniques, system performance, and potential energy efficiency gains. It will focus on developing the student's knowledge and skills to better understand the concept of whole building performance, and will demonstrate current technologies utilized to measure and verify system performance of HVAC equipment for the purpose of meeting local, state, and federal requirements for improved energy efficiency. The use of specialized tools, instruments and diagnostic procedures for system performance testing of space conditioning equipment is covered. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A199 — Current Topics in Construction Technology — 1-4 units**

Current issues in the field of construction technology, rotating through a variety of topics, such as residential/commercial/industrial electrical wiring, structured wiring, and general carpentry. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A209 — Concrete Flatwork — 2.5 units**

Concrete flatwork, hands-on forming, placement and a variety of concrete finishes. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A210 — Concrete Construction — 5 units**

Concrete flatwork and foundations, hands-on surveying, forming and finishing concrete, poured-in-place reinforced concrete, concrete stairs, estimating concrete. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A211 — Decorative Concrete — 3 units**

An introductory course in decorative concrete. Topics covered include: stamped concrete, decorative borders, staining, stencils, engraving, polishing, and overlays. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A220 — Construction Estimating — 3 units**

Construction estimating including bid preparation, material quantity take-off and analysis, subcontractor bids, bidding practices and final bid form compilation and submittal. Lecture. **Transfer Credit: CSU.**

**Construction Technology A225 — Land and Building Development — 3 units**

A general survey of land development principles and procedures used prior to the actual construction of structures. Site analysis and planning, regulatory controls, obtaining entitlements, grading, road and street designs, utility systems, principles of real property, and project financing will be covered. Same as Architectural Technology A225. Students completing Construction Technology A225 may not receive credit for Architectural Technology A225. Lecture. **Transfer Credit: CSU.**

**Construction Technology A230 — Construction Inspection — 3 units**

Inspection procedures and techniques of testing. A study of the various building code requirements in the International Residential Code and Title 24 of the California State Code. Plans, specifications, earthwork, grading foundations, concrete and framing are covered. Lecture. **Transfer Credit: CSU.**

**Construction Technology A235 — Contractor's Business Practice — 3 units**

Fundamentals of the construction industry; terminology and procedures; an overview of its trades, skills, and processes. Lecture. **Transfer Credit: CSU.**

**Construction Technology A240 — Specialty Trades — 5 units**

This introductory course covers interior and exterior building finishes and stairs, including layout fabrication and installation of stairs; an introduction to framing, pre hung door and window installation; drywall, and stucco plastering. Building codes are included. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A241 — Finish Carpentry — 5 units**

This course covers interior and exterior building finishes, including door materials, construction, hardware and installation: interior and exterior millwork; molding, cabinetry and exterior siding. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A250 — Construction Supervision and Project Management — 3 units**

The combination of designing, estimating, contracting, financing and building must be understood and practiced. Leadership in this field means being responsible for many people, their work and their safety. Lecture. **Transfer Credit: CSU.**

**Construction Technology A252 — Business Law for Contractors — 1.5 units**

Legal aspects of the formation, operation, regulatory requirements, financing, and contracts for successfully operating a construction contracting business in California. Lecture. **Transfer Credit: CSU.**

**Construction Technology A260 — Masonry Construction — 5 units**

Covers masonry materials, construction and blueprint reading with estimating, construction masonry block walls, paving, veneering, brick and stone pilasters, brick walls and planter boxes, stucco over masonry. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A261 — Masonry Construction II — 5 units**

**Advisory:** Construction Technology A260.

An advanced course in masonry. Covers flatwork with brick, stone and pavers, masonry stairs, arches, and advanced masonry veneer projects. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A265 — Plumbing 1 — 4 units**

A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Knowledge of basic principles, functions and design, as well as the physical ability to install and test the rough-in plumbing in a single family dwelling. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A266 — Plumbing 2 — 4 units**

A course designed to provide students with entry-level instruction involving the theory and skills of residential plumbing systems. Topics include basic principles, function, and design, as well as the installation of finish plumbing, repair and service of plumbing systems, and the installation of solar, spa, and sprinkler systems in a single family dwelling. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A270 — Contractor's License Law — 1.5 units**

Preparation for the California State Contractor Examination in any classification. Includes state license law, civil code, civil procedure, labor law, contract law, and asbestos regulations. Lecture. **Transfer Credit: CSU.**

**Construction Technology A275 — Residential Electrical Wiring — 5 units**

Wiring for interior electrical systems including layout and construction methods, code requirements, both sizing and installation standards, emphasis on material conservative practices, and compliance with the National Electrical Code. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A285 — Residential Light Steel Frame Construction — 5 units**

A comprehensive hands-on course that covers the fundamentals of utilizing light frame steel for residential framing in place of wood. Raised floor construction, wall framing and trussed roof fabrication and installation including applicable building codes, blueprint reading, estimating, and inspections are covered. Lecture, Lab. **Transfer Credit: CSU.**

**Construction Technology A290 — Construction Contracts and Specifications — 3 units**

**Prerequisite:** Management level in construction.

A study of construction contracts and their administration, elements of contract law, contract documents, AIA general and supplementary conditions, competitive bidding, bonding and insurance, unions and wage rates, specifications. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**CONSUMER STUDIES**

**Consumer Studies A180 — Life Management — 3 units**

*Formerly Family and Consumer Sciences A180*

This course develops skills in value clarification, goal setting, resource allocation, decision-making priority management, money management, workplace management, communication skills and healthy habits. Lecture. **Transfer Credit: CSU.**

## COUNSELING

### Counseling A100 — Introduction to College — 1 unit

Introduces new students to college services and facilities, academic policies and various segments of higher education in California. Includes time management, study skills, and academic planning. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Counseling A101 — New Horizons for Adults Returning to College — 1 unit

An orientation course designed to assist adults re-entering academic life. Orientation to O.C.C. and higher education will be offered. Topics will include career development, career change, study skills, time management, life transitions, job skills, self-esteem, assertion, and communication skills. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Counseling A104 — Career and Life Planning: A Holistic Approach — 3 units

In depth career and life planning: Designed primarily for students uncertain about educational-occupational plans. Standardized tests of interests, personality characteristics, and values are utilized to develop a systemic approach to career and life development. This course emphasizes the importance of taking personal responsibility for one's educational, career and personal decisions to achieve satisfaction through work and life balance. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Counseling A105 — Strategies for College Success — 3 units

*Formerly Counseling A102*

This is a course designed to integrate personal growth, critical and creative thinking, problem solving and academic and career success. Topics include study techniques, orientation to higher education and resources, life skills, academic planning, and personal development. For all students wishing to improve their success in college. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

### Counseling A107 — Chicana/o & Latina/o Experience in Higher Education — 3 units

**Advisory:** English A099

Counseling practices will be applied to explore factors that contribute to a successful experience in higher education for Chicana/o and Latina/o students. An examination of the educational experience of the Chicana/o and Latina/o community in the United States. Emphasis on understanding the background of Chicana/o and Latina/o students in relation to current educational conditions and trends. Lecture. **Transfer Credit: CSU, UC.**

### Counseling A107H — Chicana/o & Latina/o Experience in Higher Education Honors — 3 units

**Advisory:** English A099

Counseling practices will be applied to explore factors that contribute to a successful experience in higher education for Chicana/o and Latina/o students. An examination of the educational experience of the Chicana/o and Latina/o community in the United States. Emphasis on understanding the background of Chicana/o and Latina/o students in relation to current educational conditions and trends. Lecture. **Transfer Credit: CSU, UC.**

### Counseling A109 — Developing and Understanding Happiness — 3 units

Study of current research and the practical application of research to attain sustainable increases in well-being in order to live a fulfilling life. Will explore such questions as: What is happiness? How do we measure it? What is the evolutionary significance of positive emotion? Topics include the role of happiness, love, spirituality, relationships, forgiveness, and mindfulness. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Counseling A110 — Applied Stress Management — 2 units

This course is designed to respond to the need to understand and manage personal stress. Symptom identification and management techniques will be emphasized. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

### Counseling A120 — Career Decision Making — Accelerated — 2 units

An accelerated class designed for students who are uncertain about their educational-occupational plans. Career inventories are used along with non-test data to evaluate occupational choices. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

### Counseling A135 — Principles of Effective Parenting — 3 units

Designed for students who are interested in improving parenting skills and promoting healthy functioning in the context of all relationships. The course focuses on developing healthier interpersonal relationships that ultimately increase self-awareness and self-esteem which are essential to effective parenting and personal success. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Counseling A170 — College Major Search — 1 unit

This course is designed to facilitate a student's exploration and selection of a college major. Students will examine and apply a decision-making process in identifying their academic interests and develop an educational plan based on a major selection. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### Counseling A199 — Topics in Counseling — .5-3 units

Present, discuss, and study personal development issues. Introduce student to campus resources. Topics will change each semester. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

### Counseling A205 — Transfer Success Seminar — 1 unit

The course is designed to help Transfer Opportunity Program students develop the skills necessary to navigate the transfer process. Topics include career selection and academic planning from a transfer perspective, overview, of potentially complex transfer issues and transfer admissions representative speakers as well as financial planning and fund acquisition for transfer students. Student success strategies will be further developed, with emphasis on new skills and characteristics including emotional intelligence, educational grit, independence, and behavioral change. A comprehensive educational plan for transfer will be completed as part of this course. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

## CULINARY ARTS

### Culinary Arts A100 — Introduction to the Hospitality Industry — 3 units

Overview of the hospitality industry, its history and interrelationships of hotel, restaurant, travel and leisure industries. Economic and social influences of leisure. Emphasis on attitude required of a person seeking a position in the industry. Same as Food Service Management A100 and Hospitality, Travel & Tourism A100. Students completing Culinary Arts A100 may not receive credit for Food Service Management A100 or Hospitality, Travel & Tourism A100. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### Culinary Arts A120 — Culinary Principles 1 — 3 units

**Prerequisite:** Food Service Management A160, or concurrent enrollment.

Fundamentals of food preparation and cookery, emphasizing quality standards of production and the basic cooking methods as used in the modern commercial kitchen. Laboratory work includes knife skill, vegetable cuts, preparation of vegetables, soups, stocks, and sauces. High standards of professionalism, sanitation, and proper work habits will also be emphasized. Class requires purchase of a set of knives. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

### Culinary Arts A122 — Culinary Principles 2 — 3 units

**Prerequisite:** Culinary Arts A120.

Focus on the basic cooking methods as they apply to the major cuts of beef, veal, lamb, pork, poultry, and seafood. Portion control and proper bonding techniques will be demonstrated and practiced. Quality standards of food presentation and achieving proper flavor through the correct application of the principles and processes of modern cookery will be practiced. High standards of professionalism, sanitation, and proper work habits will also be emphasized. Course requires purchase of a set of knives. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

### Culinary Arts A124 — Principles of Baking 1 — 2 units

**Prerequisite:** Food Service Management A160, or concurrent enrollment.

Study the fundamentals of baking, including ingredient composition and function, preparation and evaluation of yeast, roll-in yeast, and quick breads, biscuits and muffins, cookies, shortened cakes, pies, custards, and recipe conversion. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

### Culinary Arts A126 — Principles of Baking 2 — 2 units

**Prerequisite:** Culinary Arts A124.

Advanced course in pastry arts production, including puff pastry, foam cakes, classical European tortes, pastry fillings, meringues, cake decorating, chocolate handling, glazes, icings, tarts, and pate a choux. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A131 — Principles of Artisan Bread — 3 units**

**Prerequisite:** Culinary Arts A124.

Study in fundamentals of bread development. Analysis of ingredient composition and function of natural and manufactured yeasts as it interacts with pre-ferments, levains, sourdough rye, and straight doughs. Bakers' percentages and recipe conversions will be examined with international weight standards. Students will be required to follow hospitality department dress standards. Field trips required. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A149 — Pantry — 2 units**

**Prerequisite:** Food Service Management A160, or concurrent enrollment.

Methods of pantry and breakfast preparation, including proper use of cook's knife, preparation and presentation of salad and salad dressings, proper vegetable and fruit cuts, and vegetable and fruit identification. Basic cooking methods applied in breakfast service will be covered. Students will also learn to use standardized recipes and practice quantity food preparation. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A170 — Culinary Team Competition — 1-4 units**

**Prerequisite:** Culinary Arts A120, A124, A149.

Team members are selected through an application process arranged by the Program Coordinator for Culinary Arts. Students will participate in weekly and bi-weekly practice sessions and ultimately compete in the American Culinary Federation's Student Team Competition. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A199 — Current Issues in Culinary Arts — .5-1.5 units**

Deals with current issues in the field of culinary arts and food service management, rotating through a variety of topics such as culinary skills and innovations, sanitation, safety, nutrition, management. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Culinary Arts A200 — Garde Manger 1 — 2 units**

**Prerequisite:** Food Service Management A160, or concurrent enrollment, and Culinary Arts A149.

Duties and skills required of the Garde Manger (cold food) chef, including the proper execution of the basic cooking methods. The course will explore the artistic side of food presentation. Topics include buffet salads, cold sauces and dressings, smoking and curing of meats, hors d'oeuvre, pate, terrine, ice carving, salt dough, tallow sculpture, and cheeses. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A210 — Directed Practice for Culinary Arts 1 — 2 units**

**Prerequisite:** Culinary Arts A120, A124, and A149.

**Advisory:** Culinary Arts A122.

This is a directed practice opportunity for Culinary Arts which includes practical training in the OCC cafeteria operation. Students will rotate through the major areas in the kitchen in supervised settings. Students will be required to follow Culinary Department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A215 — Directed Practice for Culinary Arts 2 — 2 units**

**Prerequisite:** Culinary Arts A122 and A210.

This course is primarily a directed-practice (work experience) in an off-site kitchen. Examples of work sites include restaurants, hotels, country clubs or other commercial facilities and are approved by the program coordinator. Students will practice proper interview techniques, develop a resume, career goals and action plan. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. TB clearance required. One 6-hour seminar, 120 arranged laboratory. **Transfer Credit: CSU.**

**Culinary Arts A226 — Principles of Pastry Arts — 3 units**

**Prerequisite:** Culinary Arts A126.

Advanced course of pastry arts emphasizing chocolate artistry and confections, sugar work, marzipan, and decorated cakes. Students will also learn applications of cutout, stencils, and molds for decorated plated desserts and specialty cakes. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A236 — Directed Practice for Baking and Pastry 1 — 2 units**

**Prerequisite:** Culinary Arts A124.

**Advisory:** Culinary Arts A126.

A directed opportunity for on-the-job baking and pastry training that includes practical training at OCC bakery in quantity bakery production. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. TB clearance required. Six hours of seminar, 120 work hours arranged. **Transfer Credit: CSU.**

**Culinary Arts A237 — Directed Practice for Baking and Pastry 2 — 2 units**

**Prerequisite:** Culinary Arts A236.

**Advisory:** Culinary Arts A126.

A directed opportunity for on-the-job baking and pastry training. Includes on the job training at approved institutional or commercial facilities. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. TB clearance required. Six hours of seminar; 120 work hours arranged (unpaid) or 150 work hours arranged (paid). **Transfer Credit: CSU.**

**Culinary Arts A245 — Culinary Principles 3 — 3 units**

**Prerequisite:** Culinary Arts A122, A124, and A149.

Students will prepare a variety of American Regional Cuisine for service to customers in the OCC Captain's Table Restaurant. Cuisines from around the United States will be explained and discussed. Focus for the class will be on station readiness and implementation of the basic cooking methods in a volume, banquet style format while emphasizing the elements of quality presentation. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A255 — Garde Manger 2 — 2 units**

**Prerequisite:** Culinary Arts A200.

This course applies previously learned Garde Manger techniques and skill in practical situations. Weekly themes will highlight different cuisine in a buffet format. Foods prepared will emphasize classical cooking with a modern approach to nutrition, service, and presentation. Also, charcuterie (sausage making), cheese making, and meat preservation will also be explored. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A265 — Ala Minute Continental Cooking — 2 units**

**Prerequisite:** Culinary Arts A245.

Students prepare menu offerings in the college's Captain's Table restaurant for the dining public. Emphasis is on station readiness (under strict time constraints), implementation of basic cooking methods, quality of presentation, and an exploration of a variety of cuisines from around the world in a cook-to-order format. Student will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Culinary Arts A270 — Ice Carving — 1 unit**

**Advisory:** Art A107 or A141.

Course on Ice Carving and Design Techniques: Emphasis is on carving the medium of ice for the Culinary Arts and Hospitality Field, Methods of Ice Carving, Fabrication of an Ice Block, Professional tools and chisels, safe ice carving techniques, art and design principles, display and lighting, and fusing techniques. Student will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**DANCE**

**Dance A101 — Modern Dance 1 — .5-2 units**

Offers instruction in movement vocabulary, and technical skills necessary to prepare the body as an instrument of expression in modern dance. This dance style began in the United States in the early 1930's as a "modern expression" of American themes, personal and artistic ideas. The style has continued to evolve to include dance themes expressive of contemporary times. This course offers instruction at the beginning level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A102 — Modern 2 — 1-2 units**

**Advisory:** Dance A101 or successful audition. This skill level will be validated in class during the first week of the course.

Designed to teach intermediate and advanced level dancers the dance movement and post- modern dance based on the principles of Cunningham, Nikolais, Humphrey-Weidman and other pioneers of American modern and post-modern dance. This course will explore the principles of "fall and recovery," symmetry/asymmetry, stage space, and ensemble work. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A106 — Strength and Stretch — 1-2 units**

Strength and flexibility exercises and their application to dance technique will be selected to target major muscle groups that need maximum efficiency and range of motion. The course will address both the adaptation of exercises to the individual for maximum benefit and application to movement patterns. Also applicable to any sport. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A107 — Conditioning for Dance — .5-2 units**

A program combining skills from dance and exercise designed to improve alignments, strength, flexibility, coordination, balance and endurance for greater technical ability in dance and other athletic studies. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A108 — Pilates Mat Work — 1-2 units**

A course in alignment and correctives work based on concepts and exercises developed by Joseph H. Pilates. The focus is on mat work exercises for improved body alignment, strength, flexibility, control, coordination, and breathing. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A110 — Ballet 1 — .5-2 units**

Introduces and develops movement principles and skills necessary for the study of classical ballet. Course will include ballet terminology, use of "turnout" positions of feet and legs, alignment of spine and placement of weight at the barre, in center floor and traveling patterns. Instruction at the beginning level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A111 — Ballet 2 — .5-2 units**

**Advisory:** Dance A110 or successful audition.

Introduces and develops movement principles and skills necessary for the study of classical ballet. Course will include ballet terminology, use of "turnout" positions of feet and legs, alignment of spine and placement of weight at the barre, in center floor and traveling patterns. Instruction is at the intermediate level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A113 — Pointe Work — 1-2 units**

**Advisory:** Intermediate-level ballet technique.

A course teaching the technique and movement skills needed to perform classical ballet on "pointe." Includes preparation and care of pointe shoes. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A115 — Yoga for Dancers — .5-2 units**

Using traditional yoga postures and breathing techniques, this course is designed for the needs of the training dancer. Yoga postures to increase strength and flexibility, as well as restorative postures will be taught in order to bring about improvement in the execution of dance movements. Instruction at the beginning, intermediate, and intermediate/advanced levels is offered. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A116 — Latin Dance Styles 1 — .5-2 units**

An introductory course in Latin dance styles designed to teach cha-cha, merengue, tango, salsa, and other Latin dances. Course will emphasize steps, styling, partnering, rhythm, cultural background materials. The beginning level is appropriate for students of all ages and training. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A117 — American Social Dance Styles — .5-2 units**

An introductory course in American social dance styles designed to teach foxtrot, waltz, swing, and Lindy hop. Course will emphasize steps, styling, partnering, rhythm, and cultural background material. Beginning level is appropriate for students of all ages and training. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A118 — Movement for Longevity — 1-2 units**

Designed to develop strength, flexibility, ease of motion for the maturing body. The course will address bone density and balance through dance and movement practices. Appropriate for non-dancers as well as dancers. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A119 — Kinesiology for Dance — 3 units**

This course is designed to introduce students to the basic principles of kinesiology focusing on the key body joints including the spine, shoulder, hip, knee, ankle, and foot. It addresses the specific needs of dancers and Pilates students. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Dance A120 — Jazz Dance 1 — .5-2 units**

A technique course in the study of various jazz styles. Emphasizes the use of energy, rhythm, improvisation while emphasizing body control, alignment, use of weight changes and quality within a jazz dance movement vocabulary. Instruction at the beginning level. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A121 — Jazz Dance 2 — .5-2 units**

A technique course in the study of various jazz styles. Emphasizes the use of energy, rhythm, improvisation while emphasizing body control, alignment, use of weight changes and quality within a jazz dance movement vocabulary. Instruction at the intermediate level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A125 — Tap 1 — .5-2 units**

Tap dance techniques based on the style known as rhythm tap emphasizing fundamental skills and rhythms, time steps, flash footwork, short combinations, and styling. Instruction at the beginning level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A126 — Tap 2 — .5-2 units**

**Advisory:** Dance A125 or successful audition.

Tap dance techniques based on the style known as rhythm tap emphasizing fundamental skills and rhythms, time steps, flash footwork, short combinations, and styling. Instruction at the intermediate level. Course may be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A129 — Pilates Methodology — 3 units**

**Prerequisite:** Intermediate to advanced level skills in Pilates technique. This prerequisite will be validated during the first week of the course.

Designed for Pilates students to learn how to teach classes in Pilates techniques and dance conditioning for adults or teens in a variety of settings. This class covers assessment, goal setting, lesson plans, communication, cueing, precautions, and modifications for Pilates clients. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A130 — Mid-Eastern Dance 1 — .5-2 units**

A technique course emphasizing the social and stage dances from the region designated as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary and styling, and finger cymbal playing. Instruction at the beginning and intermediate levels. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A133 — Introduction to World Dance — .5-2 units**

This is an introductory level course designed to survey dances of selected world dance cultures. Through movement experiences and lecture/discussion, students will gain the movement technique and understanding necessary to perform the selected dances. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A135 — Flamenco Dance 1 — .5-2 units**

A technique course in the study of various dance forms and rhythms in flamenco dance. Emphasizes proper alignment, rhythm, footwork and arm work within a flamenco dance movement form. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A137 — Classical Dance of India — .5-2 units**

A beginning level course that teaches the footwork, gestures, movement, music and history of Bharata Natyam dance style from Southern India. Includes lectures and field trips to introduce students to Indian culture and rituals. For dancers and non-dancers. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A138 — African Dance and Drumming 1 — .5-2 units**

A movement course designed to teach traditional and contemporary dances of various African cultures. Includes rhythms, song forms, use of costume pieces, and information on the integral link between dance, chant and social/religious aspects of African cultures. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A139 — Gyrokinesis — .5-2 units**

Designed for beginning level students, this course will present an introduction to Gyrokinesis, an important component of the Juliu Horvath Method. The entire body is worked through fluid exercises focusing on the natural directions of spinal movements and joint articulations. The course will involve participatory labs and skills demonstrations. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A142 — Folk Dance — .5-2 units**

Emphasis on the knowledge of folk dance and the background which shapes the origins, themes and style of the dance. Fundamental elements of dance, rhythms and information about the link between dance and its cultural background. One particular culture will be focused on each semester. Topics may include folk dances from South America, North America, Europe, the Middle East and Asia. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A143 — Jazz Dance 3 — 2 units**

**Prerequisite:** Dance A121 or successful audition.

This course offers Jazz dance instruction for dancers at the high intermediate level. It includes thorough warm up exercises, technique, vocabulary skills and concepts to prepare the body as an instrument of expression in Jazz dance, with emphasis on lyrical and contemporary techniques. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A144 — Ballet 3 — 2 units**

**Prerequisite:** Dance A111 or successful audition.

A technique course on classical ballet, emphasizing movement skills at the barre, in center floor and traveling patterns. Instruction is at the high intermediate level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A145 — Modern Dance 3 — 2 units**

**Advisory:** Dance A102 or successful audition.

This course offers modern dance instruction for dancers at the high intermediate level. It includes thorough warm up exercises, technique, vocabulary skills and concepts to prepare the body as an instrument of expression in modern dance, with emphasis on Nikolais, Horton and contemporary techniques. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A146 — Tap 3 — 1 unit**

This course offers tap dance instruction at the high intermediate level, teaching techniques based on the style known as rhythm tap, emphasizing low to the ground, syncopated footwork, fundamental skills and rhythms, time steps, short combinations, and styling. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A147 — Flamenco Dance 2 — .5-2 units**

**Prerequisite:** Successful audition. This prerequisite will be validated in class during the first week of the course.

A technique course in the study of various dance forms and rhythms in flamenco dance. Emphasizes proper alignment, rhythm, footwork and arm work within a flamenco dance movement form at an intermediate and advanced level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A148 — Mid-Eastern Dance 2 — .5-2 units**

**Prerequisite:** Successful audition. This prerequisite will be validated in class during the first week of the course.

A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary and styling, and finger cymbal playing. Instruction at the high intermediate/advanced levels are offered. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A149 — Hip-Hop Dance 1 — .5-2 units**

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm, and improvisation while emphasizing body control, alignment, balance, and use of weight changes. Instruction at the beginning and intermediate levels. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A150 — Dance Improvisation Workshop 1 — 1 unit**

Directed exploration of dance movement including use of space, dynamics, and rhythm as expressed through individual movement vocabulary. Designed for all levels. Appropriate for the non-dancers. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A151 — Pilates as a Profession — 1 unit**

For students planning a career in Pilates, including Pilates-related career options, and resumes, contracts, fees, insurance and other aspects of Pilates as a business. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Dance A152 — Pilates Apparatus and Mat Work Level 1 — 1-2 units**

A beginning level course emphasizing alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates using apparatus and mat work. Focus is on improved body alignment, strength, flexibility, control, coordination, and breathing. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A153 — Pilates Apparatus and Mat Work Level 2 — 1-2 units**

**Advisory:** Dance A152 or equivalent.

An intermediate course emphasizing alignment and correctives work based on exercises and concepts developed by Joseph H. Pilates using apparatus and mat work. Focus is on improved body alignment, strength, flexibility, control, coordination, and breathing. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A154 — Contemporary Commercial Dance — 1-2 units**

This course provides a study in beginning contemporary commercial dance, principles and terminology. This includes technical warm-up, progressions and beginning stylized dance combinations center floor. This technique course will focus on contemporary dance styles made popular from the television, film and video industry. The course content explores but not limited to dance conditioning, body awareness, flexibility and performance skills. Students are required to attend a live dance performance. May be taken for grade or pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A155 — Latin Dance Styles 2 — 1 unit**

**Prerequisite:** Dance A116.

An intermediate course in Latin dance styles designed to teach intermediate patterns and choreography of merengue, bachata, and salsa, and/or other Latin dances. Course will emphasize basic lifts and dips, styling, partnering, rhythm, cultural background material and choreography. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A156 — Polynesian Dance — 1 unit**

A beginning level course in Polynesian dances designed to teach footwork, gestures, hip and body movements within the genre. Students will learn and be able to perform choreography as well as improvisation to selected music and drumbeats. May be taken for grade or pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A158 — African Dance and Drumming 2 — 1 unit**

**Prerequisite:** Dance A138.

This intermediate level African dance course focuses on traditional African dances, drumming and songs from Guinea, West Africa. Each class is accompanied by live drumming, an integral, dynamic support to African dance. Additionally students will study Afro Haitian and/or Afro Cuban dances, songs and drumming. The course includes information about the integral link between dance and the social/religious aspects of African culture. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A159 — Hip-Hop Dance 2 — 1 unit**

**Prerequisite:** Dance A149.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm, and improvisation while emphasizing body control, alignment, balance, and use of weight changes. The focus of this course will be floor work vocabulary, aerials, turns improvisation and choreography. Instruction is at the intermediate level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A160 — Dance Composition/Choreography 1 — 3 units**

**Advisory:** Intermediate to Advanced technique levels in modern dance, jazz, or ballet.

A composition course for dancers with intermediate to advanced technique levels in modern dance, jazz or ballet. This course emphasizes basic skills in dance composition, problem solving and exploration of dance elements: space, shape, time and energy. Students will learn to analyze choreography, create short dance studies and learn about established choreographers through a variety of assignments. Students should be prepared to dance the first day. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A162 — Dance Composition/  
Choreography 2 — 3 units**

**Prerequisite:** Dance A160. This skill level will be validated in class during the first week of the course.

**Advisory:** Intermediate to Advanced technique levels in modern, dance, jazz, or ballet.

A composition course designed for dancers with intermediate and advanced technique levels in modern dance, ballet and jazz. This course explores dance composition elements and methods for crafting movement phrases and short dances. Through a variety of assignments students will learn how to develop themes and motifs, choose music, direct rehearsals, collaborate and learn about established choreographers and their work. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A165 — Latin Dance Styles 3 — 1 unit**

An Intermediate/Advanced course in Latin Dance Styles designed to teach intermediate/advanced patterns and choreography of Cha-Cha, Tango, Salsa and/or other Latin Dances. The course will emphasize intermediate lifts and dips, styling, partnering, complex rhythm patterns and choreography. May be taken for grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A168 — African Dance &  
Drumming 3 — 1 unit**

**Advisory:** Dance A138.

This intermediate/advanced level African dance course focuses on traditional and ritual West African dances, drumming, rhythms and songs from Guinea ("Kakilambe"), Senegal ("Sunu") and Burkina Faso ("Folongoto") and/or others. Each class is accompanied by live drumming, an integral, dynamic support to African dance. Additionally, students will create and perform short group compositions, "village dances" based on vocabulary and rhythms learned in class. The course includes information about the integral link between dance and the social/religious aspects of African culture. May be taken for grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A169 — Hip-Hop Dance 3 — 1 unit**

**Advisory:** Dance A149.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. Explores the use of space, energy, rhythm and improvisation while emphasizing body control, alignment, balance, and use of weight changes. This course will focus on further developing the understanding of movement vocabulary, dynamics, performance techniques, and choreographic principles related to the dance style known as Hip-Hop. Instruction is at the intermediate/advanced level. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A170 — Music for Dancers — 2 units**

Assists the dancer-choreographer (non-musician) in building a knowledge of the fundamentals of music through the limited study of theory, terminology and notation. The course is designed to present the development of music and dance in historical perspective, to develop through listening an awareness of the musical literature available, to train dancer and musician to work together through development of a common vocabulary and a working knowledge of each other's craft. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Dance A171 — Modern Dance Basics — 2 units**

This course is designed for students with no previous modern dance experience. It will focus on basic modern dance techniques: alignment, articulations of the spine and extremities, floor exercises, movement vocabulary, creative exercises and explorations of space, time, energy and weight/gravity – in order to prepare the body as an instrument of expression. Modern dance is a barefoot dance style that began in the United States in the early 1930's as a rebellion against ballet's upright torso, ethereal lines and literal storytelling themes. This course will continue the modern dance tradition of exploring abstract, structured dance movement, incorporating artistic concepts and personal expression. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A172 — Ballet Dance Basics — 2 units**

A course designed for students without previous knowledge of ballet. This course introduces movement principles and concepts of classical ballet technique. Attention is focused on correct body alignment of the spine, the proper use of "turn out" at the hip and the correct placement and use of feet. The course presents basic ballet terminology, barre, ballet stretches, center floor and traveling patterns. Instruction is at the most basic level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A173 — Jazz Dance Basics — 2 units**

A technique course in the study of jazz dance basics. Emphasizes the use of energy, rhythm, body control, alignment, use of weight changes, coordinations and dynamics within a jazz dance movement vocabulary. Instruction at the basic level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A174 — Tap Dance Basics — 1 unit**

This tap dance course is designed for students with no previous tap dance experience. It will focus on basic rhythm exercises, music listening, tap dance techniques and tap history. Emphasis will be placed on correct execution of tap dance rudiments, coordination, shifts of weight, basic time steps, short combinations, and styling. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A191 — Classical Technique and  
Variation Workshop — 1-2 units**

**Advisory:** Intermediate-level ballet technique.

This course is designed to offer classical technique and variations of a selected period and style for the intermediate and advanced ballet dancer. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A199 — Current Dance  
Topics — 5-3 units**

Movement and lecture/discussion of topics and issues of current interest in dance. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A200 — Appreciation of Dance — 3 units**

Designed for students to view dance of all styles, including world dance and entertainment forms of dance through viewing videos, lecture/discussion, and attendance at live dance performances. Students will attend a minimum of two live dance performances. Expense for tickets is the student's responsibility; student rates are available. May be taken for grades or on a pass/no-pass basis. This course may be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Dance A201 — Rehearsal and  
Performance 1 — 1 unit**

Structured dance rehearsal time on stage in the theatre for a large ensemble choreography, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A202 — Rehearsal and  
Performance 2 — 1 unit**

Structured dance rehearsal time on stage in the theatre for a small group choreography, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the DANCE A212 choreographer. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A203 — Performing Dance  
Ensemble 1 — 3 units**

Performing Dance Ensemble provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in performances for public schools and the community. Intermediate dance skills are required in jazz or ballet or modern or tap or world dance forms. This skill level will be validated in class during the first week of the course or by the recommendation of the instructor. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A204 — Rehearsal and  
Performance 3 — 1 unit**

Structured dance rehearsal time on stage in the theatre for a choreography created by OCC faculty or a guest artist, including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performances in the OCC student dance concert. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A205 — Dance as a  
Profession Seminar — 2 units**

For students planning a career in dance, including dance-related career options, auditions, resumes, photos, video presentations, contracts, choreography and performance fees, resources, and other aspects of professional dance. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Dance A207 — Rehearsal and Performance 4 — 1 unit**

Structured dance time on stage in the theatre for a solo choreography including spacing rehearsals, lighting rehearsals, dress rehearsals, culminating in main stage performance in the OCC student dance concert. Students may not enroll in this class without instructor approval. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A208 — Pilates 3-4 — 1.5-3 units**

**Prerequisite:** Intermediate level skills in Pilates mat and reformer work. This prerequisite will be validated in class during the first week of the course.

**Advisory:** Dance A108.

Designed for students with intermediate to advanced level Pilates skills. This course will present advanced level Pilates skills, principles of movement facilitation, core stabilization, and re-education applied to mat work and to the equipment used in teaching the Pilates Method. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A210 — Dance Methodology — 3 units**

**Prerequisite:** Intermediate to advanced level skills in dance technique (either modern dance, jazz or ballet). This skill level will be validated in class during the first week of the course.

**Advisory:** Dance A150 or A160.

Designed for dance students to learn how to teach classes in dance technique and creative movement for adults or youth in a variety of settings. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A211 — Repertoire 1 — 1-4 units**

**Co-requisite:** Students must be enrolled in OCC dance technique classes totaling 4 hours per week.

**Advisory:** Intermediate dance skills in either modern, ballet, jazz, tap, or world dance.

Designed to introduce students to the creative process for the development of a full-length ensemble dance, including unison and counterpoint dance sequences, studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for a dancer to learn and perform, or choreograph and direct, choreography for a large ensemble. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A212 — Repertoire 2 — 1-4 units**

**Prerequisite:** Dance A211.

Designed to introduce students to the creative process and unique considerations for the development of a full-length dance for two to five dancers, including lifts and partnering, cause and effect relationships, studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for a dancer to learn and perform, or choreograph and direct, choreography for duet, trio or small group. Student must be enrolled in any beginning through advanced level Tap, Modern, Middle Eastern, African, or Ballet class. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A213 — Repertoire 3 — 1-4 units**

**Prerequisite:** Dance A212.

Designed to introduce students to the creative process of a faculty member or guest artist for the development of a full-length dance, including studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for students to learn and perform choreography by a professional choreographer, an OCC faculty member, or guest artist in modern dance, ballet, jazz, tap, hip hop, or world dance styles. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A214 — Repertoire 4— 1-4 units**

Designed to introduce dance students with high intermediate to advanced level skills to the creative process for the development of a full-length solo dance, including studio rehearsals, critiques, performance skills and production responsibilities. This course provides an opportunity for dancers to learn and perform, or choreograph and direct solo choreography for a main stage performance, and provides preparation for university dance major solo auditions. Student must be enrolled in an OCC technique class in modern dance, jazz, ballet or the dance style being used by the dance choreographer. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Dance A215 — Pilates Internship 1 — 1 unit**

**Advisory:** Dance A108 and A152 or A153 or concurrent enrollment. This skill level will be validated in class during the first week of the course.

A supervised internship related to classroom-based learning at a Pilates-related work site and for the Pilates/Dance Conditioning Instructor. Students should be in or have taken the Level 1 Dance A152 or Level 2 Dance A153 and Dance A108. Recommendation: Ideally, the first level of internship should be taken at the same time as Dance A129, Pilates Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A217 — Pilates Internship 2 — 1 unit**

**Advisory:** Dance A129 or A153 or A215. This skill level will be validated in class during the first week of the course.

A supervised internship related to classroom-based learning at a Pilates-related work site. Students will teach Pilates classes at one or more sites using lesson plans that they have developed. Recommendation: Ideally, the second level of internship should be taken after or at the same time as DANC A129 Pilates Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A218 — World Dance Internship 1 — 1 unit**

**Prerequisite:** Dance A147 or A148. This prerequisite will be validated in class during the first week of the course.

**Advisory:** Dance A210.

A supervised internship related to classroom-based learning at a world dance-related work site. Students should be in or have taken Dance A147 or A148. Recommendation: Ideally, the first level of internship should be taken at the same time as Dance A210, Dance Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A219 — World Dance Internship 2 — 1 unit**

**Prerequisite:** Dance A147 or A148 or A218. This prerequisite will be validated in class during the first week of the course.

**Advisory:** Dance A210.

A supervised internship related to classroom-based learning at a world dance-related work site. Students should be in or have taken Dance A147 or A148. Recommendation: Ideally, the second level of internship should be taken after or at the same time as DANC A210 Dance Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A220 — Dance Internship 1 — 1 unit**

**Prerequisite:** Dance A143 or A144 or A145 or concurrent enrollment. This prerequisite will be validated in class during the first week of the course.

**Advisory:** Dance A120.

A supervised internship related to classroom-based learning at a dance-related work site. Students should be in or have taken Dance A143 or A144 or A145. Recommendation: Ideally, the first level of internship should be taken at the same time as Dance A210 Dance Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A221 — Dance Internship 2 — 1 unit**

**Prerequisite:** Dance A143 or A144 or A145 or A244 or A245. This prerequisite will be validated in class during the first week of the course.

A supervised internship related to classroom-based learning at a dance-related work site. Students should be in or have taken a level 2I or higher course in ballet, jazz or modern dance. Recommendation: Ideally, the second level of internship should be taken after or at the same time as Dance A210 Pilates Methodology. 62 hours internship. **Transfer Credit: CSU.**

**Dance A223 — Performing Dance Ensemble 2 — 3 units**

**Prerequisite:** Dance A203.

Performing Dance Ensemble (Small Group) provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in Lecture-Demonstration performances for the public schools and the community. An emphasis will be placed on small group choreography. May be taken for grades or on a pass-no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A230 — World Dance and Culture — 3 units**

Designed for students to view dance of diverse cultures from around the world through viewing videos, lecture/discussion and attendance at live dance concerts. The course examines dance forms in relation to their specific cultural contexts. Students will attend a minimum of two live dance performances. Expense of tickets is the student's responsibility. May be taken for grades or on a pass-no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Dance A233 — Performing Dance Ensemble 3 — 3 units**

**Prerequisite:** Dance A223.

Performing Dance Ensemble (Guest Choreographer) provides an opportunity for intermediate and advanced level dancers to improve their performing skills in structured rehearsal time, culminating in lecture-demonstration performances touring the public schools and the community. An emphasis will be placed on directing, choreography, and solo/duet performances. May be taken for grades or on a pass-no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**



**Dance A243 — Jazz 4 — 2 units**

**Prerequisite:** Dance A143.

This course offers instruction at the high intermediate and advanced levels in jazz dance techniques and it focuses on developing individual style and integrating personal and artistic phrasing and expression. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A244 — Ballet 4 — 2 units**

**Prerequisite:** Dance A144.

An advanced technique course in classical ballet, emphasizing movement skills at the barre, in center floor and traveling patterns. Complex movement combinations, extensive ballet terminology and diverse rhythms will be introduced throughout the semester. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A245 — Modern 4 — 2 units**

**Advisory:** Dance A145. This skill level will be validated in class during the first week of the course.

This course offers instruction at the high intermediate and advanced levels in modern dance, emphasizing Limon, Cunningham and contemporary techniques. It includes thorough warm up exercises, technique, vocabulary skills, creative work, and integrates personal phrasing and expression. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A246 — Tap 4 — 1 unit**

**Prerequisite:** Dance A146.

This course offers tap dance instruction at the high intermediate and advanced levels, emphasizing advanced footwork skills, complex rhythms, traveling time steps, flash footwork, traveling combinations, and historic tap repertoire with total body integration and appropriate styling. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A247 — Flamenco Dance 3 — 1-2 units**

**Advisories:** Dance A135 and A147.

An advanced course in the technique, dance forms and rhythms of flamenco dance. Emphasis is placed on proper body alignment, arm and footwork precision and artistry, rhythm and improvisational skills at a high intermediate/advanced level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A248 — Mid-Eastern Dance 3 — 1 units**

**Prerequisite:** Successful audition. This prerequisite will be validated in the class during the first week of the course.

A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary, styling, music and finger cymbal playing, use of various props, and costuming. Instruction at the high intermediate/advanced levels are offered. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A250 — Dance Improvisation 2 — 1 unit**

**Prerequisite:** Dance A150.

This dance improvisation course is designed for instruction at the intermediate level for any student who has successfully completed Dance A150. The focus will be on contact improvisation, partnering, weight and support, shape, design, exploration of imagery and props, theatrical contexts, various music styles, rhythm, phrasing and other themes. Directed improvisation assignments and problem solving lead to free exploration of movement expressed through individual movement vocabulary. Students should be prepared to participate at the first class meeting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A253 — Preparation for Audition – Jazz — 2 units**

**Prerequisite:** Dance A243.

This course offers instruction at the advanced level in Jazz dance, emphasizing contemporary Jazz technique and current vocabularies, with a focus on rhythmic challenges, athleticism, strength, endurance, phrasing and personal expression. The course is designed specifically to prepare the serious dancer for successful audition and university transfer as a dance major. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A254 — Preparation for Audition – Ballet — 2 units**

**Prerequisite:** Dance A244.

An advanced course in classical ballet intended to improve the technique and performance qualities of dance majors who plan on auditioning for university transfer and/or stage performance experience in the professional field. The class guides students who will seek a career in teaching by attention to alignment corrections and use of intricate movement combinations, diverse rhythms and extensive ballet vocabulary. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A255 — Preparation for Audition – Modern — 2 units**

**Prerequisite:** Dance A245.

This course offers instruction at the advanced level in modern dance, emphasizing release technique and current vocabularies, with a focus on rhythmic challenges, athleticism, strength, endurance, phrasing and personal expression. The course is designed specifically to prepare the serious dancer for successful audition and university transfer as a dance major. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A256 — Preparation for Audition – Tap — 1 unit**

**Prerequisite:** Dance A246.

This course offers tap instruction at the advanced level in traditional and contemporary tap styles, including tap improvisation and presentation skills needed for successful auditions for university musical theatre programs, and to gain employment in the commercial dance field for stage, television, touring productions and films. Areas of focus include tap dance techniques to enhance speed, weight changes, athletic "flash" steps and spatial patterns and turns. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Dance A262 — Dance Composition/ Choreography 3 — 3 units**

**Prerequisite:** Dance A162.

**Advisory:** Intermediate to Advanced technique levels in modern, dance, jazz, or ballet.

A composition course designed for dancers with intermediate and advanced technique levels in modern dance, ballet and jazz. This course explores dance composition elements: space, shape, time and energy, methods for crafting movement phrases and short dances. Through a variety of assignments students will learn how to develop themes and motifs, choose music, direct rehearsals, collaborate and learn about established choreographers and their work. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A263 — Performing Dance Ensemble 4 — 3 units**

**Prerequisite:** Dance A233.

Performing Dance Ensemble IV provides an opportunity for advanced level dancers to improve their performing and career skills through rehearsals culminating in performances on campus and in the R B Moore Theatre. There may be additional performances and lecture-demonstrations in public schools and the community. This is the culmination of the Performing Dance Ensemble so includes individualized assignments and responsibilities in the rehearsing, choreographing, staging, costuming, publicizing and promoting concerts and performances. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A264 — Mid-Eastern Dance 4 — 1 unit**

**Prerequisite:** Successful audition; this prerequisite will be validated in class during the first week of the course.

A technique course emphasizing the social and stage dances from the region known as the Near and Middle East. Incorporates choreography, improvisation, movement vocabulary, styling, music and finger cymbal playing, the use of various props, and costuming. Instruction at the advanced level is offered. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A267 — Flamenco Dance 4 — 1 unit**

**Advisory:** Dance A247.

An advanced course in technique, dance forms, and rhythms of flamenco dance. Emphasis is placed on proper body alignment, arm and footwork precision and artistry, rhythm and improvisational skills with live musicians at a high intermediate/advanced level. May be taken for a grade or on a pass-no pass basis. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Dance A269 — Hip Hop 4 — 1 unit**

**Advisory:** Dance A247.

Instruction in the movement vocabulary and technical skills that are needed for the dance style known as Hip-Hop. This course will focus on further developing the understanding of movement vocabulary, dynamics, performance techniques, and choreographic principals related to the dance style known as Hip-Hop. The course will focus on developing individual style and integrating personal and artistic phrasing and expression within the Hip Hop genre of dance. Instruction is at the advanced level. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**DENTAL ASSISTING**

**Dental Assisting A100 — Dental Anatomy — 2 units**

**Prerequisite:** Allied Health A111.

Anatomical structures of the head and neck. Emphasis on tooth growth, development, and their surrounding structures. Morphology of permanent and primary teeth. Identification of types of occlusions and related terminology. Lecture. **Transfer Credit: CSU.**

**Dental Assisting A110 — Chairside Techniques 1 — 3 units**

**Co-requisite:** Dental Assisting A120.

Four handed dentistry. History of the dental profession, Dental Practice Act, law and ethics. Charting, infection control protocols, sterilization procedures, use and maintenance of dental operatory equipment. Laboratory experience includes basic application of operative procedures. Course requires purchase of an appropriate clinical uniform and patient care safety goggles. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A115 — Chairside Techniques 2 — 2 units**

**Prerequisite:** Dental Assisting A110.

This is a continuation of Dental Assisting A110 Chairside Techniques 1 with an emphasis on dental specialties, and application of coronal polish for state certification. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A120 — Dental Materials — 3 units**

**Co-requisite:** Dental Assisting A110.

A comprehensive study of materials, including composition and characteristics. Emphasis on use of restorative dental materials and gypsum products. Lab exercises include manipulation of materials, taking impressions, pouring casts and trimming models. Construction of acrylic and metal temporaries and bleaching trays. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A125 — Expanded Functions — 2 units**

**Prerequisite:** Dental Assisting A110 and A120.

Emphasis on expanded functions for the registered dental assistant. Laboratory practice and preclinical evaluations. Students will practice mock written and practical skills testing in preparation for state licensing board examinations. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A130 — Preventive and Community Dentistry — 1 unit**

**Co-requisite:** Dental Assisting A110.

Discussion of current concepts of preventive dentistry. Etiology of dental disease, nutrition, oral hygiene techniques, and home care are covered in detail. Applied psychology for the dental patient is presented. Includes community dental project. Lecture. **Transfer Credit: CSU.**

**Dental Assisting A140 — Dental Radiography 1 — 3 units**

**Co-requisite:** Dental Assisting A110.

A study of the principles of x-ray production and physics, biological effects, radiation safety procedures, and monitoring. Film identification, processing and mounting procedures and introduction to the bitewing, bisection, and paralleling techniques and practical application are presented. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A145 — Specialized Practices — 2 units**

**Prerequisite:** Dental Assisting A140.

**Co-requisite:** Dental Assisting A165.

In-depth study of bisecting and paralleling techniques employed in patient intraoral radiographs. Analysis and correction of techniques and processing errors, clinical laboratory experience exposing x-rays on patients utilizing bisecting, and paralleling techniques including film processing and mounting for various radiographic examinations. Pit and Fissure sealant laboratory practice. Preclinical and Clinical performance and evaluations of pit and fissure sealant placement. Lecture, Lab. **Transfer Credit: CSU.**

**Dental Assisting A150 — Biomedical Sciences — 2 units**

**Prerequisite:** Dental Assisting A100.

**Co-requisite:** Dental Assisting A125, A165.

An introduction to general anatomy and physiology, including microbiology, study of pharmacology, oral pathology, and basic fundamentals to prepare the student to recognize and assist in dental emergencies. Students must purchase a uniform for this course. Lecture. **Transfer Credit: CSU.**

**Dental Assisting A160 — Clinical Experience 1 — 1 unit**

**Co-requisite:** Dental Assisting A110, A120, A130, and A140 and Allied Health A115.

The first clinical experience in the practice of dental assisting. Each student will be assigned to UCLA School of Dentistry or in dental office. Students are required to follow the dress code standards set up by the program, UCLA School of Dentistry, dental office, and Cal-DOSH mandates. Eight hours weekly for eight weeks with one hour seminar weekly. Lecture, 64 hours clinical. **Transfer Credit: CSU.**

**Dental Assisting A163 — Clinical Experience 2 — 1 unit**

**Prerequisite:** Dental Assisting A160.

The second in a series of opportunities for clinical practice of concepts in dental assisting. Each student will be assigned to a dental office for either general dentistry or a specialty practice. Students are required to follow the dress code standards set up by the program according to ADA guidelines and OSHA mandates. 64 hours clinical. **Transfer Credit: CSU.**

**Dental Assisting A165 — Clinical Experience 3 — 2.5 units**

**Co-requisite:** Dental Assisting A125, A115, A145, and A163.

The third in a series of opportunities for clinical practice of concepts in dental assisting. Each student will be assigned to a dental office for either general dentistry or a specialty practice. Students are required to follow the dress code standards set up by the program according to ADA guidelines and OSHA mandates. Lecture, 112 hours clinical. **Transfer Credit: CSU.**

**Dental Assisting A168 — Clinical Experience 4 — 1 unit**

**Prerequisite:** Dental Assisting A165 or concurrent enrollment.

The fourth clinical rotation in which the students will be placed in a general dentistry and/or dental specialty setting. Students are required to follow the dress code standards required by the program and OSHA mandates. Thirty-two hours weekly for two weeks. **Transfer Credit: CSU.**

**Dental Assisting A175 — Principles of Business and Practice Management — 1.5 units**

**Prerequisite:** Dental Assisting A100.

An introduction to dental office administration, including dental records and charting, HIPAA regulations, communication skills, financial management appointment scheduling, payroll, and insurance claim processing. Students will be trained to use Dentrix Dental Software program to become knowledgeable in all areas of practice management utilizing the computer. Lecture. **Transfer Credit: CSU.**

**DESIGN**

**Design A105 — Design Careers and Lifestyles — 2 units**

A career exploration course designed to help students choose a career in a design-related discipline such as art, architecture, graphics, fashion, interiors, theater, industrial, or furniture. Emphasis on personal, educational, and professional qualifications required for entry into a design-related career. Lecture. **Transfer Credit: CSU.**

**DIAGNOSTIC MEDICAL SONOGRAPHY**

**Diagnostic Medical Sonography A110 — Introduction to Sonography Imaging — 1.5 units**

**Prerequisite:** Biology A221 or A220 and A225, Allied Health A010 and A111.

This course is a required prerequisite for all students entering the Diagnostic Medical Sonography (DMS) Program. Basic sonographic theory is taught with an emphasis on instrumentation, patient exam presets and scan planes. Basic cross-sectional and sonographic anatomy, as well as scan protocols are taught. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A123 — Sectional Anatomy for Medical Imaging — 4 units**

**Prerequisite:** Biology A221 or A220 and A225.

This is a study of specific areas of the human body in serial sections. Designed for diagnostic medical sonography and radiologic imaging technology. Emphasis is on structures observable on diagnostic medical sonography, computerized tomography and related imaging studies. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A126 — OB/GYN Sonography — 4 units**

**Prerequisite:** Diagnostic Medical Sonography A123 and A150.

**Co-requisite:** Diagnostic Medical Sonography A165.

A cross-sectional anatomical and sonographic study of the female reproductive system including the nongravid pelvis as well as the gravid pelvis; includes specific study of embryology, fetal biometric data, normal and abnormal fetal anatomy, placenta, amniotic fluid, umbilical cord, menstrual cycle and pathology of the female nongravid pelvis. Topics of discussion will include appropriate laboratory tests, ultrasound scan protocols of the American Institute of Ultrasound in Medicine (AIUM) and other imaging modalities utilized in OB/GYN. Lecture. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A150 — Sonographic Physics and Instrumentation — 3.5 units**

**Prerequisite:** Radiological Technology A100.

This is the study of physical principles and instrumentation of diagnostic medical sonography. It includes equipment design, instrumentation, and application. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A155 — Introduction to Vascular Ultrasound — 2.5 units**

**Prerequisite:** Diagnostic Medical Sonography A150.

This course is an introduction to vascular ultrasound including Doppler physical principles and instrumentation. The venous system of the upper and lower extremities is emphasized this semester. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A161 — Pathophysiology — 3 units**

**Prerequisite:** Diagnostic Medical Sonography A123

**Co-requisite:** Diagnostic Medical Sonography A165.

Specific study of pathophysiological mechanisms related to diagnostic medical sonography. Lecture. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A165 — Introduction to Scanning Practice — 3 units**

**Prerequisite:** Diagnostic Medical Sonography A123 and A150.

Introduction to sonographic scanning protocol as applied to clinical practice. Course includes environment of ultrasound department, emphasis on professionalism, student behavior, medico-legal aspects, and humanistic approach to patients. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A166 — DMS Clinical Experience 1 — 2 units**

**Prerequisite:** Allied Health A115

**Co-requisite:** Diagnostic Medical Sonography A165.

Introduction to the clinical environment and exposure to departmental organization, patient flow, PACS procedures, observation of techniques, policies and procedures of clinical cases. Offered on a pass-no pass basis only. 128 hours clinical. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A167 — DMS Clinical Experience 2 — 5 units**

**Prerequisite:** Diagnostic Medical Sonography A166.

Continuation of clinical experience. Exposure to departmental organization, patient flow, PACs, observation of techniques employed, policies and procedures of clinical cases, beginning hands on experience, and equipment set up. Offered on a pass/no-pass basis only. 320 hours clinical. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A255 — Advanced Vascular Ultrasound — 2.5 units**

**Prerequisite:** Diagnostic Medical Sonography A155.

This is an advanced vascular course with laboratory exercises. It focuses on the arterial circulation of the brain and extremities. Lecture, Lab. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A271 — DMS Clinical Experience 3 — 7 units**

**Prerequisite:** Diagnostic Medical Sonography A167

Clinical experience in ultrasound. Equipment handling and patient management. Departmental operation and scope. Offered on a pass/no-pass basis only. 512 hours clinical. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A274 — Abdominal Sonography — 3 units**

**Prerequisite:** Diagnostic Medical Sonography A165.

**Co-requisite:** Diagnostic Medical Sonography A271.

Interpretation of normal and abnormal sonographic anatomy, comparing disease processes and identification of structures in sonographic images of the abdomen and superficial structures. Lecture. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A275 — Sonographic Review — 3 units**

**Prerequisite:** Diagnostic Medical Sonography A274.

Review of advanced scanning techniques and other ultrasound topics including physics and instrumentation. Interpretation of normal and abnormal sonography. Lecture. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A276 — DMS Clinical Experience 4 — 2 units**

**Co-requisite:** Diagnostic Medical Sonography A271.

Intermediate clinical experience. Studies in the abdominal, obstetrical, pelvic, scrotal, thyroid and vascular anatomical areas. Variety of real-time equipment, anatomical pathology recognition. Offered on a pass/no-pass basis only. 160 hours clinical. **Transfer Credit: CSU.**

**Diagnostic Medical Sonography A281 — DMS Clinical Experience 5 — 9 units**

**Prerequisite:** Diagnostic Medical Sonography A276.

Advanced clinical experience in the ultrasound department practicing in a variety of Sonographic studies with emphasis on the abdomen and pelvis. Advanced recognition of pathology and scan interpretation. Offered on a pass/no-pass basis only. 576 hours clinical, 16 hours seminar. **Transfer Credit: CSU.**

**DIGITAL MEDIA ARTS AND DESIGN**

**Digital Media Arts and Design A115 — Typography 1 — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.

A study of the design and use of basic letter forms, typographic contrast, hierarchy of information, major type families and characteristics, history of design and typographic grids. This course will cover the history, theory and practice of letterforms and typography as they apply to graphics, advertising and other areas of design and visual communication. Projects cover principles of typography, letter structure, typeface selection, fundamentals of computer typesetting, and typographic layout. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A116 — Typography 2 — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.

**Advisory:** Digital Media Arts and Design A115

Expands the investigation of typographic form, function and meaning within the context of contemporary visual language. Students will build conceptualization skills while further experimenting with the aesthetic, formal and functional role typography plays in the creation of meaning, as well as, focus on the design of multiple pages, an introduction to publication design, basic typographic systems, and typographic hierarchy. Typography 2 will build on the experiences gained in Typography 1, with further emphasis on the design of the word, the line, the paragraph and the page. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A117 — Rapid Illustration Techniques — 3 units**

Course expands upon freehand drawing skills. Rapid illustration methods of determining design solutions and as final presentations. Techniques drawn from areas of graphic and advertising design, industrial design, and interior design. Emphasis on acquiring art suitable for student's portfolio. Recommended for Digital Media Arts and Design majors, as well as practicing professionals. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A151 — History of Graphic Design — 3 units**

This course will cover the history and development of graphic design from written communication to current trends as professional and artistic endeavors. The influence of graphic design upon the prevailing culture and the influence of culture upon graphic design will be explored. Lecture. **Transfer Credit: CSU.**

**Digital Media Arts and Design A181 — Introduction to Computer Graphics — 3 units**

This course is designed to effectively and creatively introduce Photoshop, Illustrator and Indesign. The programs will be approached from an application perspective. Course may include guest speakers and field trips. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A182 — Graphic Design — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.

**Advisories:** Digital Media Arts and Design A190 and A193.

This course applies the elements of design, spatial relationships, typography and imagery with a practical approach to design solutions. Students employ graphic design skills using both traditional and digital tools, materials, and software used in the graphic design industry. The focus will be on finding creative visual solutions to communication problems using technical skills. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A183 — Designing for Print — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.

**Advisories:** Digital Media Arts & Design A190 and A193.

Using industry-standard hardware and software, students will create digital files that, once output, will print correctly on a printing press. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design  
A190 — Illustration and Graphics  
with Illustrator — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.  
Adobe Illustrator is a versatile tool for creating illustrations, logos, and graphics for both print and the Web. Students will learn to produce detailed and scalable vector art, while applying the principles of color and design. Students will learn the tools of Adobe Illustrator to create graphic designs and illustrations. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A193  
— Image Manipulation and Graphics  
with Photoshop — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.  
Adobe Photoshop is the world's most popular graphics and digital photo-editing software program. This course integrates photography, art, and design to introduce the skills and techniques needed for digital visual communication. Students will learn the tools and features of Photoshop, allowing students to work more efficiently and creatively. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A200 —  
Designing for the Web — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.  
**Advisories:** Digital Media Arts and Design A190 and A193.

In this course students will learn the fundamentals of the Web and how to design and publish Web sites. Learn to design prototypes and how user experiences (UX) and user interface (UI) effects Web design. Student will learn basic HTML and CSS for designers necessary to work with developers. Students will also build and publish responsive Websites using content management systems that do not require coding. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A202  
— Studio Internship — 2 units**

Studio DMAD is an advanced internship in an on-campus graphic design firm producing work for clients both on-campus and in the community. Students will complete work directly with clients and create designs based off of client creative briefs and contracts. It is a supervised internship related to classroom-based learning and applies the skills obtained in the DMAD program to the industry. This course is open to students who have completed a portfolio and taken at least four courses in one of the Digital Media Arts and Design certificate programs. Students wishing to be part of the Studio DMAD Internship must receive prior approval from the instructor. Lecture, 119 Field hours. **Transfer Credit: CSU.**

**Digital Media Arts and Design A203  
— Interaction Design — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.  
**Advisories:** Digital Media Arts and Design A190 and A193.

Interaction Design focuses on UX and UI to ensure that products are appealing, effective and intuitive for their users. Students will design and prototype for a range of platforms including the web, mobile, and tangible systems such as wearables and connected products. Students will conceptualize, solve problems, and understand the importance of the user and of user experience in design. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A263 —  
Motion Graphics and Video Compositing  
with Adobe After Effects — 3 units**

**Prerequisite:** Digital Media Arts and Design A181 and A193.

**Advisories:** Digital Media Arts and Design A190.  
Develop skills in the art of animated graphics and digital video compositing, which are used in film and television titles and advertisements, music videos, web sites, multimedia concerts and fashion shows. Create original artwork with complex layers of graphics, video, text, photography, and audio using masking, keying, layering, transparency, effects, sweeping camera paths and 3D elements. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A280  
— 2D Animation — 3 units**

**Prerequisite:** Digital Media Arts and Design A181.  
**Advisory:** Art A120 and Digital Media Arts and Design A190.

An investigation into the theory and practice of computer generated 2D animation. Lectures, demonstrations, and graphic examples introduce students to the technical and creative aspects of 2D animation as seen in communication media. Through classroom assignments students will investigate both commercial and fine art applications. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A281 — 3D  
Computer Graphics Animation — 3 units**

**Advisories:** Digital Media Arts and Design A181 or Film & Television A110.

Investigation into the practice of 3D temporal image handling utilizing computer graphics technology. Students will explore artistic applications in various fields. Instruction is offered at beginning and advanced levels. Lecture, Lab. **Transfer Credit: CSU.**

**Digital Media Arts and Design A288 —  
Digital Portfolio Development — 3 units**

**Advisories:** Digital Media Arts and Design A181, A182, A190, A193 and A200.

This course provides the student with an opportunity to prepare themselves for the workplace. During the course, students will refine a body of design work and publish their portfolio in both print (optional) and web formats. Students will design and develop their own personal brand including—visual identity, resume, cover letter, and business cards in preparation for job interviews and/or college. They will also spend the quarter researching potential employers and learn about each company, agency, and/or studio so that they can strategically tailor their application process. This course should be taken in the final semester of any Digital Media Art & Design program. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU**

**DISPLAY AND VISUAL PRESENTATION**

**Display and Visual Presentation  
A180 — Introduction to Display and  
Visual Presentation — 3 units**

Provides an opportunity to learn display and exhibit design for business and museum/gallery. Areas covered include trade show, hard-line product, themed design, space development for store planning, museum exhibition, advertising, and all aspects of visual presentation, to include: windows, point of purchase, websites, and packaging. Lecture. **Transfer Credit: CSU.**

**EARLY CHILDHOOD**

**Early Childhood A126 — Teaching in  
a Diverse Society — 3 units**

**Prerequisite:** Human Development A180 or concurrent enrollment.

An overview of the different micro cultures to which students belong and the importance of understanding their own culture. Micro cultures discussed are class, ethnicity and race, gender, exceptionality, and age. Emphasis will be placed on the social and cultural conditions that influence education. Lecture. **Transfer Credit: CSU. C-ID ECE 230.**

**Early Childhood A127 — Health,  
Safety, and Nutrition — 3 units**

**Prerequisite:** Human Development A180.

Introduction to the laws, regulations, standards, policies and procedures and early childhood curriculum related to child health, safety, and nutrition. The key components that ensure physical health, mental health and safety for both children and staff will be identified along with the importance of collaboration with families and health professionals. Focus on integrating the concepts into everyday planning and program development for all children. Lecture. **Transfer Credit: CSU. C-ID ECE 220.**

**Early Childhood A130 — Language  
Arts for Children — 3 units**

**Prerequisite:** Human Development A180 or concurrent enrollment.

This course covers the development of literacy skills in children ages birth to 5 years. Included are activities such as book selection, storytelling, finger plays, flannel stories, language centers, early writing, alphabetic and phonemic awareness. Lecture. **Transfer Credit: CSU.**

**Early Childhood A131 — Creativity  
for Children — 3 units**

**Prerequisite:** Human Development A180 or concurrent enrollment.

Methods for fostering creativity in children and teachers. Emphasis will be on cultivating music and art expression through application of developmental theory. TB clearance required. Lecture. **Transfer Credit: CSU.**

**Early Childhood A132 — Science and  
Math for Young Children — 3 units**

**Prerequisite:** Human Development A180 or concurrent enrollment.

Physical and natural science activities that encourage children's thinking and problem solving skills. Emphasis on the development of programs and materials that allow for exploration and/or experimentation. Lecture. **Transfer Credit: CSU.**

**Early Childhood A155 — Principles and  
Practices of Teaching Young Children — 3 units**

**Prerequisite:** Human Development A180 or concurrent enrollment.

An examination of the underlying theoretical principles of developmentally appropriate practices applied to programs, environments, relationships and teaching strategies in supporting all areas of development for all children. Emphasis on the value of play in supporting all areas of children's development. Lecture. **Transfer Credit: CSU. C-ID ECE 120.**

**Early Childhood A156 — Early Childhood Laboratory — 2 units****Prerequisite:** Early Childhood A155.

Beginning practical experiences that focus on establishing relationships with children and developing guidance, observation, play entry, and collaboration techniques in facilitating learning. TB clearance required. Fingerprint, criminal record and child abuse index check required. Contact EC Lab School PRIOR to enrolling to arrange hours. Hours are arranged on a first-come, first-served basis. Lecture, Lab. **Transfer Credit: CSU.**

**Early Childhood A157 — Guidance for Young Children — 3 units****Prerequisite:** Early Childhood A155.

Course covers theories of behavior, guidance techniques, and parent communication. Emphasis on developing an understanding of children's behavior and encouraging positive esteem while helping the child work toward self-control. Lecture. **Transfer Credit: CSU.**

**Early Childhood A165 — Observing and Recording Child Behavior — 3 units****Prerequisite:** Early Childhood A155, and Human Development A180.

This course focuses on the appropriate use of assessment and observation strategies to document development, growth, play and learning to join with families and professionals in promoting children's success. Recording strategies, rating systems, portfolios, and multiple assessment tools are explored. Lecture. **Transfer Credit: CSU. C-ID ECE 200.**

**Early Childhood A174 — Building Partnerships with Families — 3 units**

Practical approaches to building relationships with parents through effective communication techniques and supporting families of children with identified or suspected special needs. Lecture. **Transfer Credit: CSU.**

**Early Childhood A199 — Current Issues in Early Childhood — .5-2 units**

Current issues in the field of early childhood education, rotating through a variety of topics, such as working with parents, public policy, and curriculum updates. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Early Childhood A200 — Early Childhood Programs — The Curriculum — 3 units****Prerequisite:** Early Childhood A155 or concurrent enrollment.

Curriculum planning for preschool programs based on the individual developmental needs of the child. Emphasis on the importance of observations, schedule, routines, and parent communication. Introduction to the philosophy and history of early childhood education. Lecture. **Transfer Credit: CSU. C-ID ECE 130.**

**Early Childhood A201 — Early Childhood Practicum – Field Experience — 3 units****Prerequisite:** Early Childhood A156, Early Childhood A200 or concurrent enrollment.

Practical experiences in preschool programs that focus on the individualized curriculum that addresses all areas of development, routines, and the role of the teacher. Course also covers observation and evaluation of children in play situations, the development of indoor and outdoor environments, positive guidance and staff relationships. TB clearance required. Lecture, 108 hours field experience. **Transfer Credit: CSU. C-ID ECE 210.**

**Early Childhood A220 — Infant and Toddler Programs — 3 units****Prerequisite:** Human Development A184 or concurrent enrollment.

Various kinds of programs for infants and toddlers, including philosophies and program emphasis, appropriate routine learning experiences, environments, and provisions for the health and safety of infants and toddlers. Focus on the role of the teacher in facilitating the child's growth through play. Lecture. **Transfer Credit: CSU.**

**Early Childhood A221 — Infant and Toddler Field Experience — 3 units****Prerequisite:** Human Development A184 and Early Childhood A220.

Participation in day care and half-day programs for infants and toddlers. TB clearance required. Please contact EC Lab School PRIOR to enrolling in this class to arrange hours. Hours are arranged on a first-come, first-served basis. Lecture, 108 hours field/clinical. **Transfer Credit: CSU.**

**Early Childhood A261 — Learning Title 22 — .5 units**

Point by point discussion of California Code of Regulations, Title 22, Division 12, Chapters 1 and 2 regulations for child care program. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Early Childhood A262 — Disaster Preparedness for Child Care — .5 units**

A study of considerations of natural or man-made disasters to assist child care providers in the development of a comprehensive plan to ensure an effective response to emergency situations. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Early Childhood A263 — Child Abuse I.D. and Referral — .5 units**

Ways to identify children who are abused and programs to assist both the child and the offender. Discussion of state mandated reporting system and procedures in record keeping for the teacher and director in a child care program. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Early Childhood A275 — Early Childhood Administration – Program — 3 units****Prerequisite:** Early Childhood A200 or A220 or A229.

Supervision and administration of an early childhood program with emphasis on theories, principles, concepts of program and curriculum development, legal, financial, and administrative policies, and program evaluation. Lecture. **Transfer Credit: CSU.**

**Early Childhood A276 — Early Childhood Management — 3 units****Prerequisite:** Early Childhood A200 or A220.

Supervision and administration of an early childhood program with emphasis on leadership, personnel management, communication, problem solving, working with parents, financial, and ethical issues. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Early Childhood A277 — Adult Supervision in Early Childhood Programs — 2 units****Prerequisite:** Early Childhood A200 or A220 or A229 or A240.

Methods and principles of supervising adults in early childhood programs. Emphasis on the role of experienced teachers who function as mentors while simultaneously addressing the needs of children, parents, and staff. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**ECOLOGY****Also see Environmental Science and Ecology****Ecology A100 — Human Ecology — 3 units**

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and also for students in Environmental Science or other natural sciences. Field trip may be required. Lecture. **Transfer Credit: CSU, UC.**

**Ecology A101 — Principles of Ecology — 3 units**

This introductory ecology course for non-science majors covers ecological principles and their relevance at several levels of organization. Includes principles governing classification of life, principles of evolution, conditions for life, adaptations to the environment, analysis of ecological niches, population, and community/ecosystem ecology. Field trips are required. Lecture. **Transfer Credit: CSU, UC.**

**Ecology A110 — Island Ecology — 3 units**

Islands are used as the platform to discuss ecology, evolution, speciation, biogeography, geology, and human History as it relates to islands. This course focuses on California's Channel Islands and also covers the Hawaiian Islands, the Galapagos Islands, and many others. Field trip is required. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Ecology A121 — Marine Intertidal Ecology — 1 unit**

Ecology of the marine intertidal environment of Southern California. This is a field-oriented laboratory experience for non-majors. Same as Marine Science A121. Students completing Ecology A121 may not receive credit for Marine Science A121. Field trips are required. May be taken for grades or on a pass-no pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Ecology A124 — Ecology of the Gray Whale — 1 unit**

Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. May be taken for grades or on a pass-no pass basis. Same as Marine Science A124. Students taking Ecology A124 may not receive credit for Marine Science A124. Lecture. **Transfer Credit: CSU.**

**Ecology A140 — Mediterranean Biome Ecology — 2 units**

The Mediterranean Biome includes chaparral and coastal sage scrub in North America, mallee scrub in Australia, matorral in South America, fynbos in Africa, and maquis in Europe. This course surveys this biome through an investigative approach. Field trips are required. Lecture, Lab. **Transfer Credit: CSU.**

**Ecology A141 — Desert Ecology — 2 units**

Deserts cover 20% of the Earth and provide wildlife habitat, as well as, economic and recreational value. This course will provide students an opportunity to learn and assess the ecological processes in various deserts on Earth including the deserts of Southwestern United States and Mexico. Field trips are required. Lecture, Lab. **Transfer Credit: CSU.**

**Ecology A210 – Wetlands Ecology and Management – 3 Units**

**Advisory:** Biology A100, or Ecology A100, or Horticulture A100, or Marine Science A100, or Geology A105

This course covers the biological, physical, chemical, and hydrological components of wetland ecosystems. Various types of wetland habitats are discussed including their ecological and economic value. Field-based and laboratory-based assessments on wetland ecology are implemented throughout the course. Management practices are investigated including past and current methods, policies, restoration efforts and outcomes, and the effects of climate change on wetlands are examined. Lecture. **Transfer Credit: CSU, UC.**

**ECONOMICS**

**Economics A100 — Economics: General Concepts — 3 units**

Provides the student with a general understanding of the concepts, principles, and methods of microeconomics and macroeconomics at the introductory level. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Economics A110 — Consumer Economics — 3 units**

An applied approach to the problems and possibilities confronting the consumer in today's economy. Emphasis is placed on the development of skills in personal financial planning: decision making, use of credit and principles of saving and investment. Attention is given to the problems in housing, transportation, health services, and insurance. Issues of personal taxation, government regulation, and environmental protection are considered in relation to consumer interest. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Economics A170 — Microeconomics — 3 units**

*Formerly Economics A185*  
**Prerequisite:** Mathematics A010.

**Advisory:** Mathematics A030.

An introduction to the principles and problems of microeconomics. Covers economic concepts and principles as applied to markets, analysis of costs, consumer behavior, determining consumer optimum conditions, behavior of producers, determining the producers optimum in the goods and services market and in the factors markets, the structure of markets and how they influence and limit competition, labor, capital, information and entrepreneurship, public goods, and international economics. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ECON 201.**

**Economics A170H — Microeconomics Honors — 3 units**

**Prerequisite:** Mathematics A010.

**Advisory:** Mathematics A030.

An introduction to the principles and problems of microeconomics. Covers economic concepts and principles as applied to markets, analysis of costs, consumer behavior, determining consumer optimum conditions, behavior of producers, determining the producers optimum in the goods and services market and in the factors markets, the structure of markets and how they influence and limit competition, labor, capital, information and entrepreneurship, public goods, and international economics. Lecture. **Transfer Credit: CSU, UC.**

**Economics A175 — Macroeconomics — 3 units**

*Formerly Economics A180*

**Prerequisite:** Mathematics A010.

**Advisory:** Economics A170, Mathematics A030.

An introduction to the principles and problems of macroeconomics. Covers economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ECON 202.**

**Economics A175H — Macroeconomics Honors — 3 units**

**Prerequisite:** Mathematics A010.

**Advisory:** Economics A170, Mathematics A030.

An introduction to the principles and problems of macroeconomics. Covers economic concepts and principles as applied to markets, national income, unemployment, inflation, economic growth, fiscal and monetary policy, banking, the Federal Reserve System, and international economics. Lecture. **Transfer Credit: CSU, UC.**

**EDUCATION**

**Education A200 — The Teaching Profession — 3 units**

**Prerequisite:** English A099 or ESL A099.

**Advisory:** English A100 and Human Development A180.

Examination of opportunities, requirements, responsibilities, and rewards in teaching. Skills needed and problems encountered in the classroom will be covered. May be taken for grades or on a pass/no-pass basis. Lecture, 45 hours internship. **Transfer Credit: CSU, UC. C-ID EDUC 200.**

**ELECTRONICS TECHNOLOGY**

**Electronics Technology A047 — Electronic Problem Solving — 3 units**

A project-based, interactive course that teaches skills for college success, such as: project management, study skills, and effective personal learning strategies. Applications from Science Technology, Engineering, & Math (STEM) careers are used to help the student master complex concepts with a deeper understanding of how to apply theory, and to discover creative solutions to complex problems. These applications are integrated into the study of a wide range of math concepts including: numbering systems, fractions, ratios, statistics, probabilities, spreadsheet calculations, introduction to symbolic logic, Boolean Algebra, Algebra 1, geometry, and an introduction to trigonometry: vectors, rectangular and polar graphing techniques. Lecture.

**Electronics Technology A101 — Robotics 1 Mechanics and Design — 4 units**

**Advisory:** High School Physics, Electronics Technology A047 an A170.

Design a robot to tournament specifications, with analysis, diagnosis, modification, calibration and documentation of prototype. Course will focus on mechanical structures in robot design, function, and the physical laws that govern design. Integrated electronics applied to the robotic system will also be explored. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A135 — Symbolic Logic with Digital Applications — 4 units**

**Advisory:** Electronics Technology A047, A173, or any Mathematics course above Math A030.

Introduction to logic as it applies to discrete Boolean mathematics, deductive reasoning, and digital applications including computer programming, architecture, and embedded systems. An in-depth study of obverse, inverse, AND/OR logical operations. Boolean algebra techniques are applied to simplify complex equations. Students will build, measure, test, analyze and troubleshoot series, parallel and complex circuits. Reading documentation commonly found in industry, i.e. schematics, specifications, assembly and test procedures, will also be included. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A140 — Technical Electronics — 3 units**

**Co-requisite:** Electronics Technology A172 or Electronics Technology A173.

An introduction to electricity and electronics for non-technicians. Vocabulary, power, voltage, current, resistance, safety, test equipment, circuits and devices are studied. Hands-on, interactive, project based: you will build, test, and troubleshoot circuits and devices. You will learn how to read documentation commonly found in industry i.e. schematics, specifications, assembly and test procedures. Lecture. **Transfer Credit: CSU.**

**Electronics Technology A146 — Computer Hardware Configuration and Diagnostics — 3 units**

**Advisory:** Electronics Technology A047 or placement above Math A030.

Computer hardware installation, configuration, diagnostics and, troubleshooting. Topics include: installation and upgrade of peripherals, design systems & Local Area Networks, configuration, upgrade, build, test and, troubleshoot computer systems per client specifications; troubleshooting PC workstation to LAN installations; troubleshooting peripherals and internal components. Troubleshoot windows configuration and operation problems. Create a diagnostics and rescue kit for PC workstation. This course challenges the CompTIA A+ certified technician skills. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A150 — D. C. Circuits — 3 units**

**Advisory:** Electronics Technology A047.

Project-based, in-depth study of Direct Current (DC) circuits for technicians and engineers: Electromagnetics, power, voltage, current, resistance, sensors & other devices, series, parallel, circuit analysis methods & applications. Laboratory: safety, test equipment, industry standard documentation (i.e. schematics, specifications, procedures etc.) assembly, diagnostics, & troubleshooting techniques. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A155 —  
A.C. Circuits — 3 units**

**Advisory:** Electronics Technology A047 or concurrent enrollment, or placement above Math A030.

A project-based in-depth study of Amplitude Changing & Alternating Current (AC) circuits for technicians and engineers. Applications from AC & DC power, audio, communications, network systems, industrial automation and, motor control. Topics include: Electro-magnetics, properties of waves, transformers, power factor, maximum power transfer, impedance, inductance, capacitance, RLC transient & filter circuits, phase shift, phasors, modulation, harmonics, resonance, spectrum analysis, bandwidth, thyristors, solid-state relays, & circuit analysis methods. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A170 — Safety,  
Assembly, and Calibration — 1 unit**

First semester laboratory experience supplements, complements, or fulfills the laboratory requirement for courses in the Electronics Technology Program. Students will assemble, test calibrate, and troubleshoot electronic, electro-mechanical, instrumentation, robotics, and automation systems at a foundational level. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A172 —  
Electronics Laboratory 2 — 1 unit**

**Prerequisite:** Electronics Technology A150 or Electronics Technology A201 or Electronics Technology A246 or concurrent enrollment.

Second semester laboratory will reinforce safe shop practices, maintenance & instrument handling procedures, technical documentation, and workspace preparation. Student will work on AC and/or DC circuit projects. Mastery of theory, technical documentation, assembly skills, and teamwork skills will be emphasized. Lab. **Transfer Credit: CSU.**

**Electronics Technology A173 —  
Electronics Laboratory 3 — 1 unit**

**Prerequisite:** Electronics Technology A135 or Electronics Technology A155 or Electronics Technology A260 or concurrent enrollment.

Third semester laboratory will develop essential skills for a Test Technician: research, documentation, prototype construction, diagnostics methods and, critical thinking skills. Students will work on A/C circuit, robotics and/or semiconductor circuit for motor control projects. They will develop essential skills for a Test Technician: research, documentation, prototype construction, and diagnostics methods. Lab. **Transfer Credit: CSU.**

**Electronics Technology A174 —  
Electronics Laboratory 4 — 1 unit**

**Prerequisite:** Electronics Technology A245 or Electronics Technology A253 or concurrent enrollment or Electronics Technology A260 or concurrent enrollment.

Fourth semester laboratory develops technical and leadership skills essential for the Industrial Automation Technician, including design, strategic planning, problem solving, and project management. Students will demonstrate the ability to oversee project through the entire process, from design through commissioning of complex systems per client specifications. Lab. **Transfer Credit: CSU.**

**Electronics Technology A201 — Robotics 2  
Motors, Transports & Motor Control — 4 units**

**Advisory:** Electronics Technology A101, Electronics Technology A150, and Electronics Technology A172.

Design a robot drive and transport mechanism to compete, according to tournament criteria, against other teams. Analyze and modify the invention to improve original design. Course will focus on motors, transport mechanisms, motor control systems and variable speed drives in robot and automation designs. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A215 —  
Communications Systems — 3 units**

**Prerequisite:** Aviation Maintenance Technology A182.

A study of basic communications systems, including AM, FM, television, radar, antennas, and transmission lines. Lecture. **Transfer Credit: CSU.**

**Electronics Technology A245 — Advanced  
Digital Applications — 4 units**

**Advisory:** Electronics Technology A135.

An advanced course designed to develop hands-on skills and knowledge of integrated circuits commonly used in digital systems and microcomputers. Emphasis is on the Z80 microprocessor. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A246 — Server  
Hardware and Industrial Networks — 3 units**

**Advisory:** Electronics Technology A135, Electronics Technology A146, Electronics Technology A150, and Electronics Technology A047 or placement above Math A030.

Introduction to Server hardware & network systems configuration to client specifications. Topics include: review of PC hardware, introduction to server hardware & network devices, servers types (gateway, game, & application), Topology (Bus, Star, & Ring), industrial controllers, industrial Ethernet, and SCADA systems. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A253 — Automation 1  
Programmable Logic Controller — 4 units**

**Advisory:** Electronics Technology A135 and Electronics Technology A155.

Introduction to Programmable Logic Control (PLC) operate, calibrate, diagnose, and tune open and closed loop systems. Hands-on project-based learning: analyze programs, design and build PLC systems using various input and output devices: ultra-sound, infra-red, temperature, proximity, limit switches, linear transducers, electro-mechanical and solid-state relays, transistors, thyristors, linear actuators and motors. Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A260 — Automation 2  
Semiconductor Motor Control Circuits — 4 units**

**Advisory:** Electronics Technology A047, Electronics Technology A135, Electronics Technology A150, and Electronics Technology A173.

Diagnose semiconductor circuits: power supplies, amplifiers, active filters, oscillators, solid state motor control, phase inverters, Variable Speed Drives (VSD). Lecture, Lab. **Transfer Credit: CSU.**

**Electronics Technology A289 —  
Internship — 2 units**

**Prerequisite:** Electronics Technology A135 and A155.

**Co-requisite:** Electronics Technology A170.

A supervised internship, as an assembler or technician, with scope of work related to classroom-based instruction previously completed. The student will research companies and prepare for internship interview. Course includes a directed study of the worksite environment, assigned duties, techniques and skills required for job performance. Student will complete objectives specified by the employer. May be taken for grades or on a pass/no-pass basis. Lecture, 72 hours internship. **Transfer Credit: CSU.**

**Electronics Technology A290 — Electronic  
Troubleshooting — 3 units**

**Prerequisite:** Electronics Technology A135 and Electronics Technology A170.

A course focusing on the technician's approach to circuit fault diagnosis. Applications of various test equipment necessary to troubleshoot to component level will be discussed. Both single and multi-stage devices will be examined in analog and digital systems. Lecture, Lab. **Transfer Credit: CSU.**

**EMERGENCY MEDICAL SERVICES**

*Formerly Emergency Medical Technology*

**Emergency Medical Services A100 —  
Emergency Medical Responder — 4 units**

Emergency Medical responder (advanced first aid and cardiopulmonary resuscitation). Students will receive an American Heart Association Healthcare Provider Card and a Course Completion certificate upon successful completion of the class. Lecture. **Transfer Credit: CSU.**

**Emergency Medical Services A145 —  
Emergency Medical Care - Pediatrics — 1 unit**

Adult, child and infant CPR and AED use, first aid, and preventative health and safety for the licensed child care provider. Completion qualifies the participant for CPR, first aid, and childcare, healthcare, and safety certification. Meets the California Child Care Standards in accordance with California Code of Regulations, Title 22, Division 12. Lecture, Lab. **Transfer Credit: CSU.**

**Emergency Medical Services A150 —  
Emergency Medical Technician — 10 units**

**Prerequisite:** American Heart Association(AHA) BLS Provider CPR card. This prerequisite will be validated on the FIRST DAY of class. Card must be BLS PROVIDER from the AHA, no other CPR card will be accepted. **Co-requisite:** Emergency Medical Services A151, A150L.

An overview of the EMT's roles and responsibilities including the evaluation and treatment of medical and trauma emergencies. This would include extrication and transport of the sick and injured patient. Successful completion of all Co-requisite courses qualifies the graduating student to take the National Registry EMT certifying exam. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Emergency Medical Services A150L —  
Emergency Medical Services Lab — 1 unit**

**Prerequisite:** American Heart Association Healthcare Provider CPR card. This prerequisite will be validated in class during the first week of the course.

**Co-requisite:** Emergency Medical Services A150 and A151.

Practical application of the theories and skills required for an Emergency Medical Technician to perform assessments, and provide care, life-saving measures, and employ safe techniques while effectively engaged in patient interactions. Lab. **Transfer Credit: CSU.**

**Emergency Medical Services A151 —  
Emergency Medical Technician Clinical— 1 unit**

**Co-requisite:** Emergency Medical Services A150 and Emergency Medical Services A150L.

Application and integration of skills and knowledge gained from EMT A150 in the emergency department of an acute hospital or other arranged clinical setting in accordance with California State Title 22, Section 9 regulations, and on a Basic Life Support ambulance unit. Offered on a pass/no-pass basis only. 40 hours clinical. **Transfer Credit: CSU.**

**Emergency Medical Services A160 —  
EMT-1 Recertification — 1 unit**

**Prerequisite:** Current EMS certificate or certificate which has not expired by more than two years.

New policies and procedures including the latest CPR techniques and procedures for new equipment, updates to the EMT-Basic's scope of practice within Orange County, the State and Federal guidelines, and review of the required EMT- Basic curriculum to the most up-to-date model. Provides 24 hours of Continuing Education as 24 Hour-Refresher Course. No skills testing provided. Offered on a pass-no pass basis only. Lecture. **Transfer Credit: CSU.**

**ENGINEERING**

**Engineering A110 — Introduction to  
Engineering and Design — 3 units**

**Prerequisite:** Mathematics A010, or equivalent.

This course is an introduction to the field of engineering and the engineering design. It explores various branches of engineering as regards to academic preparation, opportunities and career options. It explains the engineering education pathways and explores effective strategies for students to reach their academic potential. Emphasis is also on the realization of the regional and global problems of engineering nature and the methods to find responsible solutions. Students are introduced to the applied engineering concepts, methods and tools of problem solving and the engineering design process. Activities also include engineering design projects. Other topics include engineering ethics, professional and legal responsibilities of engineers as a member of the society, understanding of the global challenges and the engineer's role and responsibilities in finding possible solutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 110.**

**Engineering A110H — Introduction to  
Engineering and Design Honors— 3 units**

**Prerequisite:** Mathematics A010, or equivalent.

This course is an introduction to the field of engineering and the engineering design. It explores various branches of engineering as regards to academic preparation, opportunities and career options. It explains the engineering education pathways and explores effective strategies for students to reach their academic potential. Emphasis is also on the realization of the regional and global problems of engineering nature and the methods to find responsible solutions. Students are introduced to the applied engineering concepts, methods, and tools of problem-solving and the engineering design process. Activities also include engineering design projects. Other topics include engineering ethics, professional and legal responsibilities of engineers as a member of the society, understanding of the global challenges and the engineer's role and responsibilities in finding possible solutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Engineering A180 — Engineering  
Graphics — 4 units**

**Prerequisite:** Mathematics A120.

This course covers the fundamentals of the graphic communication necessary for engineering design. Freehand sketching and Computer-Aided Design (CAD) are the main techniques utilized in this course. 2-D and 3-D visualization skills are developed through the analysis and practice of orthographic projections, principle of descriptive geometry, geometric dimensioning and tolerancing, working drawings and engineering design process. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID ENGR 150.**

**Engineering A210 — Engineering  
Materials — 3 units**

**Prerequisite:** Chemistry A180 and Physics A185, or equivalent.

This is an introductory course emphasizing the understanding of the structure and properties of materials, along with the design and selection of materials for engineering applications. Studies include analysis of ferrous and non-ferrous metals, ceramics, polymers, composites and semiconductors. Emphasis is on micro- and macrostructure, relationship between the structure and properties of materials, and effect of heat, stress, imperfections and chemical environments on material structure, properties and performance. Topics also include mechanical, thermal, electrical (including semiconductors), magnetic, optical properties, and also corrosion and degradation of materials. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 140.**

**Engineering A220 — Programming and  
Problem-Solving in MATLAB — 4 units**

**Prerequisite:** Mathematics A180 or A180H

This course utilizes the MATLAB environment to provide students with a working knowledge of computer-based problem-solving methods relevant to science and engineering. It introduces the fundamentals of procedural and object-oriented programming, numerical analysis, and data structures. Examples and assignments in the course are drawn from practical applications in engineering, physics, and mathematics. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Engineering A230 — Dynamics — 3 units**

**Prerequisite:** Engineering A280, or equivalent.

This course is an introduction to kinematics and kinetics of particles and rigid bodies. Vector analysis and calculus are used extensively as the tool to describe the motion of the systems and also to study the kinetics of particles and rigid bodies. Topics involved are the geometry of the motion (kinematics), and the methods of analysis, which include second law of motion, work-energy and momentum-impulse methods as applied to particles, system of particles and the rigid bodies. The mechanical vibration of particles and the rigid bodies are also studied in detail. It includes free and forced vibration, with and without damping. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 230**

**Engineering A240 — Strength  
of Materials — 3 units**

**Prerequisite:** Engineering A280, or equivalent.

This course provides the engineering students with the means of analyzing and designing various structures and machines subjected to different loading conditions. Students develop the techniques of stress and strain analysis of the systems under axial, torsional, transverse loading and pure bending. It also includes the major topics of design of the beams, shafts and the columns. Analysis of systems using energy method, and deflection of beams by integration and moment-area methods are also introduced. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 240.**

**Engineering A280 — Statics — 3 units**

**Prerequisite:** Mathematics A185 or Mathematics A182H or Mathematics A185H, and Physics A185.

Vector mechanics, covering force diagrams, moment of a force, centroids, beams, trusses, friction, hydrostatics, and moments of inertia. Lecture. **Transfer Credit: CSU, UC. C-ID ENGR 130**

**Engineering A285 — Engineering  
Circuits — 4 units**

**Prerequisite:** Mathematics A185 or A182H or A185H or A285 or concurrent enrollment and Physics A280.

A course in analysis of electric circuits, including DC circuits, network theorems, energy sources, transient analysis, sinusoidal analysis, phasors, AC power, and frequency response of circuits. Lab will include connection of circuits and observation of circuit behavior using electronic instrumentation. Lecture, Lab. **Transfer Credit: CSU, UC.**

**ENGLISH**

**Basic Skills**

Native fluency in English required. Not intended for students in English as a Second Language.

**English A005 — Basic Reading Skills — 3 units**

A sequence of reading lessons that will target reading rate growth, for students in the areas of vocabulary development and comprehension improvement. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.



**English A050 — Introduction to College Reading — 3 units**

Theory and practice of fundamental reading skills, finding main idea, identifying supporting details, drawing inferences, and increasing rate. Special attention will be given to critical reading and to particular problems in content areas. Recommended for all students. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English A060 — Grammar — 1.5 units**

Learn the fundamentals of standard English grammar usage, including sentence structure, part of speech, agreement, punctuation, and word choice. Apply concepts to written sentences and paragraphs. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**Composition and Related Studies****English A099 — Confidence in Writing — 3 units**

Apply the fundamentals of grammar, sentence structure, pre-compositional techniques, paragraph development, and essay construction. Practice in reading and textual analysis, critical thinking skills, and clear writing. Write structurally varied and grammatically correct sentences and clearly organized, appropriately detailed paragraphs leading to frequent practice in the construction of the expository essay. A minimum of five arranged hours of supplemental learning in the Success Center is required. May be taken for grades or on a pass/no-pass basis. Lecture.

**English A100 — Freshman Composition — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Instruction and practice in essay writing, including using analytical thinking, choosing a thesis, assembling and organizing supporting evidence, and developing a clear tone and appropriate style. Includes reading and analysis of published essays and practice basic research skills. NOTE: ALL STUDENTS ENROLLING IN ENGLISH A100 MUST BE PRESENT AT THE FIRST CLASS MEETING. ABSENT STUDENTS MAY LOSE THEIR SEATS IN CLASS. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 100.**

**English A101 — Critical Thinking, Reading, and Writing Through Literature — 4 units**

**Prerequisite:** English A100 or appropriate placement.

Read, analyze, and write on literature applying critical thinking skills and research strategies while developing students' close reading skills and appreciation for the aesthetic qualities of literature. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive/deductive reasoning. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 110, 120.**

**English A101H — Critical Thinking, Reading, and Writing Through Literature Honors — 4 units**

**Prerequisite:** English A100 or appropriate placement.

Read, analyze, and write on literature applying critical thinking skills and research strategies while developing students' close reading skills and appreciation for the aesthetic qualities of literature. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive/deductive reasoning. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 110, 120.**

**English A102 — Critical Reasoning, Reading, and Writing Through Nonfiction — 3 units**

**Prerequisite:** English A100 or appropriate placement.

Read, analyze and write on works of non-fiction applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive and deductive reasoning. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 105.**

**English A102H — Critical Reasoning, Reading, and Writing Through Nonfiction Honors — 3 units**

**Prerequisite:** English A100 or appropriate placement.

Read, analyze and write on works of non-fiction applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, implicit meaning, and use inductive and deductive reasoning. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 105.**

**English A109 — Critical Reasoning and Writing for Science and Technology — 3 units**

**Prerequisite:** English A100 or appropriate placement.

Read, analyze, and write on works about science and technology applying critical thinking skills and research. Formulate and compose written arguments. Recognize logical fallacies, rhetorical strategies, and technical writing formats. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 105.**

**English A117 — Narrative Journalism — 3 units**

**Advisory:** Journalism A110 and English A100 or concurrent enrollment.

A writing workshop focusing on student writing and marketing in-depth non-fiction feature articles. Emphasis will be on guiding students and developing interesting non-fiction stories from the idea stage through publication and finding suitable markets for publication. Same as Journalism A117. Students completing English A117 may not receive credit for Journalism A117. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**English A123 — Writing for Social Media — 3 units**

Students will develop writing skills for social media while exploring the design and impact of digital and social media technologies for professional application in a wide variety of organizational situations. Students will analyze, think critically, research, develop, write, and discuss multiple topics in social media. Lecture. **Transfer Credit: CSU.**

**Creative Writing****English A119 — Introduction to Creative Writing — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Familiarizes students with writing techniques in fiction, poetry, and scriptwriting through close reading in all three genres, careful text analysis with an emphasis on methods, and extensive writing practice. Students will produce original work in all three genres, which they will revise based on detailed responses from instructor and peers. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 200.**

**English A121 — Short Story Writing — 3 units**

**Advisory:** English A100 and A119.

A class in short fiction, centered on discussing and evaluating students' original work. Includes practical strategies for generating strong prose, based on techniques of published writers. For beginning, intermediate, or advanced writers. Students will be given the opportunity to submit work for publication in the Orange Coast Review. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A122 — Novel Writing 1 — 4 units**

**Advisory:** English A100 and A119.

An introductory course offering an intensive workshop environment in which to write an original work of book-length fiction. The course focuses on theory, technique and practical discipline of writing fiction, and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). Students discuss the techniques of storytelling and present original manuscripts for critical review. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A126 — Poetry Writing — 3 units**

**Advisory:** English A100 and A119.

Emphasizes student writing in poetic forms. Includes lectures and discussions on the theory and practice of poetry, focusing primarily on the discussion and evaluation of student work. Designed for beginning, intermediate and advanced writers seeking practice and guidance in poetry writing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A127 — Scriptwriting 1 — 4 units**

**Advisory:** English A100 and A119.

An introductory workshop in scriptwriting for the screen, television, and stage, with particular attention given to traditional cinematic/dramatic narratives, plot and structure, scene design, and character development. Students will explore craft through lecture/discussion, group interaction, instructor feedback, and peer evaluation of original drafts, writing and revising a minimum of 30 pages in their chosen genre. May be taken for grades or on a pass/no-pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A222 — Novel Writing 2 — 4 units**

**Advisory:** English A100 and A122.

For students who have completed at least fifty pages of an original novel, this intermediate level writing workshop focuses on planning and developing the novel into a full-length manuscript. The course explores theory, technique and the practical discipline of writing fiction, and examines models from various genres (literary classics, historical fiction, detective fiction, romance, science fiction and others). In addition, students learn to write critiques demonstrating a working knowledge of literary technique and terminology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**English A227 — Scriptwriting 2 — 4 units**

**Prerequisite:** English A127.

This is a course for students who have completed at least one act (30 pages) of an original play or screenplay. The emphasis will be on analyzing dramatic strategies in film, television, and theatre, with special attention given to bringing a short project to completion (30-60 pages). May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A232 — Novel Writing 3 — 4 units**

This is an advanced writing workshop for students who have already completed more than 100 pages of an original novel. Students will focus on analysis of the elements of dramatic fictional structure through examination of works in progress. In addition to generating 50-100 new pages, students will read essays on craft and engage in research into the settings and circumstances of their characters in order to lend authenticity to the narrative. This course is designed to assist students in developing and revising manuscripts to meet contemporary publication standards. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**English A237 — Scriptwriting 3 — 4 units**

**Prerequisite:** English A227.

An intermediate scriptwriting workshop for students who have completed at least 60 pages of an original work. The emphasis at this stage will be on the refinement of structure, tone, dialogue, and character, in service to the emerging themes of the work-in-progress. Students will read essays on craft and will engage in research into the circumstances and settings featured in their scripts. After generating 30-60 new pages, students will carefully revise and edit their work, resulting in the completion of a substantial portion of their full-length plays/screenplays. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A242 — Novel Writing 4 — 3 units**

**Advisory:** English A232.

This is a writing workshop for students who have completed more than 150 pages of an original novel. The course is designed to assist students in finishing their novels and prepare them to market professional manuscripts for publication. Students will research current standards for query letters and other submission procedures and apply them to the process of selling their work. Manuscripts submitted for workshop will meet contemporary publication standards. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**English A247 — Scriptwriting 4 — 4 units**

**Prerequisite:** English A237.

An advanced scriptwriting workshop for students who have completed at least 90 pages of an original work. The emphasis this semester will be on completing and marketing a saleable feature-length screenplay, theatrical play, original pilot, or spec script for an existing television show. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Literature**

**English A140 — Introduction to Literature — 3 units**

**Prerequisite:** English A100 or appropriate placement.

This course introduces representative works from major genres (fiction, novel, poetry and drama), develops students' close reading and analytical writing skills, and promotes appreciation and critical understanding of the cultural, historical, and aesthetic qualities of literature. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 120.**

**English A140H — Introduction to Literature Honors — 3 units**

**Prerequisite:** English A100 or appropriate placement.

This course introduces representative works from major genres (fiction, novel, poetry and drama), develops students' close reading and analytical writing skills, and promotes appreciation and critical understanding of the cultural, historical, and aesthetic qualities of literature. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 120.**

**English A141 — The Bible As Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same course as Religious Studies A180. Students completing English A141 may not receive credit for Religious Studies A180. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A141H — The Bible As Literature Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same course as Religious Studies A180. Students completing English A141H may not receive credit for Religious Studies A180. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A143 — Children's Literature — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important texts of children's literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 180.**

**English A143H — Children's Literature Honors — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important texts of children's literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 180.**

**English A147 — Introduction to Science Fiction — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important works of science fiction. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A147H — Introduction to Science Fiction Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important works of science fiction. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. Lecture. **Transfer Credit: CSU, UC.**

**English A148 — Film As Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on international and American films. Critically examine the philosophical, cultural, mythic, religious, and/or historical elements related to film. Explore the styles in individual works and the commentary made on moral, social, and aesthetic issues. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A148H — Film As Literature Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on international and American films. Critically examine the philosophical, cultural, mythic, religious, and/or historical elements related to film. Explore the styles in individual works and the commentary made on moral, social, and aesthetic issues. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A150 — American Literature Before the 20th Century — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important early American literary works produced prior to the 20th Century. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 130.**

**English A150H — American Literature Before the 20th Century Honors — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important early American literary works produced prior to the 20th Century. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 130.**

**English A151 — American Literature in the 20th Century — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important American literary works from the early 20th century to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 135.**

**English A151H — American Literature in the 20th Century Honors — 3 units**

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important American literary works from the early 20th century to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 135.**

**English A152 — Race, Culture, and Identity in Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on texts by American writers, immigrant writers, and other writers that explore ethnicity, race, culture, sexuality, or ideology. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A152H — Race, Culture, and Identity in Literature Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on texts by American writers, immigrant writers, and other writers that explore ethnicity, race, culture, sexuality, or ideology. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A156 — California Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important texts of California Literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A156H — California Literature Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important texts of California Literature. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A160 — World Literature Through Renaissance — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important early World literary works in translation produced from antiquity through the Renaissance. Works will be included from Europe, Asia, Africa, and the Middle East. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A160H — World Literature Through Renaissance Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important early World literary works in translation produced from antiquity through the Renaissance. Works will be included from Europe, Asia, Africa, and the Middle East. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A161 — World Literature Since Renaissance — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important World literary works in translation from the Renaissance to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works from Europe, Asia, Africa, South America, and the Middle East. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A161H — World Literature Since Renaissance Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important World literary works in translation from the Renaissance to the present. Explore the historical, cultural, philosophical, and aesthetic implications of representative works from Europe, Asia, Africa, South America, and the Middle East. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A165 — Introduction to Irish Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important texts of Irish literature from the earliest periods to the present. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Appreciate the literary devices and styles evident in individual works and the commentary made by these works on moral, social, and aesthetic issues. Typical writers include anonymous writers of Irish myths, legends, and folklore, early poets, O'Casey, Lady Gregory, Joyce, Shaw, Synge, Wilde, Yeats. Lecture. **Transfer Credit: CSU, UC.**

**English A168 — Popular Fiction — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important texts of Popular Fiction including popular novels, detective fiction, science fiction, fantasy, horror, young adult, romance, historical fiction, and graphic novel/comics. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A170 — Modern and Post-Modern Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important modern and postmodern literary works. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A170H — Modern and Post-Modern Literature Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important modern and postmodern literary works. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A172 — Unique Topics in Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important texts chosen because of their timeliness and focus on a common theme, form, geographical area, or cultural group. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A173 — Women Writers — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important works by women writers. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A173H — Women Writers Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important works by women writers. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A176 — World Mythology — 3 units**

**Advisory:** English A100.

Read, analyze, and write on myths and the literature based on mythic traditions. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analysis of assigned work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A176H — World Mythology Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on myths and the literature based on mythic traditions. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analysis of assigned work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A179 — Gender and Sexuality in Literature and Film — 3 units**

**Advisory:** English A100.

Read, analyze, and write on literature and films of different genres, periods, and cultures that focus on culturally constructed images of gender and sexuality. Examine the philosophical, cultural, mythic, and/or historical elements related to gender, sexuality and sexual identity. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**English A179H — Gender and Sexuality in Literature and Film Honors — 3 units**

**Advisory:** English A100.

Read, analyze, and write on literature and films of different genres, periods, and cultures that focus on culturally constructed images of gender and sexuality. Examine the philosophical, cultural, mythic, and/or historical elements related to gender, sexuality and sexual identity. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**English A181 — Shakespeare — 3 units**

*Formerly English A175*

**Advisory:** English A100.

Read, analyze, and write on a range of Shakespearean texts including histories, comedies, tragedies, and problem plays. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A181H — Shakespeare Honors — 3 units**

*Formerly English A175H*

**Advisory:** English A100.

Read, analyze, and write on a range of Shakespearean texts including histories, comedies, tragedies, and problem plays. Examine the philosophical, cultural, mythic, religious, and/or historical elements related to these texts. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A187 — Introduction to Literary Theory — 3 units**

**Advisory:** English A100.

Introduction to literary theory and interpretation with a focus on genre, textual analysis, and application of theoretical principles. Examines the influence of philosophy and history on perceptions of literature and will investigate relevant topics such as art, sexuality, economics, culture, power, and language. Some authors may include Barthes, Freud, Marx, Derrida, and Foucault. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A187H — Introduction to Literary Theory Honors — 3 units**

**Advisory:** English A100.

Introduction to literary theory and interpretation with a focus on genre, textual analysis, and application of theoretical principles. Examines the influence of philosophy and history on perceptions of literature and will investigate relevant topics such as art, sexuality, economics, culture, power, and language. Some authors may include Barthes, Freud, Marx, Derrida, and Foucault. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**English A270 — British Literature Before 1800 — 3 units**

*Formerly English A280*

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important British literature from the Anglo-Saxon period to 1800. Explore the historical, cultural, philosophical and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 160.**

**English A270H — British Literature Before 1800 Honors — 3 units**

*Formerly English A280H*

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important British literature from the Anglo-Saxon period to 1800. Explore the historical, cultural, philosophical and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 160.**

**English A275 — British Literature After 1800 — 3 units**

*Formerly English A285*

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important British literary works after 1800. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 165.**

**English A275H — British Literature After 1800 Honors — 3 units**

*Formerly English A285H*

**Prerequisite:** English A099 or English as a Second Language A099 or appropriate placement.

Read, analyze, and write on important British literary works after 1800. Explore the historical, cultural, philosophical, and aesthetic implications of representative works. Formulate and produce written analyses of assigned works. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID ENGL 165.**

**ENGLISH AS A SECOND LANGUAGE**

**English as a Second Language A011 — Beginning Listening and Speaking — 4 units**

Listening comprehension, oral communication, and pronunciation skills for beginning academic students who are non-native speakers of English. Practice in spontaneous conversation and small group discussion. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A015 — Grammar, Reading and Writing 1 — 8 units**

**Prerequisite:** English as a Second Language A011 or concurrent enrollment or qualifying placement score.

Intensive introductory level of integrated basic grammar, reading, and writing of American English for non-native students who are pursuing college coursework. Includes work on sentence structure, questions, verb tenses, spelling and vocabulary. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A021 — Listening and Speaking Skills 1 — 3 units**

**Prerequisite:** English as a Second Language A011 or qualifying placement score.

Listening comprehension, oral communication, and pronunciation skills for low-intermediate students. Practice comprehending classroom conversation skills and lectures. Practice in spontaneous conversation. Work on American sound system, including rhythm and intonation. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A026 — Grammar, Reading and Writing 2 — 6 units**

**Prerequisite:** English as a Second Language A011 or qualifying placement score and A015 or qualifying placement score.

Integrated intensive grammar and reading low-intermediate students who are non-native speakers of English. Practice with sentence structure, tenses, modals, comparative and superlative, and clauses. Reading for facts and inferences. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A031 — Listening and Speaking Skills 2 — 3 units**

**Prerequisite:** English as a Second Language A021 or qualifying placement score.

Listening comprehension, oral communication, and pronunciation skills for intermediate students. Practice on basic note-taking from lectures. Task-oriented discussion techniques. Review of basic patterns of American pronunciation. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A035 — Grammar, Reading and Writing 3 — 7 units**

**Prerequisite:** English as a Second Language A021 or qualifying placement score and A026 or qualifying placement score.

Integrated intensive study of grammar, reading, and writing for intermediate students who are non-native speakers of English. Introduction to literal and critical reading; responding to unsimplified texts. Writing practice for grammar, mechanics and fluency. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A051 —  
Listening and Speaking Skills 3 — 3 units**

**Prerequisite:** English as a Second Language A031 or qualifying placement score.

Listening comprehension, oral communication, and pronunciation skills for high-intermediate and advanced second language students. Practice in effective note-taking and listening for specific information. Work on interpersonal communication, oral presentation, and pronunciation. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A055 —  
Grammar, Reading and Writing 4 — 6 units**

**Prerequisite:** English as a Second Language A031 or qualifying placement score or concurrent enrollment and A035 or qualifying placement score.

Integrated intensive study of grammar, reading, and writing for high-intermediate students who are non-native speakers of English. Review of intermediate grammar and reading skills, with work on advanced grammatical structures. Paragraph writing in response to readings. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A060 —  
Composition and Reading 1 — 3 units**

**Prerequisite:** English as a Second Language A031 or qualifying placement score and A055 or qualifying placement score.

Integrates college level reading, writing, and critical thinking skills. Emphasis on summary skills and short responses to college-level readings. Students will write 6,000 instructor-evaluated words. Individual attention given to the structure and usage problems of English as a Second Language students through conferencing and computer applications. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. Not degree applicable.

**English as a Second Language A065 —  
Advanced Sentence Analysis  
and Construction — 3 units**

**Prerequisite:** English as a Second Language A031 or qualifying placement score and A055 or qualifying placement score.

Analysis of college-level texts and the relation between grammatical structures and meaning. Application of a wide variety of sentence development strategies. Especially suited for the advanced non-native speaker who already has skill in essay writing and who wants to develop English sentence structure style and accuracy. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**English as a Second Language A099 —  
Composition and Reading 2 — 3 units**

**Prerequisite:** English as a Second Language A031 or qualifying placement score and A060 or A065 or qualifying placement score.

Integrates college-level reading, writing, and critical thinking skills. Intensive practice in writing essays in response to college-level expository texts using various methods of development and organization. Individual attention given to sentence structure and usage problems. Students will write 6,000 instructor-evaluated words. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. Not degree applicable.

**ENVIRONMENTAL SCIENCE AND  
ECOLOGY**

*Same as Ecology*

**Environmental Science and  
Ecology A100 — Introduction to  
Environmental Science — 3 units**

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100 - Human Ecology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Environmental Science and Ecology  
A100H — Introduction to Environmental  
Science Honors — 3 units**

The physical and biological components of the environment, their interrelationships, and the human population influence on these components. Physical, biological, and political means of reversing environmental deterioration will be considered as well as conservation and management of natural resources. Suitable as a general education elective for the non-science major and for students in Environmental Science or other natural sciences. Field trip may be required. Same as ECOL A100 - Human Ecology. Lecture. **Transfer Credit: CSU, UC.**

**Environmental Science and Ecology A101  
— Principles of Ecology — 3 units**

This introductory ecology course for non-science majors covers ecological principles and their relevance at several levels of organization. Includes principles governing classification of life, principles of evolution, conditions for life, adaptations to the environment, analysis of ecological niches, population, and community/ecosystem ecology. Field trips are required. Same as ECOL A101 - Principles of Ecology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Environmental Science and Ecology  
A110 — Island Ecology — 3 units**

Islands are used as the platform to discuss Ecology, Evolution, Speciation, Biogeography, Geology, and Human History as it relates to islands. This course focuses on California's Channel Islands and also covers the Hawaiian Islands, the Galapagos Islands, and many others. Field trip is required. Same as ECOL A110 - Island Ecology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Environmental Science and Ecology A121—  
Marine Intertidal Ecology — 1 unit**

Ecology of the marine intertidal environment of Southern California. This is a field oriented laboratory experience for non-majors. Students completing Ecology A121 or ESEC A121 may not receive credit for Marine Science A121. Same as Marine Science A121 and Ecology A121. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU**

**Environmental Science and Ecology A124—  
Ecology of the Gray Whale — 1 unit**

Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. Students taking Ecology A124 or Environmental Science A124 may not receive credit for Marine Science A124. Same as Marine Science A124 and Ecology A124. May be taken for grades or on a pass/no pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Environmental Science and Ecology A140—  
Mediterranean Biome Ecology — 2 units**

The Mediterranean Biome includes chaparral and coastal sage scrub in North America, mallee scrub in Australia, matorral in South America, fynbos in Africa, and maquis in Europe. This course surveys this biome through an investigative approach. Field trips are required. Same as ECOL A140 - Mediterranean Biome Ecology. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU**

**Environmental Science and Ecology  
A141— Desert Ecology — 2 units**

Deserts cover 20% of the Earth and provide wildlife habitat, as well as, economic and recreational value. This course will provide students an opportunity to learn and assess the ecological processes in various deserts on Earth including the deserts of Southwestern United States and Mexico. Field trips are required. Same as ECOL A141 - Desert Ecology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Environmental Science and Ecology A210—  
Wetlands Ecology and Management — 3 units**

**Advisory:** Biology A100, or Ecology A100, or Horticulture A100, or Marine Science A100, or Geology A105

This course covers the biological, physical, chemical, and hydrological components of wetland ecosystems. Various types of wetland habitats are discussed including their ecological and economic value. Field-based assessments on wetland ecology are implemented throughout the course. Management practices are investigated including past and current methods, policies, restoration efforts and outcomes, and the effects of climate change on wetlands are examined. Same as ECOL A210 - Environmental Science & Ecology. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**ETHNIC STUDIES****Ethnic Studies A100 — Contemporary  
Ethnic America — 3 units**

An examination of contemporary American dominant, ethnic and racial minority intergroup relations from historical, sociological and psychological perspectives. Addresses continuing issues of racism and discrimination in employment, education, politics and health care. Lecture. **Transfer Credit: CSU, UC.**

**Ethnic Studies A150 — Ethnic Groups in the U.S.: Their Histories — 3 units**

A survey of the history of the many (40+) ethnic groups originating in Europe, Asia (including the American Indian), the Americas, the Pacific Islands, Africa, and the Middle East, that make up the population of the United States. Same as History A150. Students who enroll in Ethnic Studies A150 may not receive credit for History A150. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**FAMILY AND CONSUMER SCIENCES**

See *Consumer Studies*

**FASHION**

**Fashion A050 — Sewing Lab — .5-2 units**

A laboratory-based course to improve clothing construction skills. Students work independently according to a study plan they devise and complete, under the supervision of the course instructor. Includes periodic student-teacher conferences, completion of individualized lab assignments, and a final self-assessment report. Enrollment is open all semester. Offered on a pass no-pass basis only Arranged Lab. Not degree applicable.

**Fashion A100 — Beginning Clothing Techniques — 3 units**

This course is basic clothing construction using the latest methods. Students will learn basic clothing construction techniques and complete multiple easy-to-sew projects. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A102 — Industrial Sewing Techniques — 2 units**

**Prerequisite:** Fashion A100, A180, or A183.  
Advanced clothing construction techniques with emphasis on industrial equipment, techniques, use, and care. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A105 — Sewing Skills Assessment — 3 units**

**Advisory:** Fashion A100 or A180 or A183.  
Assessment of sewing skills and performance of specified clothing techniques required for Fashion A100, A180 and A183. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A110 — Applied Textiles and Design — 3 units**

Selection, use, care, and performance standards for textile products for fashion apparel and interior textiles. Lecture. **Transfer Credit: CSU, UC.**

**Fashion A115 — Introduction to the Fashion Industry — 3 units**

Organization, structure, and interrelationship of industries and services that comprise the business of fashion, terminology, designers, trade organizations, and publications. Identification of current trends and fashion inspiration. Professional opportunities explored. Lecture. **Transfer Credit: CSU.**

**Fashion A118 — Trend Forecasting — 3 units**

Studies the techniques and procedures for identifying and forecasting fashion trends and evaluates current trends found in lifestyles, business, ready-to-wear, and home fashion. Students will learn to recognize and analyze predictive lifestyle and business trends that affect retail merchandising and marketing decisions. Lecture. **Transfer Credit: CSU.**

**Fashion A120 — History of Fashion — 1.5 units**

A chronological study of costume designs from ancient times to the present. Emphasis is placed on the identification of apparel design details, the relation of recurring style trends to contemporary fashions, sociological, economic, and political factors affecting clothing through the centuries. Lecture. **Transfer Credit: CSU.**

**Fashion A121 — Street Style — 1.5 units**

This course explores the significant and dynamic role street style plays in the 21st Century and surveys how youth defies and influences the fashion establishment. The street's ascent as a fashion force will be traced from its historical inception to how it makes history. Lecture. **Transfer Credit: CSU.**

**Fashion A130 — Tailoring — 1.5 units**

**Prerequisite:** Fashion A180 or A183.

The student will construct a lined, tailored jacket using traditional and speed tailoring techniques. Forty-eight basic clothing construction techniques will be featured. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A135 — Design Thinking — 2 units**

Design problem solving and planning through the prototyping process. The study of the design process including inspiration, ideation, and implementation of design concepts. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A137 — Alterations — 2 units**

**Prerequisite:** Fashion A100 or A180 or A183.

Basic analysis and techniques related to fitting and altering ready-to-wear garments and commercial patterns. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A150 — Flat Pattern Techniques — 3 units**

**Prerequisite:** Fashion A100 or A180 or A183.

Interpretation of clothing design through the use of flat pattern techniques. Basic principles involved in designing and manipulating patterns. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A155 — Tech-Packs — 2.5 units**

**Prerequisite:** Fashion A100 or A180 or A183 and A150 and A255.

The development of offshore technical packages. To include: garment knock-offs, pattern adjustments, appropriate fit, fabric qualities and package specifications. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A170 — Clothing Design and Selection — 3 units**

An introduction to the psychology of clothing and the study of art elements and principles as they relate to dress and personal appearance. Fashion vocabulary, recognition and description of styles, fashion cycles and trends are emphasized. Lecture. **Transfer Credit: CSU.**

**Fashion A175 — Applied Color and Design Theory — 3 units**

Introduction to color and design theory and application, including line, shape, value and color. Utilization of tools, materials, and equipment to develop a visual vocabulary and technical skills applicable to interior, architectural, and fashion related fields of design. Same as Interior Design A175. Students completing Fashion A175 may not receive credit for Interior Design A175. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A177 — Fashion Merchandising Concepts — 3 units**

An introduction to the fashion merchandising industry will include vendors and products sold, as well as the various types of retail venues and the methods of merchandising apparel in each. The packaging and marketing of a product and the tracking of a fashion trends in several venues will also be included. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Fashion A180 — Fundamental Principles of Clothing Construction 1 — 3 units**

Fundamental principles of clothing construction are studied and applied to selected problems with an emphasis on expanding knowledge in a variety of techniques. Fulfills the lower division college transfer requirement in clothing for the family and consumer sciences major. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A181 — Fashion Internship — 2 units**

**Advisory:** At least four of the following: Fashion A110, A115, A120, A121, A170, A177.

**Co-requisite:** Fashion A200.

A supervised internship including classroom-based learning and experience at a fashion-related work site. This 120-hour unpaid or 150-hour paid work experience course is designed to assist students to acquire career awareness, work habits, attitudes and skills for the fashion program. Credit for occupational work experience may be accrued at the rate of one to 8 units per semester for a total of sixteen units. Additionally, this course is for 2 units and students must work 75 paid hours or 60 non-paid hours per unit earned. Lecture, Work Experience. **Transfer Credit: CSU.**

**Fashion A182 — Professional Practices — 2 units**

**Prerequisite:** Must take a minimum of four of the following: Fashion A115, A170, and A177.

This course will include writing resumes and professional correspondence and developing a visual portfolio. This course should be taken in the final semester of the certificate program. Lecture. **Transfer Credit: CSU.**

**Fashion A183 — Fundamental Principles of Clothing Construction 2 — 3 units**

An intermediate-level clothing construction class using the latest industry methods. Students will learn clothing construction techniques and complete two sewing projects. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A190 — Apparel Industry Sustainability: The Environment, Ethical Business Practices & the Law — 3 units**

An introduction to, and overview of, responsible business, also known as triple bottom line business, with a focus on environmental sustainability, responsible decision making, social impact, corporate social responsibility, regulatory compliance, certifications, and other emerging technologies. Students will examine current topics, concepts, trends, and rules that are driving the sustainability and responsible business movement and will develop an understanding of, and a lexicon for, what many consider the future of business. Lecture. **Transfer Credit: CSU.**

**Fashion A191 — Sustainability & Responsibility in Fashion Design, Manufacturing and Branding — 3 units**

**Prerequisite:** Fashion A190.

A look at environmental and social impacts the apparel manufacturing industry has had in the past and continues to have today. This class will explore the impacts associated with the process of developing and manufacturing apparel from fiber sourcing to warehousing, and sales to distribution. Additionally, this class will discuss innovative solutions that are in use today that counter those impacts. Lecture. **Transfer Credit: CSU.**

**Fashion A192 — Research & Development for Apparel Industry Sustainability — 3 units**

**Prerequisite:** Fashion A190 and A191.

Research, evaluate, and interpret sustainable fashion theory and current company processes. The course will review current sustainability programs companies are marketing, as well as assessing and evaluating their compliance programs. Through case studies and field trips you will apply knowledge and participate in the development and presentation of a brand or company that encapsulates ethical and sustainable practices. Lecture. **Transfer Credit: CSU.**

**Fashion A199 — Current Issues in Fashion — .5-1.5 units**

Current issues in the field of fashion, rotating through a variety of topics, such as fashion design/production, apparel construction, fashion merchandising, and costume. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Fashion A200 — Fashion Internship Lecture — 1 units**

**Co-requisite:** Fashion A181.

A lecture course that runs concurrently with a supervised internship course. Classroom-based learning. Includes 18 hours of company research preparation to include company culture and appropriate behavior; on-site interview skills and techniques; writing measurable learning objectives that are assessed at the end of the internship; and writing a reflective summary for each objective and developing a resource directory for employees, vendors, and services used at the field site. Lecture. **Transfer Credit: CSU.**

**Fashion A225 — Media, Events, and Promotions — 3 units**

**Prerequisite:** Fashion A177.

Principles of fashion promotion and coordination. Analysis of social media marketing related to the fashion industry. The course will include techniques and procedures for presenting fashion according to retail venue, target customer, type of merchandise, and type of theme or event. Lecture. **Transfer Credit: CSU.**

**Fashion A233 — Couture Techniques — 2 units**

**Prerequisite:** Fashion A180 or A183.

Instruction and practice in techniques used to create couture and custom garments. Techniques of handling special and difficult fabrics, leather and furs. Features fine finishing details. Requires construction of one couture garment. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A235 — Draping — 2 units**

The creative design of garments through draping techniques emphasizing fabric manipulation and design creation. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A255 — Fashion Illustrating Techniques 1 — 3 units**

Presentation and promotion of fashion and garment design through elementary trade sketching use of the 'croqui', and current computer design software, as used in the fashion industry. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A256 — Fashion Illustrating Techniques 2 — 3 units**

**Prerequisite:** Fashion A255.

Use current computer software to design and refine fashion garment proportions, textile textures and shapes, and garment construction elements to gain a clear understanding of design standards in the fashion industry. Lecture, Lab. **Transfer Credit: CSU.**

**Fashion A266 — Computerized Pattern System — 2 units**

**Advisory:** Fashion A110 and 150.

An introductory course on the operation of the current computer-assisted pattern-making software package, including the 3D format. System management, digitizing, plotting, marker-making, pattern development, library structures of pattern data, development of pattern blocks, pattern design, grading, and drafting system features/functions will be covered. Lecture, Lab. **Transfer Credit: CSU.**

**FILM & TELEVISION**

**Film & Television A100 — History & Appreciation of the Cinema — 3 units**

Introduces the analysis of film form and content, aesthetics and meaning, and history and culture. Explores the diverse possibilities presented by the cinematic art form through an examination of a wide variety of productions, national cinemas, and film movements. Topics include modes of production, narrative and non-narrative forms, visual design, editing, sound, genre, ideology and critical analysis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Film & Television A102 — The Business of Film & Television — 3 units**

**Advisory:** Film & Television A110 and A155.

An introduction course to the business of film and television. Students will get a comprehensive and practical look at each aspect of the industry, including careers in development, current programming, broadcast standards and practices, networks, studios, casting, and production for film and television. This class will also address career strategies for advancement within the film, television and new media industries. Lecture. **Transfer Credit: CSU.**

**Film & Television A104 — The Great Directors of Cinema — 3 units**

Topics delving into aspects of film history, criticism and aesthetics which can be described as extensions of the film directors' point of view. The course is intended for Film and Television majors and other students with an interest in Film and Television. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Film & Television A106 — Introduction to Media Writing — 3 units**

Basic introductory course in writing for the film and electronic media. Emphasis on preparing scripts in proper formats, including fundamental technical, conceptual and stylistic issues related to writing fiction and non-fiction scripts for informational and entertainment purposes in film and electronic media. Includes a writing evaluation component as a significant part of the course requirement. Lecture. **Transfer Credit: CSU.**

**Film & Television A107 — History of Video Games — 3 units**

Introduces the analysis of game art form and content, aesthetics and meaning, as well as history and culture. Explores the genesis of the gaming industry the business behind games as well as the diverse history of games and consoles. Topics include early computer game conception, arcade gaming, first generation consoles, gaming boom and bust of the 1980's, as well as the vast advances of the 1990's and 2000's. Lecture. **Transfer Credit: CSU, UC.**

**Film & Television A109 — Science Fiction Film — 3 units**

Participants will explore the long history of Science Fiction film starting in the early 1900s to the modern era, to gain a deeper understanding of the genre, its social significance and underlying meaning for symbols and characters. Successful structure of a Science Fiction film, as well as key figures in the development of the genre, will be explored. Lecture. **Transfer Credit: CSU.**

**Film & Television A110 — Film Production 1 — 3 units**

The course provides an introduction to the theory, terminology, and operation of single camera video production, including composition and editing techniques, camera operation, portable lighting, video recorder operation, audio control and basic editing. This course focuses on the aesthetics and fundamentals of scripting, producing, directing on location, post production, and exhibition/distribution. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Film & Television A112 — Project Development and the Pitch — 3 units**

Students will learn how to plan a video, documentary, or television project and develop a business presentation for submission to commercial buyers. Topics will include development, marketing, packaging, release strategies, financing, publicity and advertising. Lecture. **Transfer Credit: CSU.**

**Film & Television A120 — Event Productions — 3 units**

**Advisory:** Film & Television A110 and A194.

This course is designed to introduce the student to the aesthetic concepts, basic skills, and techniques used to create live event films for sports, theatrical, corporate events, and weddings. Additionally, the course will cover basic business and marketing skills needed to start a videography business. Students will acquire hands on knowledge of live event videography and editing techniques. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A150 — History of Radio & Television — 3 units**

Overview and analysis of the radio, TV, and film industries in the U.S. with emphasis on the historical, cultural, and technical functions of each medium. Additionally, broadcast advertising, research, media law, and regulations are explored with the additional impact of global broadcasting, cable TV, Internet, and satellite technologies. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Film & Television A155 — Television Production 1 — 3 units**

Introduction, orientation, and use of digital television studio equipment and other basic tools in television production. The course will focus on theory, terminology, and operation of all television equipment and the responsibilities of television personnel. Students will be assigned projects to produce and will experience all major functions of the production team. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A193 — Sound Design for Film & Television — 3 units**

This course serves as an introduction to the theory and practice of audio production for radio, television, film and digital recording applications. Students will learn the fundamentals of sound design and aesthetics, microphone use, and digital recording equipment. Students gain hands-on experience recording, editing, mixing and mastering audio. Upon completion, students will have basic knowledge of applied audio concepts, production workflow, equipment functions, and audio editing software. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A194 — Editing 1 — 3 units**  
**Advisory:** Film & Television A110.

Explore the principles, theory, and mechanics of digital film and video editing using Macintosh computers. Emphasis will be on digital editing techniques, effects, audio, graphics, and titling. The class is designed for those interested in entering the field of digital editing, graphic artists interested in expanding their knowledge base of the industry, and independent producers in the broadcast, educational, corporate, and consumer markets. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A195 — Editing 2 — 3 units**  
**Prerequisite:** Film & Television A194.

Students will dive deeper into the advanced technical features of editing while exploring the conceptual art of film editing such as tempo/pace of the edit, the importance of sound design and the feel of colorization. We will explore advanced digital editing techniques along with theory and concepts that make a successful edit. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A196 — Introduction to Visual Effects — 3 units**

**Prerequisites:** Film & Television A194.  
Explore the principles, theory, and mechanics of visual effects editing using computers. Emphasis will be on visual effects editing techniques, sound effects, graphics, and titling. The class is designed for those interested in expanding their knowledge of areas including advanced editing, visual effects, graphics, post-production industries, studio and independent productions, broadcast, educational, corporate, web, virtual reality and other consumer markets. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A210 — Production Management — 3 units**

**Prerequisite:** Film & Television A110.  
This course will provide a comprehensive step-by-step overview of production management from pre-production through post-production in film, television and new media projects. This course will also cover production planning, budgeting, scheduling, as well as other essential skills and logistics of filmmaking. Lecture. **Transfer Credit: CSU.**

**Film & Television A215 — Social Media Marketing — 3 units**

**Advisory:** Film & Television A110 or A155.  
Introduction to the role of social media marketing in entertainment and the practical applications of social media types. Students will learn to optimize career goals through social media; build and leverage a community of followers; create compelling content; and design and implement a multi-platform marketing campaign for an outside client. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A220 — Introduction to Virtual Reality (VR) — 3 units**

**Advisory:** Film & Television A110 or A194.  
An introduction to virtual reality media production, from simple 360-degree video capture, stitching, and editing, to the basic use of open-source, game engines to add 3D graphic elements, spacial audio, and user-interactivity to create immersive videos and experiences. Students will learn key terminology, techniques, and current VR and related Immersive Media trends. Students will work together to produce 360-degree videos and basic immersive experiences, viewable on a variety of headset platforms. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A221 — Introduction to Augmented Reality (AR) — 3 units**

**Advisory:** Computer Science A273 and Film & Television A220.  
An introduction to Augmented Reality development, from simple interactive graphics activated by a smart-phone, to the basic use of open-source, game engines to add 3D graphic elements, spatial audio, and user-interactivity to create immersive experiences integrated into AR-enabled publications, games, and AR goggle applications. Students will learn key AR terminology, techniques, and related Immersive Media technology trends. Students will work together to produce basic immersive experiences, viewable on a variety of handheld and headset platforms. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A222 — Introduction to Performance Capture — 3 units**

**Advisory:** Digital Media Arts and Design A180 and Film & Television A220.  
An introduction to Performance Capture techniques used in animation for multiple industries, including Film & Television, Virtual & Augmented Reality, Animation, Acting, and Game Design, from both the technician and performer side of the production workflow. Students will learn key terminology, techniques, and current best practices related to the Performance Capture profession. Students interested in the tech side will operate the capture systems and work with performance data to animate computer-generated characters. Students interested in the performer side will wear the performance capture suits and equipment while learning how to effectively act and perform as virtual characters. Students will be able to complete the class choosing to specialize either in tech or performance techniques, or both. The class will work together to produce character animations for both flat and 360-degree VR animations. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A223 — Immersive Video Game Development 1 — 3 units**

**Advisory:** Digital Media Arts and Design A281 and Film & Television A220.  
An introduction to Video Game Design and Development as it applies to Immersive Media Technologies, such as Virtual and Augmented Reality (VR/AR), as well as traditional computer games and animated films. Students will learn basic 3D modeling and Game Engine techniques using very powerful design software which is widely used by professionals in the industry. Because most of this software is FREE to non-professionals, students can download and practice with it at home as well, optimizing their ability to learn these time-intensive technologies in 16-weeks. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A225 — 360 Spatial Audio for Immersive Media — 2 units**

**Advisory:** Film & Television A193 or MUS A261.  
Fundamentals and techniques of recording and post-production processing of 360-degree spatial audio specific to creating Immersive Media, such as VR/AR, Video Game Design, Sound Design for 360 Film & Television, and immersive music composing. Students will learn to use a variety of spatial microphones and recording techniques, including mono point-source, binaural and ambisonic, as well as industry-specific post-production software and plug-ins to handle 360 spatial audio mixdown in sync with immersive visuals. The techniques for spatial audio differs greatly from traditional stereo recording and mixing, making these skills absolutely necessary for creating 360 content or pursuing careers in Immersive Media. Lecture, Lab. **Transfer Credit: CSU.**



**Film & Television A226 — Coding Basics for Immersive Media Applications — 3 units**

**Advisory:** Film & Television A220 or A221 and A223.

In contrast to traditional coding classes offered in Computer Science departments, this course offers a very basic-level overview and training in multiple coding languages specific to Immersive Media and Game Design, and only to the level needed to address typical programming challenges that may come up in the building of VR/AR and related projects using Game Engines. Coding languages and software taught will reflect only the current industry standards for Immersive Media (which often change), but may likely include elements of C#, C++, Javascript, Swift, XCode, AR Kit, AR Core, and Vuforia. This course is meant to be a 'primer', as a supplement to other Immersive Media courses, and not designed to teach any one coding language extensively. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A227 — Drone Imaging for Immersive Media — 3 units**

**Advisory:** Film & Television A110 and A220 or A221.

An overview of image capture techniques for Immersive and other media using drones and related Unmanned Autonomous Vehicles (UAVs). The concentration of this class will be centered mainly in the planning, collection, and use cases of visual imagery from drones as both a creative artform and a commercially-viable skill. So, it is open to students with or without Drone pilot licenses, although only those with proper certification will be allowed to actively operate aerial drones specifically. Ground rovers and other devices not requiring licenses will also be used, and all students will be able to take part in the collection and use of drone images. Students will work together to produce a range of projects, which may include 360-degree (VR) videos and photographs, basic immersive experiences, traditional (flat) videos and photographs, and sensor-based images, depending on equipment availability. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A229 — The Business of Immersive Media (VR/AR) — 2 units**

**Advisory:** Film & Television A220 and A221.

An introduction course to the business side of Immersive Media, including Virtual and Augmented Reality content creation and games, 360 Immersive Filmmaking, and related fields. Students will get an inside look at each aspect of the industry, including the vast array of ever-changing careers, desired skillsets and competencies, current trends, best practices, entrepreneurship, and the future direction of the industry as a whole. This class will also address soft-skills and developing career strategies for placement in entry-level jobs and internships. Lecture. **Transfer Credit: CSU.**

**Film & Television A231 — Immersive Media Development Lab 1 (VR/AR) — 2 units**

**Prerequisite:** Film & Television A220 and A223.

An auxiliary lab class for Intermediate to Advanced-level students in the Immersive Media (VR/AR) program. This lab-only course is designed to give additional access to VR/AR equipment and the development lab, under the guidance of an instructor, to allow students to work on their own self-guided Immersive Media project of a larger scope and/or higher level of difficulty than class exercises in previous or concurrent courses. Projects will be pitched and agreed on in the first 2 weeks of class, and turned in for a grade based on the pitch. This is NOT an "open lab" for students outside the program. Special training in our Immersive Media courses is necessary prior to signing up for this course. Lab. **Transfer Credit: CSU.**

**Film & Television A240 — Film Production 2 — 3 units**

**Prerequisite:** Film & Television A110.

This course provides an introduction to the theory, terminology, development of fictional story-telling structure, process of making and pre-production materials for film and television. Topics include basic cinematography including the operation, function and creative uses of production and post-production equipment, scriptwriting, camera operation, shot composition, lighting, sound recording and mixing, editing, writing, producing, directing and camera operation. Students will produce a short music video, animation or drama. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Film & Television A253 — Directing Theory — 3 units**

This course exposes students to the functions and responsibilities of a Director and Assistant Director. Students will further understand the process of reading a script, conceiving a vision, and communicating it to the cast and crew. Production hierarchy and responsibilities will also be covered in depth. Lecture, Lab. **Transfer Credit: CSU**

**Film & Television A255 — Television Production 2 — 3 units**

**Prerequisite:** Film & Television A155.

An advanced television studio production class emphasizing the role of the writer, producer, and director. Students will produce programs designed for live and live to tape television formats in the Film and Television Department's digital television studio, utilizing 16 x 9 widescreen cameras, switchers, lighting, and sound recording equipment. Each student will be assigned projects to produce and will experience all major functions of the production team. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A260 — Special Projects — 2 units**

Assists students in developing specialized Film and Television related projects. Expanded focus in specific study areas enhancing knowledge and technical skills. Designed for advanced Film and Television majors. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A261 — Television Studio Operations — 2 units**

**Prerequisite:** Film & Television A155.

Participation in the production and technical support of special television programs for students interested in gaining further experience with television. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Film & Television A262 — Cinematography — 3 units**

**Prerequisite:** Film & Television A110.

This course is an exploration of cinematography through a synergetic approach. The intent is to assist students in developing their moviemaking abilities generated by the current practice of the medium through advanced lighting techniques. Students will do individual and group projects using various camera, lighting and production equipment. Lecture. **Transfer Credit: CSU, UC.**

**Film & Television A264 — Editing 3 — 3 units**

**Prerequisite:** Film & Television A194.

An advanced course in digital film and video editing techniques and styles using an industry standard non-linear editing interface. The course will cover the importing of editing material, compositing, effects, graphics, and exporting to a variety of sources. Designed for students interested in a career as a Film and Television editor. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A265 — Field Production and the Documentary — 4 units**

**Prerequisite:** Film & Television A110.

Techniques of on-location video production including lighting, sound, videography, and post-production editing. Students will function as producers, directors, talent and crew. Projects will include news, documentary, and industrial productions. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A270 — Film Production 3 — 4 units**

**Prerequisite:** Film & Television A240.

A production course in which traditional film based systems are compared against digital technologies. Topics include film vs. video, aspect ratios, formats, high definition cameras, post-production options, distribution and delivery systems. Students will produce a short digital movie after extensive pre-production and story development. Lecture, Lab. **Transfer Credit: CSU.**

**Film & Television A271 — Portfolio Development — 3 units**

**Prerequisite:** Film & Television A240.

Prepares students to enter the professional workforce. Aids in developing promotional material such as business card, letterhead, resume, website, showreel and other promotional material. Develop proper job search and interview methodology. Lecture, Lab. **Transfer Credit: CSU**

**FOOD AND NUTRITION****Food and Nutrition A100 — Careers in Dietetics and Food Science — 1 unit**

Exploration of the fields of Dietetics and Food Science/Culinology, including trends, future projections and employment opportunities. Guest speakers and field trips to nutrition services in health care and community agencies and food manufacturing plants are included. Same as Nutrition Care A100. Students completing Food and Nutrition A100 may not receive credit for Nutrition Care A100. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A125 — Vegetarian Nutrition — 1 unit**

Vegetarian diets are explored including information on healthy food choices and nutritional implications. Each class includes lecture and preparation of a wide variety of vegetarian foods. Key nutrients and potential deficiencies are discussed. May be taken for a grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A136 — Nutrition, Fitness and Performance — 3 units**

An applied nutrition course for individuals interested in health, fitness, and athletics. Principles of nutrition are studied and applied to the athlete and active individuals. Includes pre and post event food and fluid selection, nutrient requirements, supplements, muscle mass and body fat related to performance. Same as Health Education A136 and Kinesiology A283. Students completing Food and Nutrition A136 may not receive credit for Health Education A136 or Kinesiology A283. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Food and Nutrition A140 — Introduction to Nutrition Concepts — 2 units**

Practical approach to nutrition with laboratory activities: includes basic nutrition, food product evaluation, menu modification, food and health issues, nutrition controversies, and food safety. Recommended for Culinary Arts and students wanting an overview of applied nutrition. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A144 — Life Cycle Nutrition — 3 units**

**Advisory:** Food and Nutrition A140 or A170.  
An overview of nutrition during the lifecycle. Course will cover nutritional needs during pregnancy and lactation, childhood and adolescent, and older adulthood. Introduction to the physiological, social and psychological factors affecting nutritional status for each age group. Lecture. **Transfer Credit: CSU.**

**Food and Nutrition A145 — Life Cycle Nutrition: Children — 1 unit**

An overview of nutritional needs of children (ages 2 – 18), including age appropriate practices and foods to promote optimum growth and development as well as common problems of weight (over/under), food allergies and intolerances. Lecture. **Transfer Credit: CSU.**

**Food and Nutrition A146 — Life Cycle Nutrition: Later Years — 1 unit**

An overview of the factors affecting the nutritional status of the aging adult: nutritional needs, physiological, social and psychological changes, disease intervention, drug nutrient interactions and community resources to assist the aging population. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Food and Nutrition A170 — Nutrition — 3 units**

Scientific concepts of nutrition relating to the functioning of nutrients in the basic life processes. Emphasis on individual needs, food sources of nutrients, current nutrition issues, and diet analysis. Recommended for nutrition majors and transfer students. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID NUTR 110.**

**Food and Nutrition A171 — Applied Nutrition — 2 units**

**Prerequisite:** Food and Nutrition A136 or A140 or A170 or concurrent enrollment.

Current issues in nutrition are explored along with weekly meal preparation and analysis emphasizing maximum nutrient intake. Topics covered include energy needs, current research, eating disorders, supplements, functional foods, and food safety. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A180 — Principles of Foods — 3 units**

Basic knowledge of food science principles and food preparation techniques. Emphasis on ingredient interaction, technique and production standards, food safety, sanitation, nutrient values, and food representations. Recommended for students transferring to the CSU in Nutrition. Lecture, Lab. **Transfer Credit: CSU. C-ID NUTR 120.**

**Food and Nutrition A185 — Cultural Foods — 2 units**

Exploration of America's diverse micro-cultures through food including origins, customs, psychological acceptance and nutrition information. Emphasis is placed on food preparation techniques, utensils, food service, and creation of an authentic atmosphere. Meets AA Cultural Diversity Requirement. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A195 — Food Science — 4 units**

Food science is the scientific study of raw food materials and their behavior during formulation, processing, packaging, and storage, and includes evaluation as consumer food products. Meets the AS Laboratory Science requirement. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A196 — Food Science Quality Control — 4 units**

**Prerequisite:** Food and Nutrition A195.  
The purpose of this class is to prepare students to work in a Food Manufacturing Quality Control lab. Multiple Food Manufacturing Quality Control Principles will be examined. Each examined principle will have multiple lecture and lab components. Students will use real world Quality Control lab techniques to analyze products found in the market place and correlate that product to a homemade one. Lecture, Lab. **Transfer Credit: CSU.**

**Food and Nutrition A199 — Current Issues in Food, Nutrition, and Food Science — .5 unit**

Study and review of current issues in the field of food, nutrition, food science, and dietetics, including a variety of topics, such as general nutrition, food research and technology, cook/chill, and nutrition related to health and disease, wellness, the life cycle, and fraud. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU.**

**Food and Nutrition A286 — Directed Practice for Culinaryology®/Food Science — 2 units**

**Prerequisite:** Food Service Management A160 and Food and Nutrition A195.

On the job training at approved institutional or commercial facilities working with a food scientist or culinologist in the development of new products or quality assurance. Students will be required to follow dress standards and company policies of conduct, set by the facility in which they are working. 120 hours paid, 150 hours unpaid, 6 hour seminar. **Transfer Credit: CSU.**

**FOOD SERVICE MANAGEMENT**

**Food Service Management A100 — Introduction to the Hospitality Industry — 3 units**

Overview of the hospitality industry, its history and interrelationships of hotel, restaurant, travel and leisure industries. Economic and social influences of leisure. Emphasis on attitude required of a person seeking a position in the industry. Same as Culinary Arts A100 and Hospitality, Travel & Tourism A100. Students completing Food Service Management A100 may not receive credit for Culinary Arts A100 or Hospitality, Travel & Tourism A100. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Food Service Management A150 — Principles of Quantity Food Preparation — 4 units**

**Prerequisite:** Food Service Management A160, or concurrent enrollment.

The fundamentals of food preparation, and application of these principles to quantity food production. Emphasis is placed on the use of quantity food preparation equipment, work simplification, and standardized production. Not required for Culinary Arts students. Hospitality dress standards and TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Food Service Management A151 — Food Production Management — 2 units**

**Prerequisite:** Food Service Management A150 or Culinary Arts A120, A124, and A149.

Techniques and practice managing individuals responsible for producing food including supervision in planning, organizing, supervising, and controlling food production is discussed. Students will be required to follow hospitality department dress standards. TB clearance required. **Transfer Credit: CSU.**

**Food Service Management A160 — Sanitation and Safety — 3 units**

The basic principles of bacteriology, safety, equipment selection, and facility layout for food service operations. Includes cause and control of food-borne illnesses, cleaning materials and procedures, general safety regulations, food processing methods, first aid, and fire prevention. National food handler certification exam will be given. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Food Service Management A161 — Basic Concepts in Sanitation — .5 units**

A short course in sanitation applied to the flow of food. The course is designed to meet current professional organization certification requirements and prepares the student for the national food handler certification examination (ServSafe). This course may also be offered online. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Food Service Management A190 — Dining Room Service — 2 units**

**Prerequisite:** Food Service Management A160 or concurrent enrollment.

Orientation to all functions of restaurant dining room operations, including dishwashing, pot and pan washing, floor care, equipment maintenance, and line preparation techniques. Emphasis on dining room service techniques of table waiting and accompanying dining room skills. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Food Service Management A210 — Dining Room Management — 3 units**

**Prerequisite:** Food Service Management A190.

How to manage and promote a profitable dining room. Emphasis on management activities of controlling and staffing a dining room. Students will be required to follow Hospitality Department Dress Code. TB clearance required. Lecture, Lab. **Transfer Credit: CSU.**

**Food Service Management A240 — Food Service Math/Accounting — 4 units**

Mathematical and accounting concepts applied to food service problems such as food costing, payroll computations, recipe adjusting, gross profit analysis, guest check mechanics, metric conversions, cost reports, financial statements, budgets, break-even analysis and general financial decision making problems. Lecture. **Transfer Credit: CSU.**

**Food Service Management A250 — Menu Planning and Purchasing — 3 units**

The basic principles of menu planning and purchasing principles will include writing specifications for food and supplies and proper receiving/storage techniques, for restaurants and institutions. Emphasis on type of operation, psychological needs, available equipment, skill of the personnel, merchandising, menu pricing, and operating budget. This course may be offered online. Lecture. **Transfer Credit: CSU.**

**Food Service Management A260 — Supervision and Training Techniques — 3 units**

Developing personnel programs and desirable labor-management relations. Special emphasis placed on leadership skills of motivation, communication, and decision making. Same as Hotel Management A260. Students completing Food Service Management A260 may not receive credit for Hotel Management A260. Lecture. **Transfer Credit: CSU.**

**Food Service Management A275 — Bar Management — 2 units**

How to manage a successful beverage operation. Entry level skills of preparing and serving beer, wine and spirits. Manage the bar for profitability to include cost controls, staffing, marketing, and regulations that affect operations. Lecture, Lab. **Transfer Credit: CSU.**

**Food Service Management A283 — Directed Practice in Food Service Management 1 — 2 units**

**Prerequisite:** Food Service Management A150 and 160 and A190.

This is a directed practice opportunity for Food Service Management which includes practical training in the OCC cafeteria operation. Students will rotate through the major areas of the kitchen in supervised settings. Students will be required to follow Food Service Management Department dress standards. TB clearance required. 6 hours lecture and 120 work hours (unpaid) or 150 work hours (paid). **Transfer Credit: CSU.**

**Food Service Management A284 — Catering — 3 units**

**Prerequisite:** Food Service Management A160 or concurrent enrollment.

The theory and practice of managing a catering operation. Students will be required to follow hospitality department dress standards. TB clearance required. Lecture, 9 hours laboratory arranged. **Transfer Credit: CSU.**

**Food Service Management A285 — Restaurant Management — 3 units**

The principles of operating a food service facility. Characteristics unique to different segments are explored, including quick service, full service, and institutional operations. Management principles, marketing, financial management, site location, space allocations, legal considerations, and customer relations. will be covered. Lecture. **Transfer Credit: CSU.**

**Food Service Management A286 — Directed Practice in Food Service Management 2 — 2 units**

**Prerequisite:** Food Service Management A283.

A directed opportunity in food service or culinary arts to gain practical training. This directed practice is repeated for each option the student elects in order to earn a Certificate of Achievement in that option. Students will be required to follow dress standards and companies policies of conduct set by the facility in which they are working. TB clearance required. 180 hours directed practice, plus 6-hour seminar. **Transfer Credit: CSU.**

**FRENCH**

**French A180 — Elementary French 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in French, with an introduction to cultures related to the French language. This course is equivalent to two years of high school French. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**French A180H — Elementary French 1 Honors — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in French, with an introduction to cultures related to the French language. This course is equivalent to two years of high school French. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**French A185 — Elementary French 2 — 5 units**

**Prerequisite:** French A180 or completion of two years of high school French with a grade of 'C' or better.

Continuation of French A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the French language. This course is equivalent to three years of high school French. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**French A185H — Elementary French 2 Honors — 5 units**

**Prerequisite:** French A180 or completion of two years of high school French with a grade of 'C' or better.

Continuation of French A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the French language. This course is equivalent to three years of high school French. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**French A190 — Conversational French — 3 units**

**Prerequisite:** French A185 or completion of three years of high school French with a grade of 'C' or better.

Designed to develop the student's ability at any level to comprehend and communicate in French: reading, writing and cultural components are included. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**French A199 — Current Topics in French — 1-5 units**

**Prerequisite:** Completion of two years of high school French with a grade of 'C' or better.

Development of the French language skills: listening, speaking, reading and writing. Extensive exposure to the cultures related to the French language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**French A280 — Intermediate French 1 — 4 units**

**Prerequisite:** French A185 or three years of high school French with a grade of "C" or better.

Continuation of French A185, with further development of language skills at the intermediate level and exploration of cultures related to the French language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**French A285 — Intermediate French 2 — 4 units**

**Prerequisite:** French A280 or four years of high school French with a grade of "C" or better.

Continuation of French A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the French language in preparation for higher level specialized work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**GENDER STUDIES**

**Gender Studies A100 — Introduction to Gender Studies — 3 units**

An interdisciplinary approach to understanding the role of gender in influencing experiences in society. Focus is on the role of gender in all levels of society and in all social institutions, including family, business, education, health, and religion. The perspective will be both historical and cross-cultural. Lecture. **Transfer Credit: CSU, UC. C-ID SOC 140.**

**Gender Studies A130 — Women, Politics and Inequality — 3 units**

Perspectives on women and their participation in resisting and reproducing inequality in national and international contexts. Examines the gendered character of societal institutions and politics from the bedroom to the boardroom by focusing on gender, race, ethnicity, class, and sexuality in education, work, politics, the household, and activism. Lecture. **Transfer Credit: CSU, UC.**

**Gender Studies A165 — Men, Women, and Communication — 3 units**

Major issues will be addressed regarding communication behaviors and communication conflicts between men and women of all gender orientations. Study will focus on problem analysis specific to gender self-awareness, gender conflict and how gender is communicated and constructed in our daily lives. Same as Communication Studies A165. Students completing Gender Studies A165 may not receive credit for Communication Studies A165. Lecture. **Transfer Credit: CSU.**

**Gender Studies A187 — Women in History — 3 units**

Provides a broad overview of the experiences of women in the history of the world from hunter-gatherer societies to the present. It examines how women's political, economic, social, and cultural experiences have been shaped by gender and affected by place, time, class, and race. Same as History A187. Students receiving credit for Gender Studies A187 may not receive credit for History A187. Lecture. **Transfer Credit: CSU, UC.**

**GEOGRAPHY**

**Geography A100 — World Regional Geography — 3 units**

An introduction to the regions and nations of the world. The major countries including their population, resources, general development and physical setting will be investigated. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 125.**

**Geography A100H — World Regional Geography Honors — 3 units**

An introduction to the regions and nations of the world. The major countries, including their population, resources, general development, and physical setting will be investigated. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 125.**

**Geography A101 — Regional Field Studies in Latin America — 3 units**

Field studies of the geography of Latin America. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. Class will meet on campus prior to departure and following return. Students will spend three weeks in the Latin American country. Lecture. **Transfer Credit: CSU.**

**Geography A130 — Introduction to Weather & Climate — 3 units**

**Advisory:** Geography A180  
Introduction to the earth's atmosphere and processes. Topics include: atmospheric structure and composition, solar radiation, energy budget, temperature, seasonal changes, atmospheric moisture, clouds and fog, precipitation, circulation systems, air masses and fronts, weather forecasting, climate and climate change. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 130.**

**Geography A150 — California Geography — 3 units**

A survey of California's physical and cultural environment and patterns. Topics will include physiography, vegetation, climate, resources, population, migration, ethnic diversity, economics, urbanization and current issues related to geographic factors. Field trips may be required. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 140.**

**Geography A180 — Physical Geography — 3 units**

A study of the basic physical elements of geography and their integrated patterns of world distribution. Particular emphasis is given to climate, land forms, soils and natural vegetation. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 110.**

**Geography A180H — Honors Physical Geography — 3 units**

A study of the basic physical elements of geography and their integrated patterns of world distribution. Particular emphasis is given to climate, land forms, soils, and natural vegetation. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 110.**

**Geography A180L — Physical Geography Lab — 1 unit**

**Prerequisite:** Geography A180 or concurrent enrollment.

**Advisory:** Math A010.

This course is design to provide supplemental exercises in topics covered in Geography A180. Lab experience will include map analysis and interpretation, weather prognostication, landform processes and evolution, tectonics, biogeography, and habitat analysis. Lab. **Transfer Credit: CSU, UC. C-ID GEOG 111.**

**Geography A185 — Cultural Geography — 3 units**

A study of the basic cultural elements of geography and their correlation with the physical elements. Particular emphasis is given to population distribution, land-use patterns and trade. Lecture. **Transfer Credit: CSU, UC. C-ID GEOG 120.**

**Geography A190 — Introduction to Geographic Information Systems — 2 units**

**Advisory:** Computer Information Systems A100.

Provides a theoretical basis for understanding the use of Geographic Information Systems (GIS) in spatial analysis and decision making for a variety of applications. Learn fundamental concepts of cartographic presentation and the skills for working with spatial data, database design, data conversion, information retrieval and spatial analysis. Laboratory exercises provide students with applications from various fields including business, environmental, geography, geology, marketing and planning. Lecture, Lab. **Transfer Credit: CSU. C-ID GEOG 155.**

**Geography A198 — Regional Field Studies in Geography — 2 units**

Field studies of the geography of selected regions. Physical and cultural processes, characteristics and landscapes will be observed and analyzed. Specific content will vary by geographic region. Lecture, Lab. **Transfer Credit: CSU. C-ID GEOG 160.**

**GEOLOGY**

**Geology A101 — Age of the Dinosaurs — 4 units**

The course focuses on the origin, evolution and extinction of dinosaurs with emphasis on paleobiology and paleoecology. Covers fundamentals of dinosaur anatomy and behavior, hot/cold-blooded debate, relationships to birds, diversity and exploits of dinosaur hunters. Extended field trip required. Intended for science and non-science majors. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Geology A105 — General Geology — 3 units**

*Formerly Geology A100*

Composition and structure of the earth and the processes which modify the crust and the surface and their effect on man. Not open to students who are taking or have successfully completed Geology A110. One field trip required during semester. This course may be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID GEOL 100.**

**Geology A105H — General Geology Honors — 3 units**

*Formerly Geology A100H*

Composition and structure of the earth and the processes which modify the crust and the surface and their effect on man. Not open to students who are taking or have successfully completed Geology A110. One field trip required. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Geology A105L — General Geology Laboratory — 1 unit**

*Formerly Geology A100L*

**Prerequisite:** Geology A105 or concurrent enrollment.

A laboratory study of materials and processes in the earth. A beginning laboratory course for the non-science major. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Geology A105M — General Geology Lab Honors — 1 unit**

*Formerly Geology A100M*

**Prerequisite:** Geology A105 or A105H or concurrent enrollment.

A laboratory study of materials and processes in the earth. A beginning laboratory course for the non-science major. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Geology A106 — Earth Science for Teachers — 4 units**

A broad-based study of earth science, including geology, oceanography, meteorology, and solar system astronomy. Topics are aligned with the California State Science Standards for K-12 and will prepare future teachers to teach these subjects. Lecture, Lab. **Transfer Credit: CSU. C-ID 121.**

**Geology A110 — Physical Geology — 4 units**

A study of materials and processes in the earth. A beginning course in physical geology for science and engineering majors and students desiring a science emphasis. One extended field trip required during the semester. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID GEOL 101.**

**Geology A115 — California Geology — 3 units**

The study of a geologic showcase--California. The geologic framework of our state and its corresponding geologic provinces and geologic factors which have influenced California's human history. The intimate inter-relationships of geology with our agriculture, transportation, construction, mining, oil and gas industry, recreation and public welfare. Field trip required. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID GEOL 200.**

**Geology A131 — Weather and Climate — 3 units**

A survey in meteorology, emphasizing atmospheric composition and variability as well as interactions between atmosphere, oceans and continents to produce our weather. Includes the terminology and tools that meteorologists employ to observe, study and predict storm systems, storm fronts, thunderstorms, tornadoes and wind-driven ocean waves. Current topics such as air pollution and climate change will also be addressed. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Geology A132 — Geologic Field Studies: Death Valley — 2 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Death Valley region. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. Topics include the volcanic, tectonic and hydrologic history of the region. 18 hours lecture, 18 hours scheduled lab, 36 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A133 — Geologic Field Studies: Colorado Plateau — 4 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Colorado Plateau. This course includes a multi-day field excursion to study the geology of the Colorado Plateau region. Emphasis is on the stratigraphy, tectonic evolution and geologic history of the parks of the Southwest, including the Grand Canyon, Canyonlands, Arches, Capitol Reef, Bryce and Zion National Parks. 18 hours lecture, 18 hours scheduled lab, 144 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A134 — Geologic Field Studies: Cascade Range— 4 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Cascade Range of Northern California, Oregon and Washington. The course combines classroom and field studies of Pacific Northwest geology with an emphasis on the volcanic and geothermal features of Mt. Lassen, Mt. Shasta, Crater Lake, Medicine Lake and Lava Beds National Monument. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 18 hours lecture, 18 hours scheduled lab, 144 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A135 — Geology of the Natural Parks and Monuments — 3 units**

Geology of national parks, seashores and monuments and its influence on land forms, climate and human history. Classes will vary each semester in order to develop particular skills in interpreting field problems and relationships unique to a given area. Approximate locations will be selected from one of four geologic provinces--The Mojave Desert, Basin and Range, Sierra Nevada, or Colorado Plateau. Field trip required. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Geology A136 — Geologic Field Studies: San Andreas Fault — 1 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the San Andreas Fault Zone. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 9 hours lecture, 9 hours scheduled lab, 18 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A137 — Introductory Field Geology — 4 units**

**Prerequisite:** Geology A105, Geology A105H, or Geology A110.

Provides intensive field experience in application of field geology equipment, methods, techniques and maintenance procedures. Emphasizes a "hands-on" approach to the interpretation of geologic data in the field. Includes use of Brunton compass and tape, aerial photos, global positioning system, and geographical mapping. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A138 — Geologic Field Studies: Yosemite National Park — 2 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, petrologic, historical and geomorphological setting of the Sierra Nevada mountains with an emphasis on the geologic origin and evolution of Yosemite National Park, California. Introductory lectures complement direct field observations, field data collection, analyses and interpretation. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 9 hours lecture, 18 hours scheduled lab, 63 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A139 — Geologic Field Studies: Eastern Sierra Nevada — 2 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the faults, volcanoes, glaciers, mining and tectonic history of the Eastern Sierra Nevada Mountains. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 18 hours lecture, 18 hours scheduled lab, 36 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A141 — Geologic Field Studies: Mojave Desert— 2 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

The Mojave Desert is a major economic and recreational resource for southern California. Provides students an opportunity to learn about the geologic processes which have created and shaped the region. Studies the origin, evolution, and geology of the Mojave Desert and adjacent areas. 18 hours lecture, 18 hours scheduled lab, 36 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A142 — Geologic Field Studies: Hawaii Volcanology — 2.5 units**

**Advisory:** Geology A105, Geology A105H, or Geology A110.

This course offers students an opportunity to explore fundamental geological concepts in a field-based setting. Pre-trip meetings will orient students to the tectonic, structural, plutonic and volcanic features of the Hawaiian Islands with special emphasis on Kilauea volcano. Kilauea's long-documented eruptive history and easy accessibility make it a training ground for USGS volcanologists. Focuses on the history and features of the volcano and its interactions with the people that live on it. This course includes a multi-day field excursion to various locales of geological interest and may involve camping in primitive wilderness environments. 9 hours lecture, 18 hours scheduled lab, 90 hours field study lab. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Geology A160 — Environmental Geology — 4 units**

**Prerequisite:** English A100 or concurrent enrollment or qualifying placement score.

The study of natural environments and the impact of humans on geologic systems and will focus on studies of environmental problems associated with soils, water resources and pollution, energy and mineral utilization, coastal erosion, natural geologic hazards, and global atmospheric changes. Principles of sound management of the geologic environment will be emphasized. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID GEOL 131.**

**Geology A165 — Natural Disasters — 3 units**

This course explores those natural disasters that affect human activities. Topics include earthquakes, floods, landslides, volcanoes, hurricanes, tornadoes, and asteroid/meteor impacts. The consequences of pollution and population growth will also be explored. Hypothetical and case histories of natural disasters will also be studied. Class discussion will focus on aspects of regional planning, environmental laws and the interaction between science and society. Lecture. **Transfer Credit: CSU, UC.**

**Geology A185 — Evolution of the Earth — 3 units**

**Advisory:** Geology A105 or Geology A110.

Geologic evolution of the earth as shown by the changing patterns of land and sea, and by the succession of fauna and flora. A second course in geology for science majors. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID GEOL 110.**

**Geology A185H — Evolution of the Earth Honors — 3 units**

**Advisory:** Geology A105 or Geology A110.

Geologic evolution of the earth as shown by the changing patterns of land and sea, and by the succession of fauna and flora. A second course in geology for science majors. May be taken for grades or on a pass/no-pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Geology A185L — Evolution of the Earth Lab — 1 unit**

**Prerequisite:** Geology A185 or concurrent enrollment.

Laboratory and field exercises to learn how the geologic history of the earth may be determined. Extended weekend field trip required. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Geology A185M — Evolution of the Earth Lab Honors — 1 unit**

**Prerequisite:** Geology A185H or concurrent enrollment.

Laboratory and field exercises to learn how the geologic history of the earth may be determined. Extended weekend field trip required. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU.**

**Geology A280 — Introduction to Mineralogy — 4 units**

**Advisory:** Chemistry A110 or Chemistry A130.

Introduction to basic concepts of mineralogy, crystallography, crystal and mineral chemistry, beginning optics, paragenesis of economic minerals, and plate tectonics of mineral resources. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Geology A285 — Petrology — 4 units**

**Prerequisite:** Geology A280.

Origin, occurrence, identification, and classification of rocks and rock-forming minerals. Emphasis on hand lens/microscopic identification and field occurrences. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**German A185 — Elementary**

**German 2 — 5 units**

**Prerequisite:** German A180 or completion of two years of high school German with a grade of 'C' or better.

Continuation of German A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the German language. This course is equivalent to three years of high school German. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**German A280 — Intermediate**

**German 1 — 4 units**

**Prerequisite:** German A185.

Continuation of German A185, with further development of language skills at the intermediate level and exploration of cultures related to the German language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**German A285 — Intermediate**

**German 2 — 4 units**

**Prerequisite:** German A280.

Continuation of German A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the German language in preparation for higher level specialized work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**GLOBAL STUDIES**

**Global Studies A101 — Introduction to Global Studies — 3 units**

**Advisory:** English A100.

An introduction to the interdisciplinary study of the global community and the complex forces that shape it. Explores globalization by examining its economic, political, cultural, and environmental effects. Lecture. **Transfer Credit: CSU.**

**Global Studies A102 — Introduction to Global Issues — 3 units**

**Advisory:** English A100.

An introduction to the issues and problems confronting the global community, including global population trends, economic development and global inequality, basic human needs and human rights, international conflict and security, and environmental problems with an emphasis on global governance and transnational solutions. Lecture. **Transfer Credit: CSU, UC. C-ID GLST 102.**

**HEALTH EDUCATION**

**Health Education A100 — Personal Health — 3 units**

*Same as Public Health A100*

**Advisory:** English A099 or equivalent

This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is on positive health behaviors and personal responsibility. Topics include mental health, stress, drugs, alcohol, smoking, exercise, nutrition, weight control, chronic and infectious diseases, sexuality, consumer health, violence, aging and environmental health. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC C-ID PHS 100.**

**Health Education A122 — Drugs, Health and Society — 3 units**

**Advisory:** English A099 or equivalent

*Same as Public Health A202t*

Examination of the use, misuse and abuse of drugs, both licit and illicit, in American society and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Includes psychosocial, legal, historical, political, social, economic and health related aspects; drug dependency, treatment, rehabilitation, and prevention education. Focuses on the impact of psychoactive drugs on the individual and society, including the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID PHS 103.**

**Health Education A160 — Peer Educator — Level 1 — 2 units**

*Same as Public Health A160*

This course prepares students to serve as a member of the Peer Health Action Team (PHAcT) at OCC. Topics covered include strategies for behavior change, referrals, programming, presentation and group success. Students will be certified as Peer Health Educators through BACCHUS national certification exam. 36 hours in the classroom; 54 hours arranged. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**GERMAN**

**German A180 — Elementary**

**German 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in German, with an introduction to cultures related to the German language. This course is equivalent to two years of high school German. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Health Education A220 — Concepts in Public Health — 3 units**

*Same as Public Health A200*

The factors that influence health and disease from a population based perspective, with focus on basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions, and an in-depth examination of the core public health disciplines is covered. Topics will include: history; health promotion; determinants of health and burden of disease; legal and ethical issues; epidemiology of communicable and non-communicable disease; environmental health; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management. and career opportunities in public health. This course may be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PHS 101.**

**Health Education A260 — Peer Educator — Level 2 — 2 units**

*Same as Public Health A260*

Second-semester course for students who have complete HLED A160 or PUBH A160 and have been certified as peer health educators by BACCHUS. Students will continue their development of skills related to health promotion program planning and implementation. Emphasis will be on leadership and organizational skills, bystander intervention and health topic content, ie, alcohol, sleep, nutrition, exercise, etc. Students will serve as members of the Peer Health Action Team (PHAcT) at OCC. 36 hours in the classroom; 54 hours arranged. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Health Education A270 — Fitness and Health — 3 units**

*Formerly Health Education A134*

Theory and benefits of physical activity to fitness-related health. The study of human adaptation to exercise includes cardiovascular conditioning, neuromuscular training, body composition, nutrition for performance, stretching, sports injuries, and aging. Students completing Health Education A134 may not receive credit for Kinesiology A134. This course may be taught online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC**

**HEATING, VENTILATION, AIR CONDITIONING, AND REFRIGERATION**

**Heating, Ventilation, Air Conditioning & Refrigeration A100 — Air Conditioning & Refrigeration Principles — 3 units**

Course covers heat principles, heat loads, refrigeration cycle, system components, refrigerant properties, system operation, soldering and oxy-acetylene brazing. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A101 — Basic Electrical for HVACR — 3 units**

**Advisory:** Heating, Ventilation, Air Conditioning & Refrigeration A100.

Basic electrical theory & application. Students will build a variety of series and parallel circuits using switches, contactors, relays, thermostats, transformers and other controls used in the HVAC-R field in addition to using miscellaneous electrical components. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A102 — Refrigeration Service — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

Operation, Maintenance, Troubleshooting and repair of Commercial refrigeration systems. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A103 — Air Conditioning Service — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

**Advisory:** Heating, Ventilation, Air Conditioning & Refrigeration A105.

Operation, maintenance, diagnosis and repair of air conditioning systems and their components for proper function. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A104 — Air Balance — 3 units**

**Prerequisite:** Heating and A/C A100 and A101.

**Advisory:** Heating, Ventilation, Air Conditioning & Refrigeration A103 and A105.

Operation and maintenance of air conditioning and heating ducts and their controls; various methods of distribution and the means to deliver proper air flow. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A105 — Air Conditioning & Refrigeration Controls — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

Controls used in the Heating, Ventilation, Air Conditioning & Refrigeration that include temperature, pressure, overload and safety controls. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A106 — Non-Residential Applications for HVAC — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

Fundamentals of operation, maintenance, and trouble shooting of non-residential equipment and systems. Topics include but are not limited to chillers, centrifugal, reciprocal, absorption, and other current systems. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A110 — Pneumatic Controls I — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

Students will operate, maintain, diagnose and repair basic pneumatic controls from installation to service requirements. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A111 — Ice Machine Service & Repair — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

**Advisory:** Heating, Ventilation, Air Conditioning & Refrigeration A102

The operation, diagnostics, repair, and service of current ice machines. Course to include hands-on training with tools of the trade, i.e. gauges, electrical meters and all hand tools used for service and repair. Lecture, Lab. **Transfer Credit: CSU.**

**Heating, Ventilation, Air Conditioning & Refrigeration A140 — Building Automation — 3 units**

**Prerequisite:** Heating, Ventilation, Air Conditioning & Refrigeration A100 and A101.

Fundamental applications and design of building automation systems for HVACR. Lecture, Lab. **Transfer Credit: CSU.**

**HISTORY**

**History A101 — Afro-American History — 3 units**

Political, legal, economic and social themes of blacks in the United States. Emphasis is given to the Afro-American experience from African origins, through slavery, into the 20th Century. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A140 — The California Experience — 3 units**

This introductory course surveys the uniqueness of the California experience. It explains the state's history with emphasis on the Indians, Spanish missions, Mexican ranchos, Gold Rush, transcontinental railroads, global population, colorful figures, 20th century contributions to atomic and space developments, and multinational corporations. Recommended for elementary education majors. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**History A141 — History of the Americas 1 — 3 units**

This course is a comprehensive survey of Latin America, the United States, and Canada from the development of its earliest human communities, the subsequent encounters with European civilizations, the formation of colonial empires, and the emergence of independent nations through 1850. May be taken for grades or on a pass-no pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A142 — History of the Americas 2 — 3 units**

This course presents a comprehensive survey of the distinct national identities of Latin America, the United States, and Canada as they developed and matured during the nineteenth and twentieth centuries. The course focuses on a comparative analysis of North and South America. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A145 — History of Mexico — 3 units**

Mexican history from the Pre-Columbian period to the present. Social, political, economic, and cultural growth of the Mexican nation. Emphasis on Indian, Spanish, and European contributions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A150 — Ethnic Groups of the United States: Their Histories — 3 units**

A survey of the history of the many (40+) ethnic groups originating in Europe, Asia (including the American Indian), the Americas, the Pacific Islands, Africa, and the Middle East, that make up the population of the United States. Same as Ethnic Studies A150. Students who enroll in History A150 may not receive credit for Ethnic Studies A150. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A151 — History of the Middle East to 1500 — 3 units**

A survey of the political, social, economic, and cultural history of the Middle East from the Bronze Age through the rise of the Ottoman Empire. Emphasis is placed on the contributions of ancient Near Eastern and Classical civilizations - Mesopotamia, Egypt, Persia, Israel, Greece, and Rome - to the development of the Islamic world, and the expansion of Islam and its interaction with the pre-Islamic Middle Eastern societies and the world until 1500 CE. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A152 — History of the Middle East Since 1500 — 3 units**

A survey of the political, social, economic, and cultural history of the Middle East from 1500 CE to the present. Emphasis is placed on the development and decline of the Ottoman and Safavid Empires, the impact of European imperialism and modernity, the rise of nationalism and creation of nation-states, the Arab-Israeli conflicts, and Islamic revivalist movements. Lecture. **Transfer Credit: CSU, UC.**

**History A161 — World History 1 — 3 units**

*Formerly History A102*

The history of world civilizations from the earliest beginnings to the 17th century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 150.**

**History A161H — World History 1 Honors — 3 units**

*Formerly History A102H*

The history of world civilizations from the earliest beginnings to the 17th Century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID 150.**

**History A162 — World History 2 — 3 units**

*Formerly History A103*

The history of world civilizations since the 17th century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 160.**

**History A162H — World History 2 Honors — 3 units**

*Formerly History A103H*

The history of world civilizations since the 17th Century, giving a general outline of political, social, economic, and cultural institutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 160.**

**History A170 — History of the United States to 1876 — 3 units**

A survey of American historical development from the founding of the English colonies to 1876. Emphasis is placed on the evolution of the nation's political and economic institutions, social and intellectual history, and foreign policy. Satisfies the state college requirement in American History. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 130.**

**History A170H — Honors History of the United States to 1876 — 3 units**

A survey of American historical development from the founding of the English colonies to 1876. Emphasis is placed on the evolution of the nation's political and economic institutions, social, and intellectual history, and foreign policy. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 130.**

**History A175 — History of the United States Since 1876 — 3 units**

A continuation of the survey of American history development since 1876. Satisfies the state university requirement in American History. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 140.**

**History A175H — Honors History of the United States Since 1876 — 3 units**

A continuation of the survey of American history development since 1876. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 140.**

**History A176 — Women in U.S. History — 3 units**

A survey of the history of women in the United States from the pre-contact period to the present, emphasizing significant events, individuals, and movements that have contributed to the nation's development and women's changing roles. The course investigates how factors like geographic location, class, ethnicity, race, industrialization, sexual orientation, and notions of family have affected the lives of American women. Lecture. **Transfer Credit: CSU, UC**

**History A180 — Western Civilization 1 — 3 units**

The development of present day western culture from the earliest beginnings to 1715, giving a general outline of the development of social, economic, political and cultural institutions that have had a major impact on our civilization. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 170.**

**History A180H — Western Civilization Honors 1 — 3 units**

The development of present day Western culture from the earliest beginnings to 1715, giving a general outline of the development of social, economic, political, and cultural institutions that have had a major impact upon our civilization. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 170.**

**History A185 — Western Civilization 2 — 3 units**

A study of western culture from 1715 to the present with particular emphasis on the persons, ideas, movements, and institutions which help to interpret our present day civilization. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 180.**

**History A185H — Western Civilization 2 Honors — 3 units**

A study of western culture from 1715 to the present with particular emphasis on the persons, ideas, movements, and institutions which help to interpret our present day civilization. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID HIST 180.**

**History A187 — Women in History — 3 units**

Provides a broad overview of the experiences of women in the history of the world from hunter-gatherer societies to the present. It examines how women's political, economic, social, and cultural experiences have been shaped by gender and affected by place, time, class, and race. Same as Gender Studies A187. Students receiving credit for History A187 may not receive credit for Gender Studies A187. Lecture. **Transfer Credit: CSU, UC.**

**History A195 — History of England and Greater Britain — 3 units**

Survey of British history with an emphasis on the development of Anglo-American institutions. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**History A198 — The World at War — 3 units**

Political, military, diplomatic, economic, social, and cultural developments of World War II. Emphasis on the role of the United States. May be taken for grades or on a pass-no pass basis. Lecture. **Transfer Credit: CSU, UC.**

**HORTICULTURE**

**Horticulture A100 — Horticulture Science — 3 units**

The science and culture of plants upon which man's very existence depends. The principles and practices used to grow plants for food and environmental enhancement will be emphasized. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A101 — Current Topics in Horticulture — 1-4 units**

Current issues in the field of Horticulture. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A105 — Botany For Gardeners — 3 units**

The world of garden plants, their structure, form and how they function. A course for the plant professional and plant enthusiasts. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**



**Horticulture A109 — Knowing Your Soils — 3 units**

A nontechnical study of the fundamental concepts of soil science. Methods of investigations for the management of soils and soil substitutes. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A111 — Landscape Drafting Technique — 1 unit**

Basic landscape drafting practices, lettering, line work, symbols, sheet composition and dimensioning. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A115 — Landscape Graphics — 3 units**

This course begins exploring drawing techniques necessary to perform tasks related to communicating design concepts in landscape design. The emphasis is on easy, time-saving techniques that build from understanding perspective to rapid sketching skills. Field sketching is also a vital communication skill in environmental design, as it enables designers to quickly record ideas whether simply for their own use, or to share with a client to gather early feedback on usability, form, and aesthetic. Using both indoor and outdoor venues around the campus, students will learn to communicate their thoughts visually and integrate their sketching into the design process. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A116 — Digital Design— 3 units**

This course provides an introduction to digital techniques while explaining the processes associated with describing and designing the landscape. In addition, this course guides the student through from their first impression of a site, through concept and schematic design and presentation to construction and site drawings, concluding with a case study that shows the final result. The designer needs to know about digital tools and use them at the various stages of a concept development. In the journey from concept to realization, it is important to have the right tools and methods of representation and use them in an intelligent and skillful way. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A150 — Landscape Maintenance — 3 units**

Maintenance of residential and small commercial landscapes to include: small tree and shrub trimming, all aspects of lawn care, soil amending, fertilizing, sprinkler adjustments, watering, pest inspections, and scheduling. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A151 — Introduction To Tree Care — 2 units**

An introduction to the appreciation, selection and care of trees. Tree pruning, staking, watering, fertilizing and recognition of early diagnosis of tree problems. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A170 — Pest Control Applicators and Gardeners P.C.O. Certification — 1 unit**

Preparation for California Certification Exam as Pesticide Applicator and Gardeners Maintenance Pest Control Operators. Emphasis on safe use of pesticides, alternative pest management. Ornamental, turf grass, industrial, right-of-way and seed treatment control. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A181 — Ornamental Trees — 3 units**

Identification, habits of growth, culture, propagation, and use of ornamental trees in landscape design for Southern California. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Horticulture A182 — Ornamental Shrubs — 3 units**

Habits of growth, culture, propagation and use in landscape design for Southern California. Identification will be emphasized. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Horticulture A183 — Plant Propagation — 3 units**

Principles and practice of propagation of horticultural plants. Propagation from seed, cuttings, layering, and grafting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Horticulture A184 — Greenhouse and Nursery Science — 3 units**

A survey of the nursery industry. Nursery structures and equipment, construction, operation and use in the production of commercial crops. Cultural aspects of crop production. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A185 — Plant Diseases — 1.5 units**

Common diseases of plants, emphasis on ornamentals grown in Southern California. Their symptoms and control of salinity, air pollutants, fungi, bacteria, virus, nematodes and other causal agents of plant diseases. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A186 — Pests of Ornamentals — 1.5 units**

Common mite, insect, and other animal pests of ornamental plants and common weeds of Southern California are described and identified and ways to prevent and treat infestations are discussed. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A187 — Interior Plantscaping — 2 units**

Identification, selection, installation, care and maintenance of plants for interior situations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A189 — Weeds and Their Control — 1.5 units**

Recognition and control of weeds in the landscape and in nurseries with emphasis on practical application. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Horticulture A190 — California Friendly Landscapes — 2 units**

New landscapes and the retrofitting of existing landscapes with California native and "non-thirsty" Mediterranean plants that will address the current legislation for water conservation. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A191 — Cacti and Succulents — 1.5 units**

How to use the plants from the deserts of the world in the Southern California landscape. Identification, growth habits, culture, propagation, design considerations, and conservation. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A192 — Urban Container Planting — 1 unit**

Container gardening knowledge is in high demand, particularly in urban settings. Container gardening requires specialized knowledge to achieve quality results. Learn the basics of planting and maintaining a healthy outdoor and indoor container garden: materials and styles of containers, customized potting mixes, fertilization, pests and watering requirements. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A200 — Chronicles of Garden Design through the Ages — 3 units**

This introduction course is a historical survey of the development of designed landscapes from ancient times through the 21st century. The course will emphasize the cultural, social, and economic contexts that have shaped and informed historic landscapes, broadly defined, and the influence of environmental concerns, horticultural techniques, and technological innovations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A230 — Calculations for Horticulture and Landscape Professionals — 2 units**

An applied calculations course geared for Landscape, Horticulture and Construction students. This course is necessary to effectively, safely, and economically manage a Landscape Construction operation. Examples of what a student will learn: determining area and volume, application of fertilizers, pesticides, and growth regulators, preparing design and installation cost estimates. Students will develop confidence when they perform the common mathematical tasks required of green industry professionals. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A231 — Business of Landscape Design & Construction — 2 units**

This course examines aspects of landscape design and construction practice for professional services, the legal and financial contexts in which it operates, and the documentation and delivery of projects. This course introduces students to the legal and contractual issues, technical specification, financial, project management, starting and managing a business and preparing for the C-27 licensing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Horticulture A283 — Therapeutic Gardens: Design for Healing Spaces — 2 units**

This course will introduce and broadly explore how Therapeutic Gardens and the field of Horticultural Therapy incorporates the use of plants and gardening activities to promote health and wellness for people of many ages, backgrounds, and abilities. Topics will include people/plant relationship theories, horticultural therapy as a specialized field, Therapeutic Gardens and their use, and the societal impacts of Horticultural Therapy and research that supports it. Lecture. **Transfer Credit: CSU.**

## **Horticulture A284 — Portfolio Development — 1.5 units**

This course provides the strategy, skills, and techniques necessary for constructing a professional portfolio and provides students with an opportunity to understand the full potential of the portfolio within the profession. Lecture, Lab. **Transfer Credit: CSU.**

## **Horticulture A285 — Introduction to Landscape Design — 3 units**

**Advisory:** Horticulture A111, or concurrent enrollment.

Landscape design, circulation, form, materials, scale. Preparation of landscape design plans. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Horticulture A286 — Landscape Design Elements — 2 units**

Design of basic garden elements (i.e. walls, arbors, pools, steps, fences). Reviews construction materials and their inherent qualities. Preparation of construction drawings. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

## **Horticulture A287 — Planting Design — 2 units**

Design and preparation of landscape planting plans. Emphasis on ecological and aesthetic considerations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

## **Horticulture A288 — Sprinkler Irrigation Systems Design — 2 units**

How to design irrigation sprinkler systems for small areas such as residential properties and small industrial sites. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

## **Horticulture A289 — Installation of Residential Irrigation Systems — 1 unit**

A hands-on experience with the installation of a residential irrigation system to include: materials lists, layout, trenching, gluing and fitting lines, sprinklers and nozzles, valve manifolds, and clocks. Emphasis on planning, layout, and time saving practical methods. To include one Saturday installation. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

## **Horticulture A290 — Low-Voltage Landscape Lighting — 1.5 units**

An interactive, hands-on LED landscape lighting course for those seeking to increase their knowledge and installation of low-voltage (12 volt) LED landscape lighting. This course provides detailed instruction and hands-on training across a range of topics to sharpen your skills and become proficient in this field. The design and installation of an actual LED lighting system including best practices for how to layout the lighting design and an explanation of fixture placement. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

## **Horticulture A296 — Grading and Drainage for Landscape Design — 3 units**

This course covers the basic grading and drainage techniques used in every landscape architecture project. Students learn the skills necessary to grade a site of moderate complexity while considering public health, safety, and welfare. Includes the design and installation of drainage elements per site requirements. Introduces tools and methods for grading landscape sites based on design documents and field measurements. Basic grading formulas and cut and fill calculations are presented. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

## **Horticulture A297 — Garden Pools, Fountains & Waterfalls in the Landscape — 2 units**

Design and installation of landscape water features including ponds, garden streams, fountains and container water gardens. Students learn current construction techniques through an on-site installation. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU**

## **HOSPITALITY, TRAVEL & TOURISM**

### **Hospitality, Travel & Tourism A100 — Introduction to the Hospitality Industry — 3 units**

Overview of the hospitality industry, its history and interrelationships of hotel, restaurant, travel and leisure industries. Economic and social influences of leisure. Emphasis on attitude required of a person seeking a position in the industry. Same as Culinary Arts A100 and Food Service Management A100. Students completing Hospitality, Travel & Tourism A100 may not receive credit for Culinary Arts A100 or Food Service Management A100. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A105 — Passport to Success — 3 units**

This course presents students with service learning opportunities where they practice the conceptual theories of their course work. Students develop public contact and service skills as they host campus, community, civic, and travel related events. Students improve their social, professional demeanor and critical thinking skills considered essential in the airline, hotel, travel and tourism industries. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A110 — Hotel Front Office Operations — 3 units** *Formerly Hotel Management A110*

Study of front-office procedures from reservations through checkout including the night audit and the property management system and their impacts on other lodging operations. Special emphasis placed on guest-employee relations. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A116 — Internship 1 — 3 units**

An internship opportunity for students enrolled in Airline Travel, Hotel, Meeting Event, Spa Management, or Travel and Tourism programs at Orange Coast College. This course is recommended after one semester of successful academic preparation in an area of specialization. The instructor has the authority to limit access based on academic preparation. The internship is repeated for each option the student elects in order to earn a certificate. Students will be required to follow standards set by the company in which they are working. This course may also be offered online. Lecture, seven hours unpaid, twelve hours paid Internship. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A118 — Hospitality Accounting — 3 units**

This course provides a basis for understanding hospitality accounting concepts and procedures, the processing of hospitality financial data, and the flow of financial information in the accounting cycle resulting in the production of financial statements. This course is certified through the American Hotel & Lodging Association. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A120 — Housekeeping and Property Operations — 3 units**

Examines the technical functions and coordination between hotel housekeeping and maintenance departments. The fundamentals of management are emphasized through proper communication, training, detailed work methods, and quality assurance techniques. This course is certified through the American Hotel & Lodging Association. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A125 — Destination the Americas — 3 units**

This course provides information for maximizing the travel experience to include regional accents, dialects, culture, shopping, historical and recreational tourist destinations for Canada, Mexico, Caribbean, Central America and South America. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A127 — Destination Europe — 3 units**

Provides the traveler and industry employee with information for maximizing the travel experience to include regional accents and dialects, shopping, historical and recreational tourist destinations, and regional culture and cultural diversity for Russia and Baltic countries, Czech Republic, Slovakia, Hungary, Poland, former Yugoslavia Countries, Romania, and Albania. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A128 — Destination Africa/Pacific — 3 units**

This course provides information for maximizing the travel experience to include regional accents, dialects, culture, shopping, historical and recreational tourist destinations, for Australia, New Zealand, Japan, South Korea, Hong Kong, China, Taiwan, Thailand, Philippines, Tahiti, Samoa, Fiji, Singapore, Malaysia, Indonesia, and Indochina. This course may also be offered online. Lecture. **Transfer Credit: CSU**

### **Hospitality, Travel & Tourism A129 — Computer Reservation Systems — APOLLO — 2.5 units**

**Advisory:** Airline Travel Careers A116.

This course is an introduction to APOLLO, the computer reservations system used by United Airlines and one of the two major systems used by travel consultants. Students will learn how to build PNR's (passenger name records), quote fares, and calculate prices through hands-on applications on computers. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

### **Hospitality, Travel & Tourism A130 — Cultural Tourism — 3 units**

This course examines the implications of cultural tourism in the United States and the world. The course will consider the struggle of people to preserve their cultural identity relative to the role of the U.S. tourism industry in protecting cultural heritage. The course studies the complexities of policy making in cultural tourism and world travel. Curriculum includes: values, historical beliefs and religion, plus cultural etiquette including social practices, gestures, body language, eating and drinking practices, and business behavior. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A131 — Computer Reservation Systems — SABRE — 3 units**

This course is an introduction to SABRE, the computer reservations system used by American Airlines and one of the two major systems used by travel consultants. Students will learn how to build PNR's (passenger name records), quote fares, and calculate prices through hands-on applications on computers. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A135 — Homeland Security — 3 units**

**Advisory:** English A099.

Introductory study of domestic and international threats of terrorism. Examines the concepts, definitions and contemporary issues of modern terrorism. Includes law enforcement issues for first-responders relating to terrorism, particularly with regard to Homeland Protection and counter terrorist measures. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A138 — Sharing the Travel Experience — 3 units**

In this course you will learn the critical nature of translating what you see, hear, taste, touch, smell, feel and experience into blogging, tweeting, Facebook posts and journaling. You will learn how to capture the attention of followers and build a reputation of story telling. You'll understand the methods needed to sell material in today's competitive market. If you have a desire to write and a yen to travel, you're a perfect candidate for this class. So pack your sense of adventure, organize your determination and put your keyboard in a comfortable position. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A140 — Revenue Management — 3 units**

**Advisory:** Hospitality, Travel, & Tourism A110.

This course provides a model for understanding the revenue management process and reveals four basic building blocks to revenue management success. It addresses the elements of a risk management program including, developing forecasts for room revenue and occupancy, evaluating revenue opportunities, and tracking future room availabilities to achieve maximum revenue from the sale of perishable assets. This course is certified through the American Hotel & Lodging Association. The course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A150 — Travel and Tourism Career Development — 3 units**

Survey of the travel and tourism industry and its component segments: airlines, cruises, hotels, tour operators, retail travel agencies, tour wholesalers, receptive ground operators, and other miscellaneous new segments of the industry. Review of each segment and analysis of type of careers, background education, and entry skill preparation, expected salary scale, and travel benefits. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A156— Cruising and Vacation Packages — 3 units**

**Advisory:** English A099.

Cruising is one of the fastest growing segments of the travel industry. Learn the basics of the cruise product including ship and cruise line terminology, applications and selling techniques. Cruise lines, ships and their destinations are identified. Students will learn the essentials of selling vacation packages and tours, including the latest trends, itinerary planning, and the technologies available to travel/tourism consultants in the leisure, recreational, and corporate travel markets. Does not train to work aboard ship. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A157— Tour Escorting and Group Travel — 3 units**

**Advisory:** English A099.

This course introduces the roles and expectations of a tour escort and manager. The student will learn to research, plan and incorporate itineraries, promote the group travel package, attract clients, and manage the operational aspects of a group. The responsibilities and characteristics of a tour escort will also be discussed. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A158— Luxury, Incentive, and Corporate Travel — 3 units**

**Advisory:** English A099.

This course leads you on a path toward developing an intimate knowledge of the luxury and incentive travel product, sales process, and unique needs of the affluent consumer. You will be introduced to the corporate travel market and understand how they share expectations. Explore the distinct types of consumers and how to focus sales and marketing efforts to attract and keep them coming back. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A160 — Introduction to Spa and Hospitality Operations — 1.5 units**

Gain an understanding of the operational and administrative procedures in spas, private clubs, and the hospitality industry. You will develop an understanding of unique sensitivities required in managing and operating in the increasingly lucrative and complex spa industry. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A165 — Spa Industry Services and Treatments — 1.5 units**

As the industry evolves, day spas, hotel spas, destination spa resorts, and spas with medical services are becoming more specialized. Understanding the services and treatments making each different is an important element to the success of a business. This course will take you through the fundamentals of spa therapies, equipment, and products and projections for future trends. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A170 — Spa Industry Finance — 1.5 units**

This course provides spa supervisors and operation managers techniques toward successful financial management. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A175 — Spa Marketing and Retail Management — 1.5 units**

In this course the student will learn to develop effective marketing and retailing to increase sales, and promote branding opportunities for a spa. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A180 — Enhancing Guest Service — 3 units**

**Advisory:** Hotel Management A110 or Hospitality, Travel & Tourism A100 or concurrent enrollment.

This course is designed to convey the importance of guest relation skills in a competitive market. Students will develop the skills expected of each employee, supervisor, and manager based on wants, needs, and expectations of the guest while developing a personal service style. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A185 — Interviewing and Professional Development — 3 units**

**Advisory:** English A099.

Students will learn how professional communication skills can make the difference in achieving their personal career success. This course is an examination of the employment process in the Hospitality and Travel industries. The course analyzes interview techniques, employment tests, and interviewers' questions leading toward employment in all aspects of the Tourism industry. Reviews oral and written career communication skills, including the development of a personal portfolio. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A199 — Current Issues in Hospitality, Travel & Tourism — .5-1.5 units**

This course deals with current issues in the field of hospitality, travel and tourism. Topics vary. Open entry/open exit on a space available basis with instructor approval. Lecture. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A221 — Meeting/Event Management Internship — 4 units**

**Prerequisite:** Hospitality, Travel & Tourism A105 and A284.

**Advisory:** English A099.

Advanced internship for students enrolled in Management programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A225 — Travel & Tourism Internship — 4 units**

**Prerequisite:** Hospitality, Travel & Tourism A105 and A284.

**Advisory:** English A099.

Advanced internship for students enrolled in Travel and Tourism programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A226 — Airline Internship — 4 units**

**Prerequisite:** Hospitality, Travel & Tourism A105 and A284.

**Advisory:** English A099.

Advanced internship for students enrolled in Airline Travel programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A227 — Hotel Internship — 4 units**

**Prerequisite:** Hospitality, Travel & Tourism A105 and A284.

**Advisory:** English A099.

Advanced internship for students enrolled in Hotel Management programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A240 — Hospitality and Tourism Marketing — 3 units**

**Advisory:** English A099.

This course will provide students an understanding and application of E-Marketing and Sales in the hospitality and tourism sectors. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A265 — Principles of Event and Meeting Management — 1.5 units**

This course addresses successful business practices in event and meeting management. It provides knowledge essential effectiveness and profitability as an event or meeting manager. It is strongly recommended that all students enroll in this course first as it provides a foundation for future coursework. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A266 — Organize and Manage Events and Meetings — 1.5 units**

A comprehensive, fast-paced, hands-on course in managing a professional event/meeting, including the practical skills and tools needed for successful planning. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A267 — Managing Business Risks — 1.5 units**

This course provides a thorough and systematic approach to risk management that ensures the understanding and use of safeguards to produce safe and successful meetings or events. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A269 — Destination Management — 1 unit**

Get the most comprehensive guide to destination management. From tours to transportation, from entertainment to local rules of etiquette, the Destination Management Company (DMC) is the premier resource that finds the right venue, location, speaker, and vendor to ensure a highly professional and successful program. **Lecture. Transfer Credit: CSU.**

Course changed from HTEL A270.

**Hospitality, Travel & Tourism A270 — Meeting and Event Marketing and Sales — 1.5 units**

This course examines essential techniques for successful promotion of products and services. An emphasis is placed on the hotel, meeting, and event environments. Creative ideas and practical tools learned will help increase the effectiveness of the marketing dollar. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

Course Changed from HTEL A272

**Hospitality, Travel & Tourism A271 — Corporate Meetings & Events — 1 unit**

Review of the most successful techniques for managing trade shows, sales promotion events, staff meetings, and other corporate events. Focus is placed on how to produce meetings/events with creative flair while staying within a budget. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A272 — Meeting/Conference Practices — 1 unit**

This course provides the tools necessary to successfully plan and manage local, national and international meetings and conferences. Prepares students to take the nationally recognized International Special Event Society (ISES), Certified Special Events Professional (CSEP), and Certified Meeting Professional (CMP) examinations. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

Course Changed from HTEL A276

**Hospitality, Travel and Tourism A273 — Sport Event Management — 1 unit**

Promoting and managing large and small sporting events including event logistics, sponsorship, successful marketing strategies and professional management skills. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel and Tourism A274 — Establish and Operate an Event Business — 1 unit**

This course covers the practical skills necessary to launch, operate, and grow a successful event management business. Focus is placed on how to develop a business plan, manage finances, market, and approach event management as a small profit-making business. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel and Tourism A275 — Event Fund-Raising and Sponsorship — 1 unit**

Provides a comprehensive plan for identifying, evaluating, soliciting, selling, managing, and coordinating long-term fund-raising and/or sponsorship deals. Develop skills to manage events and work successfully as a staff professional or volunteer. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A276 — Expo/Trade Show Management Promotion — 1 unit**

This course provides information for designing and managing projects from a trade show exhibit to planning and coordinating an entire exposition. Focus is placed on the growing role of expositions and trade shows in the marketing and sales processes both nationally and internationally. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

Course Changed from HTEL A277

**Hospitality, Travel & Tourism A277 — Wedding Planning as a Business — 1 unit**

This course will assist in developing elements of design, coordination, and execution in preparing and planning weddings. Career opportunities in the lucrative bridal industry will also be discussed. This course may also be offered online. **Lecture. Transfer Credit: CSU.** Course Changed from HTEL A278

**Hospitality, Travel & Tourism A278 — Catering Design/Management — 1.5 units**

This course addresses elements of successful catering operations. Students will explore the catering industry and learn to work with catering professionals to improve quality while reducing costs. **Lecture. This course may also be offered online. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A279 — Spa Internship — 4 units**

**Prerequisite:** Hospitality, Travel & Tourism A105 and A284.

**Advisory:** English A099.

Advanced internship for students enrolled in Spa Management, programs at Orange Coast College to increase their level of expertise in the area of specialization which they expect to graduate. Students will be required to follow standards set by the company in which they are working. 9 hours lecture and 210 hours work hours (unpaid) or 262.5 work hours (paid). **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A284 — Leadership and Strategic Management — 3 units**

**Advisory:** English A099.

This course is designed to provide a basic introduction to leadership by focusing on what it means to be a good leader. Emphasis is on the practice of leadership. We will examine topics such as: the nature of leadership, recognizing leadership traits, developing leadership skills, creating vision, setting the tone, listening to our group members, handling conflict, overcoming obstacles, and addressing ethics in leadership. Attention will be given to helping students to understand and improve their own leadership performance. This course may be offered online. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A285 — Hospitality Operations — 3 units**

This course is designed to acquaint students with leadership, management, and quality issues facing today's hospitality industry. Focus is placed on the Malcolm Baldrige National Quality Award, continuous improvement, empowerment, goal setting, high-performance teams, diversity, managing organizational change, and strategic career planning. This course may also be offered online. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A286 — Hospitality, Travel & Tourism Law — 3 units**

This course provides an awareness of the rights and responsibilities the law grants to or imposes upon hospitality, travel and tourism businesses. Illustrations of possible consequences for failure to satisfy legal obligations are used. Legal issues raised by the Internet and the hospitality industry are discussed. This course is certified through the American Hotel & Lodging Association. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. **Lecture. Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A288 — Human Resource Management — 3 units**

As employers continue to struggle with filling positions in a tight labor market, the role of the human resources manager becomes even more critical. This course uses case studies, Internet exhibits, and Web links that provide essential information for future HR professionals. There is a greater emphasis on legal issues including ADA and OSHA regulations, with focus on corporate/ organizational culture. This course is certified through the American Hotel & Lodging Association. This course may also be offered online. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A290 — California Employment Law — 3 units**

**Advisory:** Hospitality, Travel & Tourism A288.

California labor and employment law including legislation, court cases and regulatory requirements. Organized to make complex laws understandable. Topics include Unemployment Insurance, State Disability, Family/Medical and Sick Leaves, Workers' Compensation, Training, Personnel Records, Privacy, Wage & Hour Laws, Compensation, Exempt/Non-Exempt. This course may also be offered online. **Transfer Credit: CSU.**

**Hospitality, Travel & Tourism A299 — Certified Travel Associate — 3 units**

The Certified Travel Associate (CTA) program teaches skills to become a front-line travel industry professional, including how to close more sales, improve efficiency, expand geography knowledge, and fine-tune customer service skills, all while earning widely recognized industry credentials. This course may also be offered online. **Transfer Credit: CSU.**

**HUMAN DEVELOPMENT****Human Development A180 — Child Growth & Development — 3 units**

A study of growth and development from conception through adolescence. Emphasis on theories of physical, cognitive, and psychosocial development using standard research methodologies and identifying typical and atypical development. Analyze how cultural, economic, political, and historical contexts affect children's development. Observations directed to further insight into change during childhood years. **Lecture. Transfer Credit: CSU, UC. C-ID CDEV 100.**

**Human Development A182 — Middle Childhood Development and Guidance — 3 units**

Growth and development of the child from 5 to 12 years of age including physical, cognitive, and psychosocial development, and techniques for guidance of the school age child. Focus is on identifying common developmental qualities of school-age children and find positive approaches to individual, group, and environmental management. **Lecture. Transfer Credit: CSU.**

**Human Development A184 — Infant Development and Relationships — 3 units**

Growth and development of the child from birth to two years: current theories and adult-infant relationships along with practical applications for relating to and caring for infants. **Lecture. Transfer Credit: CSU.**

**Human Development A190 — Family, School, and Community Partnerships — 3 units**

Examines the connections between the homes, schools, and communities in which children live. Explores historical, legal, social, political, and cultural influences affecting the development of children, pre-school through high school, educational access and equity. Introduces the various models and approaches for building meaningful partnerships with culturally and linguistically diverse families and communities. **Lecture. Transfer Credit: CSU, UC. C-ID CDEV 110.**

**Human Development A210 — Introduction to the Exceptional Child — 3 units**

**Prerequisite:** Human Development A180.

Introduction to the exceptional child including the gifted, developmentally delayed, emotionally disturbed, speech and hearing impaired, visually impaired, orthopedically and neurologically impaired. The role of the teacher in supporting these children and their families and vocational opportunities are discussed. **Lecture. Transfer Credit: CSU.**

**HUMANITIES****Humanities A100 — Introduction to the Humanities — 3 units**

A survey of the European humanities (history, philosophy, literature, and the fine arts) and their contribution to artistic, cultural, and social expression in Western civilization. May be taken for grades or on a pass/no-pass basis. **Lecture. Transfer Credit: CSU, UC.**

**Humanities A101H — Honors Themes in Humanities — 3 units**

An examination of how literature, philosophy, history, and the arts intersect to explore the problems of man; how the humanities have viewed significant aspects of the human and his culture over widely separated points of time. May be taken for grades or on a pass/no-pass basis. **Lecture. Transfer Credit: CSU, UC.**

**INFORMATION TECHNOLOGY**

*Same as Computer Information Systems*

**Information Technology A106 — Introduction to Linux: LPI Certification Preparation — 3 units**

**Advisory:** Information Technology A110. or Computer Information Systems A110.

This course provides an overview of the Linux operating system through the basic administration level. The student will be introduced to the configuration of Linux software and hardware, User and Group creation and management, process management, Linux rights and security. This course prepares the student for the Linux Professional Institute Linux Server Professional Server Certification. Same as CIS A106. Students who have taken CIS A106 may not take IT A106. **Lecture, Lab. Transfer Credit: CSU.**

**Information Technology A110 — PC Concepts: A+ Certification Preparation — 4 units**

Introduces the hardware and operating system concepts of a personal computer and the broad range of hardware and software technologies. Provides preparation for students seeking A+ Certification sponsored by the Computing Technology Industry Association and certifies the competency of entry-level service technicians in the computer industry. Same as CIS A110. Students who have taken CIS A110 may not take IT A110. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU.**

**Information Technology A162 — Fundamentals of Information Security — 3 units**

**Advisory:** Computer Information Systems A110 or A191 or Information Technology A110 or A191.

This course provides the fundamental knowledge necessary for a student to become proficient in the field of Information Security. This course will prepare the student for a wide variety of security responsibilities. The curriculum covers a wide range of security concepts, including: General Security Concepts, Communication Security, Infrastructure Security, Basics of Cryptography, and Operational and Organizational Security. This course covers CompTIA's Security+ content and provides preparation for students seeking the CompTIA Security+ Certification. Same as CIS A162. Students who have taken CIS A162 may not take IT A162. **Lecture, Lab. Transfer Credit: CSU.**

**Information Technology A163 — Windows Desktop Administration — 3 units**

**Advisory:** Computer Information Systems A110. or Information Technology A110.

Provides students with the knowledge required to work in enterprise environments that use Microsoft Windows desktop operating systems. Students will learn to install, deploy, and upgrade the Windows operating system, including ensuring hardware and software compatibility, configure pre-installation and post-installation system settings, security features, network connectivity applications and mobile computing. Students will also be able to maintain systems, including monitoring for and resolving performance and reliability issues. Will help prepare students for the Microsoft Certified IT Professional (MCITP) exams. Same as CIS A163. Students who have taken CIS A163 may not take IT A163. **Lecture, Lab. Transfer Credit: CSU.**

**Information Technology A176 — Database Design and Data Warehousing— 3 units**

**Advisory:** Computer Information Systems A182 or Information Technology A176 or equivalent.

Covers the terminology, technology and software used to design and implement a Microsoft SQL Server database. Student will learn to design, create and maintain a database to handle LOB (Line of Business) and DW (Data Warehousing) applications. Same as CIS A176. Students who have taken CIS A176 may not take IT A176. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU.**

**Information Technology A177 — Business Intelligence and Data Mining — 3 units**

**Advisory:** Computer Information Systems A176 or Information Technology A176 or equivalent.

Covers the terminology, technology and software used to build a data warehouse model and prepare that model for data mining. Students will learn how to design and process a data warehouse database using SSIS (Sql Server Integration Services), and format a cube in SSAS (SQL Server Analysis Services) in preparation for data mining operations. Same as CIS A177. Students who have taken CIS A177 may not take IT A177. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A191 — Network and Communications Technologies — 4 units**

**Advisory:** Computer Information Systems A110 or Information Technology A110.

Provides an introduction to an overview of the field of networking, data communications and connectivity, with an emphasis on terminology, hardware, and software associated with the various components of a network. Provide preparation for students seeking the Network + Certification. Same as CIS A191. Students who have taken CIS A191 may not take IT A191.. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Information Technology A192 — Network Systems Administration — 3 units**

**Advisory:** Computer Information Systems A110 and A191 or Information Technology A110 and A191.

Covers terminology, technology, topologies and software used in the Microsoft Windows servers. Students will learn to create user accounts, implement different levels of security, apply diagnostics and back up and maintain the software. Will help prepare students for the Certified IT Professional (MCITP) exams. Same as CIS A192. Students who have taken CIS A192 may not take IT A192. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A193 — Network Infrastructure Administration — 3 units**

**Advisory:** Computer Information Systems A191 or Information Technology A191.

Provides students with knowledge required to setup, configure, and support network infrastructures using the TCP/IP protocol. Topics include IP addresses, point-to-point tunneling protocols, DNS and DHCP services. Will help prepare students for the Certified IT Professional (MCITP) exams. Same as CIS A193. Students who have taken CIS A193 may not take IT A193. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A194 — Network Directory Services Administration — 3 units**

**Advisory:** Computer Information Systems A191. or Information Technology A191.

Provides a study of the procedures necessary to plan, implement, and troubleshoot directory service infrastructures, including forests and domains, DNS, site topology and replication, and directory strategies. Will help prepare students for Certified IT Professional (MCITP) exams. Same as CIS A194. Students who have taken CIS A194 may not take IT A194. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A196 — Network Enterprise Administration — 4 units**

**Advisory:** Computer Information Systems A192 or Information Technology A192.

This course will prepare students for the role of "Enterprise Administrator." The Enterprise Administration will be responsible for the management of the overall Windows server environment and architecture. The Enterprise Administrator translates business goals into technology decisions and designs mid-range to long-term strategies. The Enterprise Administrator is will also be responsible for infrastructure design and global configuration changes. Same as CIS A196. Students who have taken CIS A196 may not take IT A196. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Information Technology A197 — Introduction to Networking (Cisco 1) — 3 units**

**Advisory:** Computer Information Systems A191 or Information Technology A191.

Introduces the architecture, structure, functions, components, and models of the Internet and computer networks. The principles of IP addressing and fundamentals of Ethernet concepts, media, and operations are introduced to provide a foundation for the curriculum. By the end of the course, students will be able to build simple LANs, perform basic configurations for routers and switches, and implement IP addressing schemes. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. Same as CIS A197. Students who have taken CIS A197 may not take IT A197. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU. C-ID ITIS 150.**

**Information Technology A198 — Routing and Switching Essentials (Cisco 2) — 3 units**

**Advisory:** Computer Information Systems A197 or Information Technology A197.

Describes the architecture, components, and operations of routers and switches in a small network. Students learn how to configure a router and a switch for basic functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with RIPv1, RIPv2, single-area and multi-area OSPF, virtual LANs, and inter-VLAN routing in both IPv4 and IPv6 networks. This course covers Cisco's CCNA content and provides preparation for students seeking the Cisco CCNA Certification. Same as CIS A198. Students who have taken CIS A198 may not take IT A198. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A261 — Fundamentals of Wireless Networking — 3 units**

**Advisory:** Computer Information Systems A197 and A198 or Information Technology A197 and A198.

This course provides a complete foundation of knowledge for entering into or advancing in the wireless networking industry. Students will learn to design and construct wireless networking infrastructures, interoperate with other wireless networks, and design and build a wireless antenna. By using the designs and best practices learned in this course students will be able to implement a secure wireless network. This course covers Cisco's Wireless LAN Certification content and provides preparation for students seeking a Cisco Wireless certification. Same as CIS A261. Students who have taken CIS A261 may not take IT A261. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A262 — Fundamentals of Voice over IP Protocols — 3 units**

An introduction to Voice over IP (VoIP). Topics include VoIP architecture, components and functionality. Additional focus will be given to VoIP signaling, call control, voice dial plans, configuring voice interfaces and dial-peers, and implementing quality of service technologies in a VoIP environment. Same as CIS A262. Students who have taken CIS A262 may not take IT A262. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A263 — Introduction to the Internet of Things — 3 units**

**Advisory:** Computer Information Systems A110 and Computer Information Systems A191 or Information Technology A110 and A191.

The Internet of Things (IoT) is the network of physical objects or "things" embedded with electronics, software, sensors and connectivity to enable it to achieve greater value and service by exchanging data with the manufacturer, operator and/or other connected devices. Each thing is uniquely identifiable through its embedded computing system but is able to interoperate within the existing Internet infrastructure. This course will prepare students to install, configure and maintain these devices. Same as CIS A263. Students who have taken CIS A263 may not take IT A263. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A265 — Enterprise Router Configurations 1 — 3 units**

**Advisory:** Computer Information Systems A198 or Information Technology A198.

The course focuses on advanced installation, configuration, and troubleshooting routers. Student will be introduced to routing protocols using Juniper Networks routing platforms. Students develop real-world case studies. Significant time will be allocated for hands-on experience. Provides preparation for students seeking Juniper certification. Same as CIS A265. Students who have taken CIS A265 may not take IT A265. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A267 — Scaling Networks (Cisco 3) — 3 units**

**Advisory:** Computer Information Systems A198 or Information Technology A198.

Describes the architecture, components, and operations of routers and switches in a large and complex network. Students learn how to configure routers and switches for advanced functionality. By the end of this course, students will be able to configure and troubleshoot routers and switches and resolve common issues with OSPF, EIGRP, STP, and VTP in both IPv4 and IPv6 networks. Students will also develop the knowledge and skills needed to implement DHCP and DNS operations in a network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. Same as CIS A267. Students who have taken CIS A267 may not take IT A267. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A268 — Connecting Networks (Cisco 4) — 3 units**

**Advisory:** Computer Information Systems A267 or Information Technology A267.

Discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and LAN technologies to meet network requirements. Students learn how to configure and troubleshoot network devices and resolve common issues with data link protocols. Students also develop the knowledge and skills needed to implement IPSec and virtual private network (VPN) operations in a complex network. This course provides preparation for students seeking the Cisco CCENT/CCNA Certification. The same as CIS A268. Students who have taken CIS A268 may not take IT A268. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A280 — Information and Storage Management — 3 units**

**Advisory:** Computer Information Systems A110 and A191 or Information Technology A110 and A191.

The course provides a comprehensive introduction to information storage technology which enables students to make more informed decisions in an increasingly complex IT environment. It builds a strong understanding of underlying storage technologies and prepares Student to learn advanced concepts, technologies and products. The same as CIS A280. Students who have taken CIS A280 may not take IT A280. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A281 — Cloud Infrastructure and Services — 3 units**

**Advisory:** Computer Information Systems A110 or A191 or Information Technology A110 or A191.

This course educates students about cloud deployment and service models, cloud infrastructure, and the key considerations in migrating to cloud computing. The course covers technologies required to build classic, virtualized, and cloud data center environments. These technologies include compute, storage, networking, desktop and application virtualization. Additional areas of focus are backup/recovery, business continuity, security, and management. Students will learn about the key considerations and steps involved in transitioning from the current state of a data center to a cloud computing environment. The same as CIS A281. Students who have taken CIS A281 may not take IT A281. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A282 — Ethical Hacking and Network Defense — 3 units**

**Advisory:** Computer Information Systems A191 and A261 or Information Technology A191 and A261.

Students will learn how hackers attack computers and networks, and how to protect Windows and Linux systems. Legal restrictions and ethical guidelines will be taught and enforced. Students will perform many hands-on labs; attacking and defending, using port scans, footprinting, buffer overflow exploits, SQL injection, privilege escalation, Trojans, and backdoors. The same as CIS A282. Students who have taken CIS A282 may not take IT A282. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A285 — VMware View: Installation, Configuration, and Management — 3 units**

**Advisory:** Computer Information Systems A110 or A191 or Information Technology A110 or A191.

Students will learn the concepts and capabilities of virtual desktops with a focus on the installation, configuration, and management of virtual desktops and thin clients using tools such as VMware. This course will provide applications-oriented administrators with the knowledge and skills to virtualize applications with VMware ThinApp, modify parameters to handle special circumstances, and choose the best deployment and updating processes for organizational environments. The same as CIS A285. Students who have taken CIS A285 may not take IT A285. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A286 — VMware, vSphere: Installation, Configuration, and Management — 3 units**

**Advisory:** Computer Information Systems A261 and A191 or Information Technology A261 and A191.

Students will learn the concepts and capabilities of virtual architecture with a focus on the installation, configuration, and management of virtual infrastructure using tools such as VMware®. This course covers fundamentals of virtual network design and implementation, fundamentals of storage area networks, virtual switching, virtual system management, and engineering for high availability. The same as CIS A286. Students who have taken CIS A286 may not take IT A286. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Information Technology A290 — Small/Home Office: Case Study 1 — 3 units**

**Advisory:** Computer Information Systems A191 or A261, and A263 or Information Technology A191 or A261.

Challenges students to apply network concepts learned in previous courses to a case-study based problem in Small Office / Home Office environments. Includes various responsibilities and tasks required for a service engineer to design and execute a successful implementation. Prepares individuals for careers as a Network Engineer in the IT industry. The same as CIS A290. Students who have taken CIS A290 may not take IT A290. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Integrative Health A115 — Clinical Skills for the Integrative Health Coach — 2.5 units**

This course provides students with an understanding of basic clinical skills to be effective liaisons between medical clinicians and patients. Topics covered include listening skills, common screening assessments, legal and ethical issues in health care, death and dying, and professional burn out. Students will also be trained in cardiopulmonary resuscitation and receiving AHA CPR certification. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Integrative Health A210 — Navigating the U.S. Health Care System, Health Insurance, Public Assistance, and Benefits Programs — 2.5 units**

This course provides students with an understanding of the U.S. healthcare system and health insurance options to provide for efficient navigation through the healthcare system. Topics include the history of health insurance in the U.S. and the role of government in healthcare; the U.S. healthcare workforce; basic health insurance terminology; types of insurance and the healthcare marketplace; different types of care, including outpatient, ambulatory and long-term care; public assistance programs and disability programs; and, ethical and bioethical issues. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Integrative Health A220 — Techniques and Topics in Health Education — 3 units**

This course will provide students with the skills and knowledge to be successful health educators in both group and individual setting. Topics will include the principles and practice in the planning, facilitation, and evaluation of public health education and training. This course covers basic theories and participatory training methods, with a focus on meeting the needs of diverse communities and adult learners. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Integrative Health A225 — Introduction to Complementary and Alternative Medicine — 3 units**

This course will focus on the role of alternative medicine in health behavior, disease, treatment, coping, and healing. Topic covered will include history, philosophy, development, and use of CAM modalities to treat and manage disease. Traditional/alternative medical systems, such as Chinese, Tibetan, and Ayurvedic medicine, will be examined. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Integrative Health A230 — Assessing and Analyzing Health Information — 3 units**

This course prepares students to perform the information-related duties of an Integrative Health Coach, health educator, and other public health professions. Students develop skills and knowledge required to locate and critically appraise online health information; review measurements and methods to access public health data located in surveillance systems and vital records, and provide an overview of public health informatics. The same as PUBH A230. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**INTEGRATIVE HEALTH**

**Integrative Health A100 — IHC Principles & Practice — 3 units**

Prepares students for work as Integrative Health Coaches in clinics, hospitals, and other health provider locations. The course emphasizes skill development in areas of client-centered theory and practice. Topics include the role of the IHC in the delivery of medical care and services as related to client-centered professional skills, behavior change theory, goal setting, and motivation. Students will also explore professional practices related to self-care teamwork, ethics, and conflict resolution. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Integrative Health A250 — Integrative Health Coach Internship — 2 units**

Supervised internship for the student who is completing the Integrative Health Coach certificate. Job site experience will train the student in additional job skills that will enhance academic learning. The internship may be either a paid or unpaid position; students must work 75 paid hours or 60 non-paid hours per unit earned (150 hours paid/120 hours non-paid for this 2 unit course). May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU**

**INTERIOR DESIGN**

**Interior Design A050 — Interior Design Lab — .5-2 units**

A laboratory based course to improve interior design skills. Students work independently according to a self-designed study plan they complete under the supervision of the course instructor. Periodic student teacher conferences and a final self-assessment report are part of the course. Enrollment is open all semester. Students should be enrolled in an interior design course. Offered on a pass/no-pass basis only. 27-108 hours arranged lab. Not degree applicable.

**Interior Design A100 — Fundamentals of Interior Design — 3 units**

Application of design principles and elements in planning of total interior environments that meet individual, functional, legal, and environmental needs. Selection of materials and products used in interior environments will be emphasized for functional, economic, and aesthetic qualities. Evaluation of color theories, space planning, floor plans, lighting, environmentally responsible design, accessibility, and the design process will be introduced. Lecture. **Transfer Credit: CSU.**

**Interior Design A105 — Interior Design Studio 1 — 3 units**

**Prerequisite:** Interior Design A100 or concurrent enrollment.

This studio course will apply concepts and theories presented in the lecture course, Interior Design A100. Therefore, it is recommended that this course be taken concurrently. Emphasis is placed on the application of design principles and elements and the design process in developing solutions for residential interior design projects. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A110 — Design Communication 1: Design Graphics — 2 units**

This introductory course in design communication techniques will emphasize the importance of visual communication and three-dimensional design graphics for two-dimensional media. Course content will include subject matter and technique presentations in hand-drawn graphics. Design communications shall include orthographic projections, paralines, plan views, elevations, sections, basic perspective drawing, rendering and tonal value applications. Included in this coursework will be introductory applications of 3D software as well integration with hand drawings. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A120 — Interior Design Careers — 1 unit**

A survey of the interior design profession, industry, related occupations and work sites. The course will emphasize personal, educational, and professional qualifications required for entry into the interior design profession. Lecture. **Transfer Credit: CSU.**

**Interior Design A130 — Design Communication 2: CAD 2D — 3 units**

This course introduces Computer Aided Drafting (CAD) as used to produce 2-dimensional design drawings. PCs with Autodesk Architecture or other Industry standard software will be used and instruction will focus on computer drawing a simple project to include the following drawing types: floor plan, site plan, elevations, and enlarged section/details. Students should have basic knowledge of computer operation and file management. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A150 — Interior Materials and Products — 3 units**

Analysis, application, and evaluation of products and materials used in interior design. Includes interior textiles, furnishings, and finish materials and products and specifications. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Interior Design A170 — Space Planning — 3 units**

**Prerequisite:** Interior Design A110.

**Advisory:** Interior Design A100.

The application of programming, theory, and techniques in residential and commercial space planning. Drawing and planning process techniques are emphasized in the studio. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A175 — Applied Color and Design Theory — 3 units**

Introduction to color and design theory and application, including line, shape, value, and color. Utilization of tools, materials, and equipment to develop a visual vocabulary and technical skills applicable to interior, architectural, and fashion related fields of design. Same as Fashion A175. Students completing Interior Design A175 may not receive credit for Fashion A175. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A180 — History of Interior Architecture and Furnishings 1 — 3 units**

The historical relationship between the decorative arts, period furniture, and interior architecture is illustrated in this overview of design heritage from Antiquity through the 19th century in France. Emphasis on style development as it relates to social, economic, and political influences. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Interior Design A190 — History of Interior Architecture and Furnishings 2 — 3 units**

The historical relationship between the decorative arts, period furniture, and interior architecture is illustrated in this overview of design heritage. This course begins with 16th century England and America and analyzes the influences and changes in design to the present. Style development as it relates to social, economic, and political forces is emphasized. Lecture. **Transfer Credit: CSU.**

**Interior Design A199 — Current Issues in Interior Design — .5-1.5 units**

**Advisory:** Interior Design A100.

Current issues in the field of Interior Design, rotating through a variety of topics relating to exploration and preparation for the Interior Design profession. May be taken for grades or on a pass-no-pass basis. Lecture. **Transfer Credit: CSU.**

**Interior Design A200 — Design Communication 3: Illustration — 3 units**

**Prerequisite:** Interior Design A105 and A110.

**Advisory:** Interior Design A175.

Application of the methods, techniques, and tools used for illustrating interior spaces and products. 36 hours lecture, 54 hours non-lecture. **Transfer Credit: CSU.**

**Interior Design A210 — Fundamentals of Lighting — 3 units**

**Prerequisite:** Interior Design A100 and A110.

**Advisory:** Interior Design A170.

The fundamentals of lighting, design, theory, and application including the history and vocabulary of lighting, how light affects color and vision, incandescent and fluorescent lamps, lighting techniques for interior designers, codes, and energy efficient lighting practices. Lecture. **Transfer Credit: CSU.**

**Interior Design A215 — Interior Design Studio 2 — 3 units**

**Prerequisite:** Interior Design A170.

**Advisory:** Interior Design A210.

Develop, analyze, and apply design concepts to interior environments. Universal design, 'green' design, space planning, lighting systems, interior components, architectural elements, and specification writing will be integrated into research projects emphasizing a problem solving approach. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A220 — Interior Design Construction Documents — 3 units**

**Prerequisite:** Interior Design A110 and A130 or concurrent enrollment.

**Advisory:** Interior Design A215.

A drafting course emphasizing the legal nature and scope of construction drawings, specifications, codes, products, materials, and equipment used for interior design projects. **Transfer Credit: CSU.**

**Interior Design A230 — Business and Professional Practice — 3 units**

**Advisory:** Interior Design A100 and A120.

The business and professional management of an interior design practice including legal issues, project management, and business practices. Three hours. **Transfer Credit: CSU.**

**Interior Design A240 — Interior Design Internship — 2 units**

**Prerequisite:** Interior Design A210 and A215 or concurrent enrollment.

**Advisory:** Interior Design A130.

A supervised internship related to classroom-based learning at a interior design-related work site. 120 hours arranged. **Transfer Credit: CSU.**

**Interior Design A245 — Portfolio Development — 2 units**

**Prerequisite:** Interior Design A210 or concurrent enrollment and Interior Design A215 or concurrent enrollment.

**Advisory:** Interior Design A130.

A comprehensive portfolio of Interior Design coursework developed in digital and print media. Course will include digital presentation skills and portfolio development. This course should be taken in the final semester of Level 2. Lecture. **Transfer Credit: CSU.**



**Interior Design A250 — Codes and Building Systems — 3 units**

**Advisory:** Interior Design A215.

This course examines the building code relative to Interior Design and Architecture. Construction materials and building systems including structural, mechanical, electrical, plumbing and lighting are analyzed in conjunction with the code. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Interior Design A260 — Design Communication 4: Digital Visualization — 3 units**

**Advisory:** Interior Design A130, A170.

Application of the methods, techniques, and tools used for illustrating interior spaces two and three-dimensionally through the use of technology/software programs. Students should have basic knowledge of computer operation CAD and file management. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A265 — Studio Project Specialization — 3 units**

**Prerequisite:** Interior Design A215.

**Advisory:** Interior Design A210 and A260.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized equipment unique to planning office spaces. Design solutions for offices will be developed in the studio. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A275 — Interior Design Studio 4 — 3 units**

**Prerequisite:** Interior Design A215.

**Advisory:** Interior Design A210 and A260.

Analysis and application of the design process to space planning, materials and finish choices, codes application, and selection of specialized equipment unique to planning hospitality spaces. Design solutions for hospitality to be developed in the studio. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A280 — Interior Design Studio-Bath Design — 2 units**

**Prerequisite:** Interior Design A215.

**Advisory:** Interior Design A260.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized items, fixtures, and equipment unique to the bath space. Design solutions for residential bathrooms will be developed in the studio. Lecture, Lab. **Transfer Credit: CSU.**

**Interior Design A285 — Interior Design Studio-Kitchen Design — 2 units**

**Prerequisite:** Interior Design A215.

**Advisory:** Interior Design A260.

Analysis and application of the design process to the space planning, materials and finish choices, codes application, and selection of specialized items, fixtures, and equipment unique to the kitchen space. Design solutions for residential kitchen will be developed in the studio. Lecture, Lab. **Transfer Credit: CSU.**

**INTERNSHIP ACADEMY**

**Internship A392 — Internship Academy-Level 2 — 1-4 units**

**Prerequisite:** Concurrent enrollment in a course related to the student's identified major.

Supervised internship for the student who has identified a major area of study. Job site experience will train the student in additional job skills that will enhance academic learning. Courses in the career field will be taken concurrently with the student's job site experience. May be either a paid or unpaid position. Three and one-half to sixteen and one-half hours. **Transfer Credit: CSU.**

**Internship A393 — Internship Academy-Level 3 — 1-4 units**

**Prerequisite:** Advanced standing in career program.

Supervised internship related to classroom-based learning at an on-the-job learning site related to student's career goal. This is an advanced internship course. May be either a paid or unpaid position. Three and one-half to sixteen and one-half hours. **Transfer Credit: CSU.**

**ITALIAN**

**Italian A180 — Elementary Italian 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Italian, with an introduction to cultures related to the Italian language. This course is equivalent to two years of high school Italian. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Italian A185 — Elementary Italian 2 — 5 units**

**Prerequisite:** Italian A180 or completion of two years of high school Italian with a grade of 'C' or better.

Continuation of Italian A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Italian language. This course is equivalent to three years of high school Italian. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Italian A199 — Current Topics in Italian — 1-5 units**

**Prerequisite:** One semester of college-level Italian.

Development of listening, speaking, reading, and writing proficiency in Italian. Extensive exposure to cultures related to the Italian language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. Content differs each time. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Italian A280 — Intermediate Italian 1 — 5 units**

**Prerequisite:** Italian A185.

Continuation of Italian A185, with further development of language skills at the intermediate level and exploration of cultures related to the Italian language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Italian A285 — Intermediate Italian 2 — 5 units**

**Prerequisite:** Italian A280.

Continuation of Italian A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the Italian language in preparation for higher level specialized work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**JAPANESE**

**Japanese A180 — Elementary Japanese 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Japanese, with an introduction to cultures related to the Japanese language. This course is equivalent to two years of high school Japanese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Japanese A180H — Elementary Japanese 1 Honors — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Japanese, with an introduction to cultures related to the Japanese language. This course is equivalent to two years of high school Japanese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Japanese A185 — Elementary Japanese 2 — 5 units**

**Prerequisite:** Japanese A180 or completion of two years of high school Japanese with a grade of 'C' or better.

Continuation of Japanese A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Japanese language. This course is equivalent to three years of high school Japanese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Japanese A185H — Elementary Japanese 2 Honors — 5 units**

**Prerequisite:** Japanese A180 or completion of two years of high school Japanese with a grade of 'C' or better.

Continuation of Japanese A180H, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Japanese language. This course is equivalent to three years of high school Japanese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Japanese A280 — Intermediate Japanese 1 — 5 units**

**Prerequisite:** Japanese A185 or completion of three years of high school Japanese with a grade of "C" or better.

Continuation of Japanese A185, with further development of language skills at the intermediate level and exploration of cultures related to the Japanese language. Additional emphasis on reading and writing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Japanese A285 — Intermediate Japanese 2 — 5 units**

**Prerequisite:** Japanese A280 or completion of four years of high school Japanese with a grade of "C" or better.

Continuation of Japanese A280, with further refinement of language skills at the intermediate level and additional investigation of cultures related to the Japanese language. Continued emphasis on reading and writing. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**JOURNALISM**

*Formerly Communications*

**Journalism A110 — News Writing and Reporting — 3 units**

**Prerequisite:** English A100 or concurrent enrollment or qualifying placement score.

Beginning journalists will acquire the skills to write practical news stories under deadline pressure with a focus on accuracy, balance, and style. Writing assignments will include police stories, obituaries, speech coverage, round-ups, and feature stories. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC C-ID JOUR 110.**

**Journalism A113 — Social Media for Print and Online Journalists — 1 unit**

**Prerequisite:** Journalism A115, or A125, or A135, or A145.

This course is for any student enrolled in the student newspaper and will help them understand the issue of social media as a vital part of news gathering and reporting. The course will allow journalism students to create and maintain both a professional personal presence on social media as well as work to maintain the paper's presence on social media including Facebook, Twitter, Instagram, and YouTube. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A115 — Newspaper Production Level 1 — 4 units**

**Advisory:** English A100 and Journalism A110 or concurrent enrollment.

Assist in all aspects of newspaper planning, writing, design and production. Requires writing news and feature stories on deadline, commentary, writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. May be taken for grades or on a pass/no-pass basis. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU. C-ID JOUR 130.**

**Journalism A116 — Multi-Media Reporting and Producing — 3 units**

Students will acquire the skills needed to research, write and produce multi-media stories for posting online, including online newspaper sites. Students will gain a basic understanding of digital photography, videography, and photo editing software. May be taken for grades or on a pass/no-pass basis. Transfer Credit: CSU. Lecture, Lab. **Transfer Credit: CSU. C-ID JOUR 120.**

**Journalism A117 — Narrative Journalism — 3 units**

**Advisory:** Journalism A110 and English A100 or concurrent enrollment.

A writing workshop focusing on student writing and marketing in-depth non-fiction feature articles. Emphasis will be on guiding students and developing interesting non-fiction stories from the idea stage through publication and finding suitable markets for publication. Same as English A117. Students completing Journalism A117 may not receive credit for English A117. May be taken for grades or on a pass-no pass basis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A123 — Social Media for Print and Online Journalists Level 2 — 1 unit**

**Prerequisite:** Journalism A125, or A135, or A145.

This course will build on the basics of social media for students enrolled in the student newspaper. Students will use social media planning software to post stories and photographs on various platforms and help drive traffic to the campus newspaper's website. An introduction to social media etiquette will also be reinforced. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A125 — Newspaper Production Level 2 — 4 units**

**Prerequisite:** Journalism A115.

Assist in all aspects of newspaper planning and writing. Requires writing news and feature stories on deadline, along with commentaries, sports and arts and culture stories and reviews. Students will continue to practice basic news writing and feature writing skills while expanding background to include sports and arts stories. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Journalism A126 — Multi-Media Reporting and Producing Level 2 — 3 units**

**Prerequisite:** Journalism A116.

Students will acquire the skills needed to research, write and produce multi-media stories for posting on CoastReportOnline.com. Students will also cover news judgment and advanced editing and hardware and software skills specific to news websites. May be taken for grades or on a pass/no-pass basis. Transfer Credit: CSU. Lecture, Lab. **Transfer Credit: CSU.**

**Journalism A135 — Newspaper Production Level 3 — 4 units**

**Prerequisite:** Journalism A125.

Assist in all aspects of newspaper planning, writing, design and production. Requires writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Journalism A145 — Newspaper Production Level 4 — 4 units**

**Prerequisite:** Journalism A135.

Assist in all aspects of newspaper planning, writing, design and production. Requires writing news and features stories on deadline, commentary, writing headlines, designing pages, editing, and layout techniques. Students will use state-of-the-art computer design, graphics, and word processing software in a professional setting. Students will also use social media to promote readership. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Journalism A185 — Photojournalism — 3 units**

Covers the fundamentals of photojournalism with students gaining practical experience in the creative process and techniques of making photographs for publication. Work will be assigned for publication in the campus newspaper, Coast Report. Lecture, Lab. **Transfer Credit: CSU. C-ID JOUR 160.**

**Journalism A210 — Advanced News Writing and Reporting — 3 units**

**Prerequisite:** English A100 or qualifying placement score and Journalism A110.

This course offers students insight and background into covering public affairs for print and online news environments. The course guides students through the process of community news reporting and writing, including coverage of student government, local and regional governments, city boards, police, courts and school boards. The course also covers legal and ethical issues in the news media as it pertains to public access, California's open meetings law, and other news gathering specifics. The course is designed for students pursuing media-related majors and for those seeking employment in the field. Lecture. **Transfer Credit: CSU.**

**Journalism A215 — Coast Report Editorial Board Level 1 — 1 unit**

**Prerequisite:** Must be editor on Coast Report staff.

**Co-requisite:** Journalism A115, or A125, or A135, or A145.

This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor's critique of the past one. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A225 — Coast Report Editorial Board Level 2 — 1 unit**

**Prerequisite:** Journalism A215.

**Co-requisite:** Journalism A125, or A135, or A145.

This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor's critique of the past one. The editors will also design and write headlines for the paper. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A235 — Coast Report Editorial Board Level 3 — 1 unit**

**Prerequisite:** Journalism A225.

**Co-requisite:** Journalism A135 or A145.

This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor's critique of the past one. The editors will also write editorials and do advanced layout of the paper and begin directing content for CoastReportOnline.com. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Journalism A245 — Coast Report Editorial Board Level 4 — 1 unit****Prerequisite:** Journalism A235.**Co-requisite:** Journalism A145.

This course is for the editorial board of the student newspaper. The editors will meet once per week to discuss policy matters, the upcoming issue and the instructor's critique of the past one. The editors will work independently to produce each week's paper and stay up to date on posting content to CoastReportOnline.com. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**KINESIOLOGY***Formerly Physical Education***Also see Athletics****Fitness/Conditioning****Kinesiology A105 — Cardiovascular Fitness — .5-2.5 units***Formerly Physical Education A110*

Cardiovascular exercise program. Stretching, fast-walk, jogging, and running programs will be set up on an individual basis. Pulse monitoring, nutrition, and strength will also be emphasized. Explores the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A106 — Weight Training — 1-2 units***Formerly Physical Education A111*

The student will learn the basic principles of weight training and exercises and be able to demonstrate proper biomechanics of weight training exercises appropriate for the beginner. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A107 — Fitness Programs I — .5-3 units***Formerly Physical Education A107*

Allows a student to use the OCC Cardiovascular lab and attend other daytime activity classes with instructor permission. Students must make selections from a series of computer-analyzed fitness and lifestyle evaluations, as well as attend seminars on physical fitness and wellness. Students are required to attend a one-hour orientation. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A108 — Strength and Conditioning — .5-3 units***Formerly Physical Education A108*

Individual strength and conditioning programs. Workouts must be done in the Fitness Complex. Students are required to attend a one-hour orientation. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A109 — Cardiovascular Training & Strength Development Level 1 — 1-3 units**

This course is designed for the beginning student who is interested in muscular strength/endurance and cardiovascular fitness training to improve general body strength and endurance. Each student will develop an individual fitness and/or strength program with specific performance goals. Safety procedures and protocols through use of cardiovascular and weight training equipment. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A110 — Walking for Fitness Level 1 — 1-2 units**

This course is designed to provide an introduction to walking as a cardiovascular fitness activity. Topics to be discussed will include proper walking techniques; fitness program design and evaluation; equipment and safety; persistence and motivation; and nutrition basics. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A111 — Step Cardio and Core Level 1 — 1-2 units***Formerly Physical Education A112*

Contemporary workout designed to improve participant's strength and cardiovascular fitness level through steady-state stepping movements. The student will be exposed to a graduated continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance, which are basic components of physical fitness. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A112 — Body Sculpting Level 1 — 1-1.5 units***Formerly Physical Education A125*

Body sculpting is a contemporary workout designed to improve each participant's muscular tone, strength, endurance and flexibility. The student will be exposed to a graduated continuous system of sculpting the body through the use of various resistance techniques. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A114 — Cardio-Kick Boxing Level 1 — 1-2 units**

Designed for students with beginning and intermediate kickboxing ability. Students will learn and improve on a series of combative boxing and kickboxing maneuvers (mainly kicking and punching movements). The objectives of these movements (as well as combinations of them) is to improve cardiovascular and muscular endurance, speed, strength, power, agility and flexibility. In conjunction with improvements in general fitness, this practice of self-defense aims to reduce stress, and improve cognitive processes and focus. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A115 — Cross Training Level 1 — 1-2 units***Formerly Physical Education A115*

A multi-dimensional approach to total body fitness and wellness. Cross training will encompass aerobics, running and weight training, and provide the student the opportunity to develop and maintain a complete conditioning program which balances cardiovascular conditioning, strength, flexibility, and coordination. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A116 — Triathlon Techniques — 2.5 units***Formerly Physical Education A106*

A multi-sport fitness program for the novice exerciser to competitor. Students will receive video analysis in swimming, learn safe group cycling practices, proper running technique, discuss injury prevention, the importance of rest and recovery and nutrition. Other topics include equipment technology, selection and maintenance. May — be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A125 — Self Defense for Women — 1-2 units**

This course is designed for students as an introduction to basic self-defense skills. This includes basic principles of practical personal protection for women with an emphasis on awareness and prevention of situations that may leave a person vulnerable to crime, especially rape. Will explore escape and avoidance strategies, offensive and defensive postures, defensive techniques, and simulated attacks. The course will also examine community services available for both violence prevention and victim abuse services. Finally, fitness principles, such as strength, flexibility, and cardiovascular fitness, will be addressed, particularly in regard to the impact of personal fitness on one's ability to perform the self-defense skills presented in class. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A206 — Weight Training Level 2 — 1-2 units**

The student will learn the intermediate to advanced principles of weight training and exercises and be able to demonstrate proper biomechanics of weight training exercises appropriate for the student who has experience in weight training. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A207 — Fitness Programs 2 — .5-3 units***Formerly Physical Education A187***Prerequisite:** Kinesiology A107.

This is an advanced course of Kinesiology A107. Allows a student to use the OCC Cardio Labs and attend other daytime activity classes with instructor permission. Students are required to attend a general fitness evaluation at beginning of the semester. Students are required to attend a one-hour orientation. Offered on a pass-no basis only. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A208 — Strength and Conditioning 2 — .5-3 units***Formerly Physical Education A188***Prerequisite:** Kinesiology A108.

Advanced Strength and conditioning programs. Workouts must be done in the Fitness Complex. Students must attend a one-hour orientation. Offered on a pass/no-pass basis only. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A210 — Walking for Fitness Level 2 — 1-2 units**

This course is designed to provide continued improvement and understanding of the benefits of walking as a cardiovascular fitness activity. Topics to be discussed will include walking and power walking techniques; fitness program design and evaluation; equipment and safety; persistence and motivation; and nutrition basics. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A211 — Step Cardio and Core Level 2— 1-2 units**

**Prerequisite:** Kinesiology A111.

Advanced step, cardio, and core workout designed to improve participant's strength and cardiovascular fitness. The student will be exposed to a graduated continuous system of rhythmic stepping at various platform heights, emphasizing strength, flexibility, and endurance, which are basic components of physical fitness. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A212 — Body Sculpting Level 2 — 1-1.5 units**

**Advisory:** Kinesiology A112.

Body sculpting is a contemporary workout designed to improve each participant's muscular tone, strength, endurance and flexibility. The student will be introduced to a graduated continuous system of sculpting the body through the use of various resistance techniques. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A214 — Cardio-Kick Boxing Level 2 — 1-2 units**

Designed for students with intermediate and advanced kickboxing ability. Students will learn and improve on a series of advanced combative boxing and kickboxing maneuvers (mainly kicking and punching movements). The objectives of these movements (as well as combinations of them) is to improve cardiovascular and muscular endurance, speed, strength, power, agility and flexibility. In conjunction with improvements in general fitness, this practice of self-defense aims to reduce stress, and improve cognitive processes and focus. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A215 — Cross Training Level 2 — 1-2 units**

**Advisory:** Kinesiology A115.

Cross training is a multi-dimensional approach to total body fitness and wellness. This course will encompass an intermediate and advanced level of aerobics, running and weight training and provide the student the opportunity to develop and maintain a complete conditioning program which balances cardiovascular conditioning, strength, flexibility and coordination. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Eastern Movement Forms**

**Kinesiology A126 — Aikido — .5-1.5 units**

*Formerly Physical Education A120*

Aikido is a Japanese art of self-defense which is both non aggressive and non-competitive. Besides offering students a method of self-defense and all around physical conditioning, Aikido contributes greatly to self-confidence. In addition, it teaches patience, self-discipline, awareness, and respect. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A127 — Karate — .5-1.5 units**

*Formerly Physical Education A122*

The study of the elements of Karate, with an emphasis on Karate basics through advanced fundamentals, Kata, and sparring (including Kumite). Karate students progress from beginning fundamentals to intermediate techniques. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A128 — Hatha Yoga — Level I — .5-1.5 units**

*Formerly Physical Education A104*

Yoga postures, breathing, concentration/meditation, and relaxation techniques will be presented as a method of personal development encompassing body, mind, and spirit. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A129 — T'ai Chi Chih — .5-2 units**

*Formerly Physical Education A105*

The study and practice of Tai Chi Chih, a newly developed system of the Qigong discipline based upon ancient principles. It consists of 20 movement patterns designed to generate, circulate and harmonize internal energy flows for health/enhancement. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A228 — Hatha Yoga – Level 2 — .5-1.5 units**

*Formerly Physical Education A204*

**Advisory:** Kinesiology A128 or instructor's consent.

Yoga postures, breathing, concentration/meditation, and relaxation techniques will be presented as a method of personal development encompassing body, mind, and spirit. Intermediate yoga poses will be introduced and practiced. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Aquatic Skills**

**Kinesiology A130 — Aqua Fitness — .5-1.5 units**

*Formerly Physical Education A140*

**Prerequisite:** Ability to swim. This skill will be validated the first week of class.

Designed to improve physical fitness through water exercises, increase flexibility, muscle tone, aerobic conditioning, and enhance physical rehabilitation. Exercises are impact-free and combine the properties of weightlessness and resistance to protect the bones and joints and increase bone density. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A131 — Swimming for Fitness Level 1 — 1-2 units**

*Formerly Physical Education A146*

**Prerequisite:** Ability to swim.

Introduces the theories and teaches the skills necessary to achieve fitness through swimming. Swimming programs are designed to attain desired levels of cardiovascular efficiency. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A132 — Swimming Level 1 — 1-2 units**

*Formerly Physical Education A143*

Instruction and practice in basics of freestyle, breast stroke, and backstroke, as well as breathing skills, while improving cardiovascular endurance. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A136 — Introduction to Sailing 1 unit**

*Formerly Physical Education A147*

**Prerequisite:** Ability to swim 50 yards and tread water for five minutes.

Introduces the novice to the fundamentals of sailing through dockside lectures and hands-on experience in Lido 14 dinghies. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as Marine Activities A136. Students completing Kinesiology A136 may not receive credit for Marine Activities A136. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A137 — Intermediate Sailing - Introduction to Keel Boats — 1 unit**

*Formerly Physical Education A148*

**Prerequisite:** Kinesiology A136 or Marine Activities A136 and the ability to swim 50 yards and tread water for five minutes; basic sailing ability. These skills will be validated the first week of class.

Introduces the intermediate sailor to the fundamentals of sailing through dockside lectures and hands-on experience in Shields 30 sloops. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as Marine Activities A137. Students completing Kinesiology A137 may not receive credit for Marine Activities A137. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A138 — Introduction to Ocean Sailing — 1 unit**

*Formerly Physical Education A149*

**Prerequisite:** Ability to swim 50 yards and tread water for five minutes. Knowledge of basic sailing principles.

Introduces the fundamentals of ocean sailing through dockside lectures and hands-on experience aboard large sailing vessels. Sail handling, winch operation, steering, reefing, line handling are emphasized. Same as Marine Activities A138. Students completing Kinesiology A138 may not receive credit for Marine Activities A138. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A139 — Kayaking — .5-1.5 units**

*Formerly Physical Education A160*

**Prerequisite:** Students must be able to swim 100 yards and tread water for five minutes. This prerequisite will be validated in class during the first week of the course.

Designed to teach the fundamental kayaking techniques needed to become a safe and effective kayaker. There will be a fee for use of equipment and use of the off-campus facility. Same as Marine Activities A139. Students completing Kinesiology A139 may not receive credit for Marine Activities A139. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Kinesiology A140 — Outrigger Canoeing — .5-1.5 units***Formerly Physical Education A159*

**Prerequisite:** Students must be able to swim 100 yards and tread water for five minutes. This prerequisite will be validated in class during the first week of the course.

Designed to teach the fundamental outrigger canoeing techniques needed to become a safe and effective paddler. There will be a fee for use of equipment and use of the off-campus facility. Same as Marine Activities A140. Students completing Kinesiology A140 may not receive credit for Marine Activities A140. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A141 — Surfing and Ocean Safety Level 1 — 2 units***Formerly Physical Education A161*

**Prerequisite:** Students must be able to swim 100 yards non-stop and tread water for five minutes. This prerequisite will be validated in class during the first week of the course. Bring swim suit. Designed to teach the fundamentals of board surfing and provide beginning and intermediate surfers the opportunity to safely learn and improve the skills to ride waves. Introduction of paddling, wave selection, equipment, tides, current, etiquette and ocean safety are emphasized. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A231 — Swimming for Fitness Level 2 — 1-2 units**

**Prerequisite:** Ability to swim. This prerequisite will be validated in class during the first week of the course.

**Advisory:** Kinesiology A131. Explains the theories and teaches the intermediate and advanced skills necessary to achieve cardiovascular fitness through swimming. Introduction to the use of pace clocks, Heart Rate Target-Zone training, hand paddles and pool safety are emphasized. Swimming programs are designed to attain desired levels of cardiovascular efficiency. This is not a swim technique class. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A232 — Swimming Level 2 — 1-2 units**

**Prerequisite:** Ability to swim. This prerequisite will be validated in class during the first week of the course.

**Advisory: Kinesiology A132**

Instruction and practice in intermediate to advanced techniques of freestyle, breast stroke, backstroke, and butterfly. Instruction and execution of thorough breathing skills, pulling ability and kicking propulsion while improving cardiovascular endurance. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A241 — Surfing and Ocean Safety Level 2 — 2 units**

**Prerequisite:** Students must be able to swim 100 yards non-stop and tread water for five minutes. This prerequisite will be validated in class during the first week of the course. Bring swim suit.

**Advisory:** Kinesiology A141.

Designed to teach the fundamentals of board surfing and provide intermediate and advanced surfers the opportunity to safely learn and improve the skills to ride more challenging waves. Analysis of paddling, wave selection, equipment, tides, currents, etiquette and water safety are emphasized. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Racquet****Kinesiology A145 — Badminton Level 1 — 1-2 units***Formerly Physical Education A150*

This course is intended to develop beginning-level skills necessary to participate in the game of badminton. Skill development will include instruction on basic strokes and strategies with an emphasis on rules and etiquette for active singles and doubles play. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A146 — Tennis Level 1 — 1-1.5 units***Formerly Physical Education A155*

Instruction and practice in the essential stroke skills, rules, etiquette and competition in singles and doubles for the beginning/intermediate levels. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A147 — Table Tennis Level 1 — 1-2 units***Formerly Physical Education A154*

Introduction and practice in the essential stroke skills, rules, etiquette, and competition in singles and doubles. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A245 — Badminton Level 2 — 1-2 units***Formerly Physical Education A150*

This course is intended to develop intermediate-advanced level skills necessary to participate in the game of badminton. Skill development will include instruction on intermediate-advanced stroke analysis, specific singles and doubles tactics, offensive and defensive strategies, and competitive class match play. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A246 — Tennis Level 2 — 1-1.5 units****Advisory: Kinesiology A146 or Instructor's consent.**

Instruction and practice of intermediate and advanced skills and strategies of tennis, including the analysis of self and opponent's play to become an effective competitor. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A247 — Table Tennis Level 2 — 1-2 units****Advisory: Kinesiology A147.**

Introduces and develops for the Intermediate and advance players the chop shot, loop and defensive strategies as well as singles and doubles tournaments. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Individual & Team Sports****Kinesiology A150 — Basketball — .5-1.5 units***Formerly Physical Education A173*

Instruction and practice in the essential skills, rules, etiquette and competition necessary for beginning/intermediate basketball. This is a coed class designed for recreational players. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A151 — Futsal/Indoor Soccer Level 1 — 2 units***Formerly Physical Education A156*

Designed for men and women with beginning, intermediate, and advanced soccer ability. Students will improve skills through application of rules, theory and study, improve flexibility and endurance training, and participate in drills, Futsal/indoor soccer scrimmages and games. Will explore the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A152 — Soccer Level 1 — 1-2 units***Formerly Physical Education A177*

Designed for beginning, intermediate, and advanced soccer players. Students will improve skills through application of rules and theory increase flexibility and endurance, and participate in drills, scrimmages and games. This course will explore the relationship between fitness and health related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A153 — Golf Level 1 — 1-2 units***Formerly Physical Education A179*

Novice through intermediate levels of instruction in putting, chipping, pitching, sand shots and full swing fundamentals with emphasis placed on grip and stance. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A154 — Volleyball Level 1 — 1-1.5 units***Formerly Physical Education A178*

Development of skills necessary to participate in a game of volleyball at the beginning and intermediate levels. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

**Kinesiology A155 — Bowling Level 1 — .5-1.5 units***Formerly Physical Education A174*

This course is designed to teach the basic fundamentals of bowling and provide beginning bowlers the opportunity to learn and improve their skills. Beginning-level skill development will include instruction on basic bowling techniques with an emphasis on rules and etiquette. May be taken for grades or on a pass/no-pass basis. **Lecture, Lab. Transfer Credit: CSU, UC.**

## **Kinesiology A156 — Rock Climbing — .5-2 units**

*Formerly Physical Education A167*

Basic climbing techniques and safety fundamentals prepare the student for participation in rock climbing. Securing the climbing harness properly, properly tying to the harness, proper use of climbing commands, safety falling, and arresting falls will be covered. A fee for use of an off-campus facility will be required. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A157 — Sand Volleyball Level 1 — 1-2 units**

This is an introductory course to the fundamentals of sand volleyball including serving, passing, spiking and digging. Students will learn rules and court strategy for playing the game. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

## **Kinesiology A158 — Flag Football Level 1 — 1-2 units**

This course is designed for students who have little to no football playing experience. This course will teach the fundamentals of football and provide beginners with a safe environment to learn the game. Students will learn basic football terminology, philosophy, schemes, and learn new skills required to play the game. Students will also learn the important of nutrition and teamwork. The course will be a combination of classroom time and field work. Students will be expected to apply information learned in the classroom onto the field. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A159 — Lacrosse Level 1 — 1-2 units**

The purpose of this course is to provide an introduction to the basic skills, rules, and game tactics of lacrosse. In addition to skill acquisition, the course will focus on specific stages of skill development during modified games through the use of extending, refining, and application tasks and skills of lacrosse. Topics to be discussed and experienced include stick handling, small group game tactics, rule application scenarios, exercise and conditioning, and active participation. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A251 — Futsal/Indoor Soccer Level 1-1-2 units**

**Advisory: Kinesiology A151**

Designed for intermediate and advanced soccer players. Students will learn advanced technical ball skills and advanced game tactics for competitive team play. This course will explore the relationship between fitness and health-related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A252 — Soccer Level 2 — 1-2 units**

**Advisory: Kinesiology A152**

Designed for intermediate and advanced soccer players. Students will learn advanced technical ball skills and advanced game tactics for competitive team play. This course will explore the relationship between fitness and health-related topics to improve, be part of, and maintain a wellness lifestyle. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A253 — Golf Level 2 — 1-2 units**

**Advisory: Kinesiology A153**

Intermediate/Advanced instruction, with emphasis on course play and competition. Students should have beginning knowledge of golf, with a golf swing already in place. Refines full swing, chipping techniques pitching, sand bunker play, rules, scoring, and game management at the intermediate level. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A254 — Volleyball Level 2 — 1-1.5 units**

**Advisory: Kinesiology A154.**

This course presents advanced volleyball techniques and tactics for team and tournament play. The course covers advanced skills, court positioning, rolls, drives, and team strategy, both offensive and defensive. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Kinesiology A255 — Bowling Level 2 — 1-2 units**

This course is designed to teach intermediate-advanced level bowling skills necessary to participate in handicap and scratch bowling leagues and tournaments. Skill development will include instruction on intermediate-advanced bowling techniques, specific strategies and tactics, and competitive class league and tournament play. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

## **Kinesiology A258 — Flag Football Level 2 — 1-2 units**

This course is designed for students who have intermediate to advanced knowledge and of the game. This course will introduce students to advanced football fundamentals, schemes, strategy, and skills of the game. Students will further their knowledge of the game through weekly lectures and competitions. Students will be responsible for organizing practices and create/explain drills to prepare their team for weekly competitions. This course will be a combination of classroom time and field work. Students will be expected to apply information learned in the classroom onto the field. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

## **Kinesiology A259 — Lacrosse Level 2 — 1-2 units**

The course is designed for intermediate and advanced lacrosse players. Students will extend, refine, and apply intermediate and advanced skills and tactics during small, large, and whole game scenarios. Topics will include game applications, intermediate and advanced tactical applications while exploring the relationship between fitness and successful continuous large group and full team game play. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## **Adapted Kinesiology**

### **Kinesiology A170 — Adapted Strength Training — .5-1.5 units**

*Formerly Physical Education A191*

Course is designed for students with physical disabilities requiring an individualized exercise program. Instruction and practice in individualized weight training and resistive exercises will be given for improvement in muscular strength, endurance, and flexibility. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A171 — Adapted Individual Sports — Bowling .5-1.5 units**

*Formerly Physical Education A192*

This course is designed for students with physical disabilities who can benefit from instruction and practice in the methods, techniques, and rules of bowling. Adapted bowling equipment is available for student use. Class will meet at a local bowling alley. A fee is required to cover use of lanes, shoes, and equipment. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A172 — Adapted Aquatics — .5-1.5 units**

*Formerly Physical Education A194*

Designed for students with physical disabilities who can benefit from individualized exercises and swimming in the pool. Instruction and practice in swimming skill development and improvement, exercises in strength and flexibility, and gait training will be offered. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A173 — Adapted Strength and Balance — .5-1.5 units**

*Formerly Physical Education A185*

Course is for students with physical disabilities who want to learn methods of increasing stability, decreasing fear, improving posture, recovering loss of balance & getting up from a fall. Students must participate in all challenges & balance assessments. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A174 — Adapted Cardiovascular Fitness — .5-1.5 units**

*Formerly Physical Education A196*

Course is designed for students with physical disabilities who can benefit from an individualized cardiovascular exercise program. Instruction and practice in cardiovascular activities using a variety of ergometry equipment will be given. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A175 — Adapted Aerobic Exercise — .5-1.5 units**

*Formerly Physical Education A197*

Course is designed for students with physical disabilities who can benefit from a sustained cardiorespiratory exercise program. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

### **Kinesiology A176 — Adapted Stretching — .5-1.5 units**

*Formerly Physical Education A198*

Course is designed for students with physical disabilities who can benefit from individualized stretching and muscular endurance activities. Activities are conducted both from a sitting position and lying down on mats. Relaxation techniques, pressure points, passive and resistive stretching, and exercises will be demonstrated and performed. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

## Kinesiology Studies

**Professional Kinesiology courses are intended for Kinesiology majors. Students should consult the Transfer Information section or their counselor for specific requirements.**

### Kinesiology A202 — Introduction to Kinesiology — 3 units

*Formerly Physical Education A202*

Introduction to the interdisciplinary approach to the study of human movement. An overview of the importance of the sub disciplines in Kinesiology will be discussed. Exploration of career opportunities in areas related to sport, movement, exercise and fitness, including teaching, coaching, and fitness professions. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID KIN 100.**

### Kinesiology A203 — First Aid and CPR — 2 units

Emphasizes injury prevention, early medical care, first aid for common injuries and life-saving skills. Successful completion qualifies a student for the American Red Cross Standard First Aid Card and CPR Certification. Formerly known as HLED A112. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

### Kinesiology A270 — Fitness and Health — 3 units

*Formerly Physical Education A134*

Theory and benefits of physical activity to fitness-related health. The study of human adaptation to exercise includes cardiovascular conditioning, neuromuscular training, body composition, nutrition for performance, stretching, sports injuries, and aging. Same as Health Education A270. Students completing Kinesiology A270 may not receive credit for Health Education A270. This course may be taught online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

### Kinesiology A271 — Drugs and Sports — 3 units

*Formerly Physical Education A138*

An in-depth look at substance abuse among athletes. The focus will be on drug effects, the impact on the team, nutrition and positive alternatives. Same as Health Education A271. Students completing Kinesiology A271 may not receive credit for Health Education A271. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU UC.**

### Kinesiology A272 — Movement Analysis 3 units

*Formerly Physical Education A274*

Introduction to the musculo-skeletal system and its function in human movement. Analysis of movements in sport skills and the muscles and bones involved. Lecture. **Transfer Credit: CSU, UC.**

### Kinesiology A273 — Sports Medicine — 3 units

*Formerly Physical Education A281*

Technique and theory of care and prevention of athletic injuries. Includes the use of various therapeutic modalities for therapy and prevention of injury through strength and flexibility exercise. Lecture. **Transfer Credit: CSU, UC.**

### Kinesiology A274 — Athletic Taping and Modalities — 3 units

*Formerly Physical Education A285*

The entry-level theory and technique of athletic strapping and physiological effects and use of therapy modalities. Instruction in the use of ultrasound, electric stimulation, heat/cold, and whirlpool. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A275 — Sports Medicine Practicum Level 1 — 2-4 units

*Formerly Physical Education A287*

Designed to provide the beginning level athletic training student interested in sports-related injury prevention and care to develop learning and gaining practical knowledge of athletic training by observing procedures, techniques and concepts applicable to the athletic training setting. Experiences will include observing taping for prevention of injury, use of modalities, and exercise programs in rehabilitation of injuries. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A276 — Sports Medicine Practicum Level 2 — 2-4 units

**Advisory:** Kinesiology A275 or instructor consent.

This course is designed for the beginning/intermediate athletic training student to get an overview of sports medicine topics including medical terminology, therapeutic modalities, basic tape techniques, contagious skin diseases as related to athletes, and a variety of sports-related injuries. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A277 — Sports Medicine Practicum Level 3 — 2-4 units

**Advisory:** Kinesiology A275 and A276.

This course is designed for the intermediate/advanced student to learn therapeutic goals and objectives, therapeutic taping and bandaging, selection of therapeutic exercises, methods of evaluating and recording rehabilitation progress and development of criteria for progression and return to normal function. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement. Lecture, Lab. **Transfer Credit: CSU, UC**

### Kinesiology A278 — Sports Medicine Practicum Level 4 — 2-4 units

**Advisory:** Kinesiology A275 and A276 and A277.

This course is designed for advanced level athletic training student to further develop their athletic training skills and prepare to transfer to a 4 year school. This includes working with team physicians, physician assistants, emergency medical technicians, coaches, administrators, cooperative learning with lower level students, record keeping and taping. Instructor will assess student ability and skill level in the first week of class to insure proper course level placement. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A279 — Sports Management — 3 units

*Formerly Physical Education A278*

This introductory course will expose students to the business structures of the recreational, high school, collegiate and professional sports industry. Discussion of sports management career opportunities will be included. This course may also be offered online. Lecture, Lab. **Transfer Credit: CSU.**

### Kinesiology A280 — Strength and Conditioning Theory -3 units

*Formerly Physical Education A289*

Theory and applications of strength development, muscular endurance, flexibility, neuromuscular coordination, nutrition and supplementation. Includes planning, developing and setting up programs designed to achieve the desired goals in the most efficient way. Also, includes introduction to fitness and exercise testing procedures. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A281 — Fitness and Exercise Testing — 3 units

*Formerly Physical Education A284*

Theory and techniques of physical fitness evaluation, exercise testing and exercise prescription. Lecture. **Transfer Credit: CSU, UC.**

### Kinesiology A282 — Introduction to Exercise Physiology — 3 units

*Formerly Physical Education A296*

**Advisory:** Biology A221.

An introduction to the study of human physiological processes during exercise and activity. Includes study of metabolic changes to major body systems during acute exercise, the physiological adaptations due to chronic exercise and the effect of training upon performance. Students will practice fitness testing and apply practical knowledge in a lab setting. Lecture, Lab. **Transfer Credit: CSU, UC.**

### Kinesiology A283 — Nutrition, Fitness, and Performance — 3 units

An applied nutrition course for individuals interested in health, fitness, and athletics. Principles of nutrition are studied and applied to the athlete and active individuals. Includes pre and post event food and fluid selection, nutrient requirements, supplements, muscle mass and body fat related to performance. Same as Food and Nutrition A136 and Health Education A136. Students completing Kinesiology A283 may not receive credit for Food and Nutrition A136 or Health Education A136. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

### Kinesiology A284 — Theory of Yoga — 3 units

A survey of the origins of Yoga, including ancient to modern traditions, and exploration of the principal ancient texts of Yoga. This course includes the evolution of yoga from its earliest development to its current integration into modern culture. Lecture. **Transfer Credit: CSU.**

### Kinesiology A285 — Yoga Methodology — 3 units

**Advisory:** Kinesiology A128 and A228.

Designed for students to learn how to teach key poses in each category of Yoga for adults, teens, and children in a variety of settings. This class includes proper alignment, sequencing of postures, positive communication, verbal and physical cueing, precautions, and modifications for yoga clients. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A286 — Yoga Methodology 2 — 3 units**

**Prerequisite:** Kinesiology A228 and A285.  
Designed for students to increase their knowledge and build on the concepts from Yoga Methodology 1. Students will learn how to teach the principles and techniques of Yoga in each category of the three stages of life (developmental, preventative, and therapeutic) in a variety of settings. This class includes further study of proper alignment, sequencing of postures, positive communication, verbal and physical cueing, precautions, and modifications for yoga clients. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A287 — Yoga Practicum Level 1 — 3 units**

**Advisory:** Kinesiology A228 and A285.  
Students in this course are given practical experience in yoga teaching, class planning, and auditioning for employment. Students will learn how to prepare to teach diverse populations, enhance the teacher-student experience, and prepare for yoga studio, corporate, and private employment. Additional lab hours will assign students to teach in a supervised Hatha Yoga Level 1. class at OCC. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A296 — Personal Trainer — 3 units**

This course will provide students with the knowledge and confidence to become leaders in the personal training industry to be prepared for careers as fitness professionals. Topics to include an investigation of the personal training industry, fitness assessment, and program design. Lecture. **Transfer Credit: CSU.**

**Kinesiology A297 — Fitness Specialist Practicum — 2 units**

This course will provide a hands-on experience in fitness evaluation and assessment for healthy populations. Students will learn how to accurately perform skinfolds measurement, assess flexibility, strength, and muscular endurance. Maximum and submax cardiovascular endurance assessment will also be covered. Exercise programming based on assessment will be completed. Lecture, Lab. **Transfer Credit: CSU.**

**Kinesiology A298 — Fitness Specialist Internship — 2-3 units**

*Formerly Physical Education A298*  
**Prerequisite:** Current CPR certification to be verified by instructor during first class meeting and Kinesiology A280 or concurrent enrollment.  
A supervised internship related to classroom-based learning at a workplace site that supports the learning outcomes of the Fitness Specialist Certificate program. Lecture, arranged. **Transfer Credit: CSU.**

**LEADERSHIP STUDIES**

**Leadership Studies A180 — Personal Leadership — 3 units**

Introduction to the concepts and personal skills related to leadership on campus, the community, and business. Course progresses from a study of leadership traits and models to assessment and analysis of personal skills and attitudes and ends with the development of individual student plans for leadership development. An introductory course of the leadership studies program. Lecture. **Transfer Credit: CSU.**

**Leadership Studies A200 — Organizational Leadership — 3 units**

Learn to provide leadership to business, community, and governance organizations. Lecture. **Transfer Credit: CSU.**

**LEARNING SKILLS**

**Learning Skills A001 — Basic Skills Remediation — 1-3 units**

**Prerequisite:** Completion of the California Community College Learning Disabilities Assessment. Provides individualized remedial instruction to students with learning disabilities. The program is designed to help a student improve the basic academic skills of reading, spelling, writing and arithmetic. This is an open entry/open exit course. Offered on a pass/no-pass basis only. Lab. Not degree applicable.

**LIBRARY AND MEDIA SERVICES**

**Library A100 — Library Research and Information Competency — 2 units**

This course is designed to introduce students to college level research, using traditional and electronic library resources and other online research tools effectively. Classwork emphasizes applied experience with research planning, search strategies, critical evaluation of information, and documentation of sources following standard citation styles. This course may be offered online. Lecture. **Transfer Credit: CSU, UC.**

**MANUFACTURING TECHNOLOGY**

*(Formerly Machine Technology)*

**Machine Technology A100 — Introduction to Machine Shop — 3 units**

This course familiarizes the student with the basics of machine shop safety practices, common non-precision and basic precision measuring tools, hand tools, simple blueprint reading, simple lathe, mill, and drill press operations. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A105 — Lathe — 5 units**

**Advisory:** Machine Technology A100, A120 and A121.  
A basic course in engine lathe operation to include ID and OD threading, knurling, boring, turning, facing, and cutting tapers. This course also includes exposure to the chucker lathe, tracer lathe, and the turret lathe. Safety and measurement are also emphasized. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A110 — Milling Machine — 5 units**

**Advisory:** Machine Technology A100 and A120.  
A basic course in milling machine operations to include both vertical and horizontal milling usage, theory, and usage of tools and accessories. Safety is also emphasized. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A115 — Production Machining Techniques — 2 units**

**Prerequisite:** Machine Technology A100 and A105 and A110 or permission of instructor.  
This course emphasizes production machining. Set up and running of more than one part on a variety of machines including but not limited to engine lathe, chucker lathe, ID and OD grinder, vertical mill and horizontal mill. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A120 — Blueprint Reading for Manufacturing — 3 units**

A study of blueprint reading and measuring systems used in manufacturing, including an in-depth study of the basic and advanced measuring tools used by machinists. Common blueprint formats and dimension practices will be explored. Geometric dimensioning and tolerancing will be discussed. Lecture. **Transfer Credit: CSU.**

**Machine Technology A121 — Computations for Machinists — 3 units**

A course in applied technical computations for students in machine technology and CNC studies. Topics include basic computations, shop formulas and equations, and applied trigonometry as used in the machining industries. Lecture. **Transfer Credit: CSU.**

**Machine Technology A122 Machine Shop Inspection — 1.5 units**

**Advisory: Machine Technology A120.**  
This course provides a basic understanding of the purpose and procedures for verifying the dimensional properties of manufactured parts. Students will train and practice using appropriate inspection equipment. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A125 — Computerized Numerical Control Machine Operation — 3 units**

**Advisory:** Machine Technology A105 and A110.  
A basic course in the operation of a computerized numerically controlled lathes and mills, including machine functions, tooling setup, reading machine language, part setup, and machine manipulation. Includes production of parts on both lathes and mills. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A126 — CNC Operation 2 — 2 units**

**Advisory:** Machine Technology A125 or instructor approval.  
Students will learn advanced features of state-of-the-art CNC lathes and mills, make their own fixtures, write the necessary programs, and produce the parts on CNC machines. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A130 — Introduction to Computerized Numerical Control and Manual Programming — 3 units**

**Advisory:** Machine Technology A105 and A110 or approval of instructor.  
A basic course in computerized numerical control of machine tools. Types of control systems, capabilities, and the different machine languages are examined. Elementary parts programming in two-axis systems, including all steps necessary to complete a part on both CNC lathes and mills. Lecture. **Transfer Credit: CSU.**



**Machine Technology A133 — CNC Programming-Mastercam 1 — 3 units**

**Advisory:** Computer and High Technology A100 or Computer Information Systems A100 or Machine Technology A130.

Students will receive hands-on training in the use of Mastercam CNC programming software. The basics of two-dimensional part programming, including geometry development, milling, drilling, tapping, pocketing, and more will be explored. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A134 — CNC Programming-Mastercam 2 — 3 units**

**Prerequisite:** Machine Technology A133.

Advanced CNC programming using Mastercam to program CNC machines. Instruction emphasizes complex cutter movement and surfacing. 54 hours lecture, 18 hours laboratory. **Transfer Credit: CSU.**

**Machine Technology A141 — Mastercam Lathe — 1.5 units**

**Prerequisite:** Machine Technology A133.

A course designed for students who have completed the basic Mastercam class, Machine Technology A133, and wish to have concentrated instruction on CNC lathe programming on lathe only. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A142 — Mastercam Solids — 2 units**

**Prerequisite:** Machine Technology A133.

An intermediate course in CNC programming using the solids feature of Mastercam. This course will introduce the student to solid modeling creation, Boolean addition and subtraction, as well as filleting, chamfering, and the machining of solids models. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A146 - Machining with MasterCAM - 1.5 Units**

An intermediate course in manufacturing with vertical machining centers using MasterCAM to develop programs for the purpose of creating metal parts. Basic 2D toolpaths as well as advanced 3D toolpath techniques will be discussed and created. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A150 — Tool and Cutter Grinding — 2.5 units**

**Advisory:** Machine Technology A100.

A basic course in the sharpening of common cutting tools such as drills, reamers, countersinks, counter bores, and end mills. Emphasis is on the tool and cutter grinder, but several other types of sharpening machines will be included. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A152 - Introduction to SolidWorks — 3 Units**

The fundamentals of computer-aided design and drafting using SolidWorks software. Application of SolidWorks in creating manufacturing models will be covered. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A158 - Additive Manufacturing/3D Printing — .5 unit**

Additive Manufacturing deals with aspects of additive, subtractive, and joining processes to form three-dimensional parts with applications ranging from prototyping to production. Additive manufacturing processes directly from computer-aided-design (CAD) models. In this course, students will learn about a variety of AM and other manufacturing technologies, their advantages and disadvantages for producing both prototypes and functional production quality parts. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A175 — Dimensioning and Tolerancing — 3 units**

**Advisory:** Machine Technology A120.

A course in reading and using Reference (SME Y-14.5-1994) standards for geometric dimensioning and tolerancing. Lecture. **Transfer Credit: CSU.**

**Machine Technology A190 — Elementary Metallurgy — 2 units**

An elementary course describing the relationship between microstructure, composition, heat, and mechanical treatment and physical properties of metal and alloys; their relationship to design and machining. Lecture. **Transfer Credit: CSU.**

**Machine Technology A195 — Manufacturing Processes — 3 units**

A study of engineering materials and manufacturing processes from the viewpoint of the machinist, draftsman, and designer. Course discusses the problems of material selection coupled with economical manufacturing methods. Lecture. **Transfer Credit: CSU.**

**Machine Technology A199 — Current Topics in Machine Technology — 1-4 units**

Current issues in the field of Manufacturing Technology, rotating through a variety of topics, such as inspection, quality control, lean manufacturing, rapid prototype, materials, and other topics related to manufacturing. Lecture, Lab. **Transfer Credit: CSU.**

**Machine Technology A200 — Tooling — 2.5 units**

**Advisory:** Machine Technology A100, A105, A110, and A120.

A basic course in the making of jigs, fixtures, and molds. Lecture, Lab. **Transfer Credit: CSU.**

**MANAGEMENT****Management A100 — Applied Management for Public and Private Organizations — 3 units**

An introduction to the tools, practices, policies, and concepts of management in modern organizations. Emphasis will be on management, the functions of planning, organizing, leading, and controlling, communication, decision-making, and the manager's role as a leader in organizational change. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Management A115 — Human Relations and Supervision — 3 units**

A behavior science approach to human relations in business with special emphasis on developing a student's leadership qualities, understanding, personal characteristics, and attitudes desirable for advancement to greater responsibilities in business management. Designed for on-the-job trainees or mid-management trainees who are seeking further insights in dealing with co-workers and management. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Management A239 — Professional Communication — 3 units**

Study of communication functions, choices, and roles for professionals in business. Practice in using verbal, nonverbal, and writing skills to communicate one-on-one, electronically, and in groups. Same as Business A239. Students completing Management A239 may not receive credit for Business A239. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**MARINE ACTIVITIES****Marine Activities A136 — Introduction to Sailing — 1 unit**

*Formerly Marine Activities A147*

**Prerequisite:** Ability to swim 50 yards and tread water for five minutes. This prerequisite will be validated in class during the first week of the course.

Introduces the novice to the fundamentals of sailing through dockside lectures and hands-on experience in Lido 14 dinghies. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as Kinesiology A136. Students completing Marine Activities A136 may not receive credit for Kinesiology A136. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Marine Activities A137 — Intermediate Sailing - Introduction to Keel Boats — 1 unit**

*Formerly Marine Activities A148*

**Prerequisite:** Marine Activity A136 or Kinesiology A136 and the ability to swim 50 yards and tread water for five minutes. Basic sailing ability. This prerequisite will be validated in class during the first week of the course.

Introduces the intermediate sailor to the fundamentals of sailing through dockside lectures and hands-on experience in Shields 30 sloops. Points of sail, basic terminology, tacking, jibing, theory, and safety are emphasized. Same as Kinesiology A137. Students completing Marine Activities A137 may not receive credit for Kinesiology A137. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Marine Activities A138 — Introduction to Ocean Sailing — 1 unit**

*Formerly Marine Activities A149*

**Prerequisite:** Ability to swim 50 yards and tread water for five minutes. Knowledge of basic sailing principles. This prerequisite will be validated in class during the first week of the course.

Introduces the fundamentals of ocean sailing through dockside lectures and hands-on experience aboard large sailing vessels. Sail handling, winch operation, steering, reefing, and line handling are emphasized. Same as Kinesiology A138. Students completing Marine Activities A138 may not receive credit for Kinesiology A138. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Marine Activities A139 — Kayaking — .5-1.5 units**

*Formerly Marine Activities A160*

**Prerequisite:** Students must be able to swim 100 yards and tread water for five minutes. This prerequisite will be validated in class during the first week of the course.

Designed to teach the fundamental kayaking techniques needed to become a safe and effective kayaker. There will be a fee for use of equipment and use of the off-campus facility. Same as Kinesiology A139. Students completing Marine Activities A139 may not receive credit for Kinesiology A139. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Marine Activities A140 — Outrigger Canoeing — .5-1.5 units**

*Formerly Marine Activities A159*

**Prerequisite:** Ability to swim 100 yards and tread water for five minutes. This prerequisite will be validated in class during the first week of the course.

Designed to teach the fundamental outrigger canoeing techniques needed to become a safe and effective paddler. There will be a fee for use of equipment and use of the off-campus facility. Same as Kinesiology A140. Students completing Marine Activities A140 may not receive credit for Kinesiology A140. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Marine Activities A150 — Coastal Navigation — 3 units**

Starting with the basics of navigation, students will be able to interpret charts, plot positions and courses, utilize navigational publications, and determine the effects of tides and currents relating to coastal piloting. Passage planning and boating safety legal requirements will be included. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Activities A151 — Maritime Industry — 2 units**

Students will learn about marine industry careers, maritime terminology, types of vessels and vessel protocol. Job skills and career paths for the marine industry are covered. Personal conduct, customer service skills, resume writing and interviewing skills are included to improve employment opportunities. This is a required course of the Professional Mariner Program. A facility fee will be charged for field trips. Lecture. **Transfer Credit: CSU.**

**Marine Activities A152 — Boat Handling and Seamanship — 3 units**

**Prerequisite:** Student must be able to swim 50 yards, tread water for 10 minutes.

Students learn safe boating practices and regulations. Practical training while operating small motor boats includes docking procedures, underway maneuvering, anchoring and overboard rescue drills. Time on the water provides experience in crew teamwork, standing watch, maintaining a lookout and general seamanship. This is a required course of the Professional Mariner Program. Prerequisites will be validated in class during the first week of the course. A facility fee will be charged. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Activities A153 — Marine Basic Safety Training — 4 units**

**Prerequisite:** Marine Activities A151 or concurrent enrollment.

This course is the basic safety training (BST) as specified by the U.S. Coast Guard (USCG). Basic firefighting, personal survival, personal safety, social responsibility, and first aid in marine situations are covered in this hands-on program. Students with satisfactory level of completion will be qualified for First Aid and CPR cards and Certificates of Completion for STCW-95 compliance. This is a required course for the Professional Mariner Program. An optional facility fee will be paid to a Fire Training Facility. A \$30 Certificate fee will be paid at Bursar's Office upon successful completion of all USCG evaluations. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Activities A154 — Yachtkeeping and Engine Maintenance — 2 units**

This course offers hands-on experience in Yachtkeeping; cleaning interior & exterior surfaces. Students will learn the practical operation and routine maintenance of mechanical systems aboard vessels, diesel inboard engines and gasoline outboard engines. Skills practiced include painting, varnishing and routine engine maintenance. This is a required course of the Professional Mariner Program. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Activities A156 — Maritime Environment — 2 units**

Students will learn about the systems that drive global weather patterns and conditions commonly found along major shipping routes as well as hubs of recreational yachting. Global and regional physical oceanography will be covered as it relates to navigational challenges to the mariner. Understanding oceanography and weather will aid the student in understanding pollution regulations and the responsibilities of the mariner to the environment in which he or she works. This is a required course of the Professional Mariner Program. A facility fee will be charged for field trips. Lecture. **Transfer Credit: CSU.**

**Marine Activities A157 — Radar Observer — 2 units**

**Prerequisite:** Professional Mariner Level 1 Certificate of Achievement or higher.

Students will learn fundamentals of marine Radar, its uses, limitations, and how to interpret data from a radar system. Primary focuses will be on Radar Navigation and Collision avoidance. Students with satisfactory level of completion will be qualified for a Certificate of Completion for U.S. Coast Guard Radar Observer license endorsement, establishing competency in the operation and utilization of marine radar equipment. This endorsement may be added to any U.S. Coast Guard Deck Officer License. Lecture. **Transfer Credit: CSU.**

**Marine Activities A200 – Professional Mariner Internship – 2 Units**

**Prerequisite:** Marine Activities A150, or A151, or A152, or A153, or A155

**Co-requisite:** Marine Activities A201.

A supervised internship related to classroom-based learning at a maritime related work site. This course is designed as a supervised internship course for the Professional Mariner student. The student will gain experience in a marine related position that bridges classroom based learning with career goals. This 120 hour unpaid or 150 hour paid work experience course is designed to assist students to acquire career awareness, work habits, attitudes and skills for the professional mariner program. Credit for occupational work experience may be accrued at the rate of one to 8 units per semester for a total of sixteen units. Additionally, this course is for 2 units and students must work 75 paid hours or 60 non-paid hours per unit earned. **Transfer Credit: CSU.**

**Marine Activities A201 - Professional Mariner Lecture — 1 units**

**Co-requisite:** Marine Activities A200.

This course provides instructor-guided preparation related to classroom-based learning at a maritime-related work site. This course is designed as a supplement to the supervised internship course for the Professional Mariner student. **Transfer Credit: CSU.**

**MARINE SCIENCE**

**Marine Science A100 — Oceanography — 3 units**

**Advisory:** English A098 or English as a Second Language A099.

An orientation to the marine sciences including considerations of physical and chemical properties of the sea, the sea-air interface, the biology of the sea, the geology of the ocean basins, the sea as a physical, chemical, biological and recreational resource, and the obligation of mankind to control further contamination of the environment. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Marine Science A100H — Honors Oceanography — 3 units**

**Advisory:** English A098 or English as a Second Language A099.

An orientation to the marine sciences, including considerations of physical and chemical properties of the sea, the sea-air interface, the biology of the sea, the geology of the ocean basins, the sea as a physical, chemical, biological and recreational resource, and the obligations of mankind to control further contamination of the environment. Lecture. **Transfer Credit: CSU, UC.**

**Marine Science A100L — Oceanography Laboratory — 1 unit**

**Prerequisite:** Marine Science A100 or concurrent enrollment. If student drops from Marine Science A100, the student, on their own initiative, must also drop Marine Science A100L.

**Advisory:** English A098 or English as a Second Language A099.

An orientation to marine science research process, techniques, and equipment. Investigations of physical and chemical properties of the sea, the air/sea interface, biological taxonomy, and classification, student of longitude, latitude, other navigational elements, ocean basin geography, and geology study. Evaluation of the sea as a physical, chemical, biological, and recreational resource. Includes at least three class field trips. Lab. **Transfer Credit: CSU, UC.**

**Marine Science A100M — Honors Oceanography Laboratory — 1 unit**

**Prerequisite:** Marine Science A100 or concurrent enrollment. If student drops from Marine Science A100, the student, on their own initiative, must also drop Marine Science A100M.

**Advisory:** English A098 or English as a Second Language A099.

An orientation to marine science research process, techniques, equipment, institutions, and training/education centers. Investigations of physical and chemical properties of the sea, conditions of the air/sea/land interface, review of biological taxonomy and classification, study of longitude, latitude, ocean basin geography, and geology. Evaluation of the sea as a physical, chemical, biological, and recreational resource. Analysis of human efforts to control pollution, manage fisheries, and monitor the ocean world. Includes at least three class field trips. Lab. **Transfer Credit: CSU, UC.**

**Marine Science A120 — Marine Aquarium Science — 1 unit**

**Advisory:** English A099 or English as a Second Language A099 and Marine Science A100 or A100H.

Introduces students to the science of Aquariumology and provides experience working in a small public aquarium, under the supervision of the instructor and designated student aquarium managers. Students will learn basics of animal husbandry, disease control, aquarium water chemistry, methods of filtration, feeding, and cleaning. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Science A121 — Marine Intertidal Ecology — 1 unit**

Ecology of the marine intertidal environment of Southern California. This is a field oriented laboratory experience for non-majors. May be taken for grades or on a pass/no-pass basis. Same as Ecology A121. Students completing Marine Science A121 may not receive credit for Ecology A121. **Transfer Credit: CSU**

**Marine Science A124 — Ecology of the Gray Whale — 1 unit**

Ecology and natural history of the California Gray Whale and the Orange County Whale Watch program. Completion qualifies students as docents on whale watching boats. Field trip required. May be taken for grades or on a pass-no pass basis. Same as Ecology A124. Students completing Marine Science A124 may not receive credit for Ecology A124. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU.**

**Marine Science A130 — Husbandry of Aquatic Organisms — 1 unit**

**Prerequisite:** Marine Science A120.

**Advisory:** Marine Science A180 and A180L.

This course focuses on the husbandry of various aquatic organisms in an aquarium setting. Students will learn how to properly care for a diverse assemblage of freshwater and marine fish, invertebrates, algae, and aquatic plants. Course content will focus on common organisms' natural history, nutrition, growth, reproduction, transportation, acclimation, disease diagnosis and treatment, and community planning. Students will be required to demonstrate proper aquatic animal husbandry skills, help care for a living collection of organisms, and perform critical evaluations of procedures in the OCC Public Aquarium. Field trips to local aquariums or to collect organisms may be required to demonstrate particular concepts. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Science A140 — Aquarium Life Support Operation and Maintenance — 1 unit**

**Prerequisite:** Marine Science A120.

**Advisory:** Marine Science A180 and A180L.

This course focuses on life support operation and maintenance of aquarium water recirculation systems using a diversity of biological, mechanical, and chemical filtration equipment. Students will learn the principal designs, components, standard operating procedures, and preventative and emergency maintenance for an array of aquarium system types. Course content will emphasize the understanding and proper use of various types of life support and water transportation equipment, and how each component functions to disinfect or manipulate water quality and system characteristics. Students will be required to demonstrate proper equipment operation and maintenance protocols, identify appropriate equipment that can be used to treat hypothetical issues, apply their knowledge to help care for a living collection of organisms and perform critical evaluations of life support procedures in the OCC Aquarium. Field trips to local aquariums may be required to demonstrate particular concepts. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Science A180 — Marine Biology — 3 units**

**Advisory:** English A098 or English as a Second Language A099 and Marine Science A100 or A100H.

The life of the world's oceans including principles of cell biology as it relates to the marine situation, energy flow through living systems, the evolution of marine life, the taxonomy of marine plants and animals, an overview of marine habitats and their organisms, intertidal zonation, plankton biology, marine mammals, pollution and its relations to marine biology, and discussion of currently applicable topics. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Marine Science A180L — Marine Biology Lab — 1 unit**

**Prerequisite:** Marine Science A180, or concurrent enrollment.

**Advisory:** English A098 or English as a Second Language A099.

An exploration of the principles of marine biology using, whenever possible, living organisms in natural surroundings. Included will be plankton biology, the taxonomy and habits of common eastern Pacific marine plants and animals, aspects of intertidal zonation, analysis of fouling communities, and field trips to sea to observe marine birds and mammals. Lab. **Transfer Credit: CSU, UC.**

**Marine Science A185 — Coastal Oceanography — 3 units**

**Prerequisite:** Marine Science A100 or A100H or concurrent enrollment.

Study of the physical, chemical, geological, and biological oceanography of the coastal ocean of Southern California and northeast Pacific Ocean. May be taken for grades or on a pass/no-pass basis. This course may be taught online. Lecture. **Transfer Credit: CSU, UC.**

**Marine Science A185L — Coastal Oceanography Lab — 1 unit**

**Prerequisite:** Marine Science A100. Marine Science A185, or concurrent enrollment.

Scientific laboratory and field investigation of physical, geological and chemical oceanography related to the Southern California coastal ocean. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Marine Science A187 — Marine Mammals — 3 units**

**Advisory:** English A099 or English as a Second Language A099.

Explores the natural history, ecology, population dynamics, evolutionary history, communications, energetics, migrations, intelligence, and conservation of marine mammals – including: whales, dolphins, seals, sea lions, walrus, sea cows, sea otters, and polar bears. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Marine Science A188 — Marine Mammal Field Studies — 1 unit**

**Advisory:** Marine Science A187.

This course offers students the opportunity to survey the ecology, behavior, and life history of various marine mammal groups in a field based setting. In-class meetings will orient students to the specific marine mammal group and the field site that they will explore. The course includes a multi-day field excursion to various locales of ecological interest and may involve camping in primitive wilderness environments. Topics include evolution, human interaction, biology, ecology, life history and conservation of marine mammals. Specific content will vary depending on region and marine mammal life present. Lecture, Lab. **Transfer Credit: CSU.**

**Marine Science A220 — Practical Experience in Aquarium Science and Management 1 — 1 unit**

**Prerequisite:** Marine Science A120.

This course introduces students to the complexity involved in working in, and actively managing a functioning public aquarium as a student aquarium manager. Students will gain hands-on experience planning, designing and maintaining exhibits in the OCC Public Aquarium. They will be responsible for helping to educate and mentor students in the marine aquarium science course and giving tours to visitors. Course content will introduce more advanced aquarium equipment and technology and the student will take an active role in identifying potential issues, evaluating possible solutions, and implementing resolutions based on an understanding of aquarium science. All prospective students will be required to perform a facility safety and proficiency demonstration to enroll in this course. Lab. **Transfer Credit: CSU.**

**Marine Science A221 — Practical Experience in Aquarium Science and Management 2 — 1 unit**

**Prerequisite:** Marine Science A220.

This course will expand and develop student skill sets as a student aquarium manager and mentor. Student managers will apply their experience and knowledge of marine aquarium science and take additional responsibility in aquarium planning, maintenance and coordination of the aquarium. Students will learn about a variety of topics ranging from water chemistry to animal husbandry in greater scientific detail and take greater levels of responsibility in actively managing the aquarium facilities. Lab. **Transfer Credit: CSU.**

**Marine Science A222 — Practical Experience in Aquarium Science and Management 3 — 1 unit**

**Prerequisite:** Marine Science A221.

This course introduces students to the responsibility and understanding involved in being a senior student aquarium manager. Students will take an active role in researching species interactions and husbandry, and focus on identifying potential issues that they must then address proactively. They will also be responsible for not only mentoring aquarium science students, but also newer aquarium managers to help train them proper procedures and techniques based on the best available scientific knowledge. Lab. **Transfer Credit: CSU.**

**Marine Science A223 — Practical Experience in Aquarium Science and Management 4 — 1 unit**

**Prerequisite:** Marine Science A222.

This course is the last class in the aquarium science and management series and focuses on preparing aquarium managers to take on leadership roles in off-campus businesses and organizations involved in aquarium science. Students will broaden their understanding of increasingly-complex aquarium science husbandry techniques and will be responsible for helping the course instructor to plan and implement longer-term facility and educational goals. Constructively mentoring junior aquarium managers and the development of leadership and communication skills will be a central focus of this course. Lab. **Transfer Credit: CSU.**

**MARKETING**

**Marketing A100 — Introduction to Marketing — 3 units**

A survey of the major marketing topics of interest to marketing students and practitioners. Studies include: major institutions involved in the marketing process, major tools used by marketers, and environmental forces affecting the marketing process. Emphasis is placed on effective marketing strategy planning. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Marketing A110 — Professional Selling — 3 units**

Theory and practices of the relational selling process. Covers the basic steps in organizing, developing, and preparing a professional sales presentation. Builds self-confidence and competence in selling oneself as well as products, service, and ideas. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Marketing A130 — Principles of Advertising — 3 units**

Examines the major components of modern advertising and promotion. Key areas explored include the social and economic role of advertising, controls over advertising, planning of the campaign, and the role of research, media playing, advertising strategy and coordination with other elements of marketing. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Marketing A142 — Direct Marketing — 1.5 units**

Selling to consumers by mail, catalogs, telemarketing, consumer publications, broadcast media, and business-to-business direct marketing. Includes planning, segmentation, budgeting, creating the message, and the legal environment. Lecture. **Transfer Credit: CSU.**

**Marketing A150 — International Marketing — 3 units**

A survey of major international marketing topics of interest to international business students and practitioners. Studies include: tools used by global marketers; institutions and environmental forces impacting the marketing process worldwide; and effective strategic planning for global markets. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Marketing A150H — International Marketing Honors — 3 units**

A survey of major international marketing topics of interest to international business students and practitioners. Studies include: tools used by global marketers; institutions and environmental forces impacting the marketing process worldwide; and effective strategic planning for global markets. Lecture. **Transfer Credit: CSU.**

**Marketing A200 — Retail E-Commerce Management — 3 units**

**Advisory:** Mathematics A010 or Business A125.

Study of the operations of an established E-Commerce retail business. Concepts of merchandising include buying, pricing, stock control, credit, credit control, omni-channel strategies, logistics, layout, customer service, marketing, and analytical software. Emphasis is on creation and management of an E-Commerce store. Lecture. **Transfer Credit: CSU.**

**Marketing A220 — Retail Buying — 3 units**

**Advisory:** Mathematics A010 or Business A125.

A study of the principles and techniques of buying for retail organizations, including merchandise selection, planning, control, and use and interpretation of merchandise management reports. Lecture. **Transfer Credit: CSU.**

**MATHEMATICS**

Competence in arithmetic is expected for students enrolling in all mathematics courses. The passing of a placement test is required in most mathematics courses. A grade of 'C' or better is required in prerequisite courses.

Students who have had a lapse in the mathematics sequence of two years or more are strongly advised to retake the previous mathematics course (excluding plane geometry) before continuing in the mathematics sequence.

In all mathematics courses except Mathematics A021 and Business A125, students other than majors in mathematics, engineering and physical sciences will have the option of pass/no pass or grade. Credit in mathematics courses means 'C' performance or better.

Courses marked with an \* are offered in both conventional and self-paced sections. In self-paced sections, students may start anytime and complete at their own rate.

**\*Mathematics A005 — Practical Math — 3 units**

**Prerequisite:** Math placement test required.

Practical math involves the fundamental operations of arithmetic on integers, fractions, decimals and percents (without calculators), and consumer applications. The course includes introductions to ratio and proportion, measurement, geometry, and statistics. Applied problems will be emphasized throughout the course. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**\*Mathematics A008 — Pre-Algebra — 3 units**

**Prerequisite:** Math A005 or qualifying placement score.

Pre-algebra will introduce basic operations of algebra including signed numbers, exponents, first degree equations, special products, applied problems, factoring, rational expressions, radicals, proportions, and the rectangular coordinate system. These topics will utilize the student's working knowledge of decimals, fractions, and percentages. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**\*Mathematics A010 — Elementary Algebra — 4 units**

**Prerequisite:** Math A008 or qualifying placement score.

Operations of algebra including first degree equations and inequalities, exponents, special products and factoring, rational expressions, graphing, radicals, and quadratic equations will be presented. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**\*Mathematics A020 — Plane Geometry — 3 units**

**Prerequisite:** Math A010 or qualifying placement score.

Definition of basic geometry terms: point, line, plane, angle. Postulates and theorems involving angles, congruence, lines, circles, general polygons, triangles, inequities, and solid geometry will be covered. May be taken for grades or on a pass/no-pass basis. Lecture. Not degree applicable.

**\*Mathematics A030 — Intermediate Algebra — 4 units**

**Prerequisite:** Math A010 or qualifying placement score.

Topics covered will be functions, linear and quadratic equations, curve sketching, exponents, rational expressions, rational exponents, logarithms, variations, systems of equations, determinants, Cramer's Rule, and conic sections. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture.

**\*Mathematics A045 — Combined Elementary and Intermediate Algebra — 6 units**

**Prerequisite:** Math A008 or qualifying placement score.

This course includes all the topics that are studied in elementary algebra and intermediate algebra. Thus starting at the elementary level, each topic is covered up to the level of intermediate algebra. Topics include, introduction and advance operations with algebraic expressions, linear graphing and factoring. Functions, linear and quadratic equations, curve sketching, exponents, rational expressions, rational exponents, logarithms, variations, systems of equations, and conic sections. A minimum of five arranged hours of supplemental learning per semester in the Success Center is suggested. May be taken for grades or on a pass/no-pass basis. Lecture.

**Mathematics A070 — Intermediate Algebra and Trigonometry — 5 units**

**Prerequisite:** Math A010 or qualifying placement score.

**Advisory:** Mathematics A020.

Topics covered will be functions, linear and quadratic equations, curve sketching, exponents, rational expressions, rational exponents, logarithms, systems of equations, determinants, Cramer's Rule, conic sections, trigonometric and inverse trigonometric functions, graphs of trigonometric functions, identities and trigonometric equations, solutions for triangles, and complex numbers. This is an intense and fast-paced course designed for students intending to continue into precalculus. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**Mathematics A090 — Support for Liberal Arts Mathematics — 2 units**

**Co-requisite:** Math A100.

A concurrent support course for Math A100, Liberal Arts Mathematics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents and fractions; selected algebraic topics essential to Liberal Arts Mathematics; the graph of a line; and problem-solving strategies. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Mathematics A091 — Support for College Algebra — 2 units**

**Co-requisite:** Math A115.

A concurrent support course for Math A115, College Algebra, designed to review prerequisite skills necessary for success. Topics include operations with real numbers, an introduction to polynomial, operations with rational and radical expressions, an introduction to polynomials, and solutions to linear equations and inequalities. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Mathematics A092 — Support for Trigonometry — 2 units**

**Co-requisite:** Math A120.

A concurrent support course designed to review prerequisite topics necessary for success in Math A120, Trigonometry, covering operations with real numbers, relations and functions, systems of linear equations, factoring, rational expressions, quadratic equations, conic sections, and basic geometry. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Mathematics A096 — Support for Introduction to Statistics — 2 units**

**Co-requisite:** Math A160.

A concurrent support course for Math A160, Introduction to Statistics, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; percents, ratios and proportions; selected algebraic topics essential to statistics; the graph of a line; and problem-solving strategies. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Mathematics A100 — Liberal Arts Mathematics — 3 units**

**Prerequisite:** Math A030 or qualifying placement score.

Designed for students whose majors do not require calculus, this applications-oriented course emphasizes management science optimization techniques, introductory descriptive and inferential statistics, weighted voting systems analysis, game theory principles, decision-making strategies, growth trends, and pattern analysis. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A103 — Statistics for Elementary Teachers — 3 units**

**Prerequisite:** Math A030 or qualifying placement score.

Designed for prospective teachers, this course is an activity-based exploration of statistics aligned with the California State Mathematics Standards for K-12. Topics include data representation and analysis, randomization and sampling, measures of central tendency and variability, hypothesizing and statistical inference. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Mathematics A104 — Mathematics for Elementary Teachers — 3 units**

**Prerequisite:** Math A030 or qualifying placement score.

**Advisory:** Math A020.

Designed for prospective elementary school teachers, the course emphasizes mathematical structure and problem solving techniques associated with the real number system, elementary number theory, ratio and proportion, set theory, elementary logic, and percent. Instructional delivery design techniques and technological applications will be explored. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A115 — College Algebra — 4 units**

*Formerly Mathematics A130*

**Prerequisite:** Math A030 or qualifying placement score.

Topics include linear, quadratic, rational, logarithmic, and exponential functions and their graphs, systems of equations, matrices, sequences, series, and basic combinations. This course prepares students to enter Math A140 but does not provide sufficient preparation to enter Math A180. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**\*Mathematics A120 — Trigonometry — 3 units**

**Prerequisite:** Math A030 or qualifying placement score.

**Advisory:** Mathematics A020.

Topics covered will be trigonometric (circular) and inverse trigonometric functions, graphs of trigonometric functions, identities and conditional equations, solutions for triangles, vectors, complex numbers and applications. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Mathematics A140 — Business Calculus — 4 units**

*Formerly Mathematics A157*

**Prerequisite:** Math A115 or A155 or A170 or qualifying placement score.

Analytic geometry and limits; introduction to differential and integral calculus with applications to include polynomial, rational, exponential and logarithmic functions and their graphs. Multivariate calculus to include partial differentiation and multiple integration. Introduction to the calculus of probability with applications. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A155 — Finite Mathematics with Applications — 4 units**

*Formerly Mathematics A154*

**Prerequisite:** Math A030 or qualifying placement score.

Mathematical models, properties of sets, functions, elementary curve fitting, finance, matrix operations, linear programming by the graphic and simplex methods, Markov matrices, elementary probability, and game theory. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A160 — Introduction to Statistics — 4 units**

**Prerequisite:** Math A030 or qualifying placement score.

A general education course covering descriptive statistics, probability, binomial and normal distributions, variation, linear regression, correlation and hypothesis testing. Applications taken from natural sciences, social sciences, business, and everyday life. Students completing Mathematics A160 may petition for credit for Psychology A160. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MATH 110.**

**Mathematics A170 — Precalculus — 4 units**

**Prerequisite:** Math A070 or A120 or qualifying placement score.

The course includes structure and properties of number systems; applications, solution and graphs of polynomials, rational, exponential, logarithmic and trigonometric functions; matrices, sequences and series; analytic geometry. Prepares students for Mathematics A180. This course may also be taken online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A180 — Calculus 1 — 4 units**

**Prerequisite:** Math A170 or qualifying placement score.

This is the first course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include limits, derivatives of algebraic and transcendental functions, applications of derivatives, indefinite integrals, definite integrals, the Fundamental Theorem of Calculus, and applications of integration. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MATH 210.**

**Mathematics A180H — Honors Calculus 1 — 4 units**

**Prerequisite:** Math A170 or qualifying placement score.

This is the first course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include limits, derivatives of algebraic and transcendental functions, applications of derivatives, indefinite integrals, definite integrals, the Fundamental Theorem of Calculus, and applications of integration. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MATH 210.**

**Mathematics A182H — Honors Calculus 1 and 2 — 5 units**

**Prerequisite:** Math A140 or A180 or A180H or AP Calculus AB exam with a score of 3 or higher or qualifying placement score.

An in-depth honors level study of elementary differential and integral calculus which includes exponential, logarithmic, and trigonometric functions, techniques of integrations, sequences and series, and applications. Combines content of Math A180 and Math A185 with emphasis on theory and challenging problems in a fast-paced course for well-prepared students with previous calculus experience. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A185 — Calculus 2 — 4 units**

**Prerequisite:** Math A180 or A180H or qualifying placement score.

This is the second course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include techniques and some applications of integration, calculus applied to parametric curves and polar curves, analytic geometry, sequences, series, and an introduction to differential equations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MATH 220.**

**Mathematics A185H — Honors Calculus 2 — 4 units**

**Prerequisite:** Math A180 or A180H or qualifying placement score.

This is the second course in the calculus sequence. It satisfies the sequence for majors in mathematics, science, or engineering. Topics include techniques and some applications of integration, calculus applied to parametric curves and polar curves, analytic geometry, sequences, series, and an introduction to differential equations. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A220 — Introduction to Symbolic Logic — 3 units**

Translate simple, quantified, and multiple quantified English sentences to symbolic form. Determine the validity of arguments containing simple sentences and sentences involving single quantification. Prove arguments composed of simple sentences, sentences involving single and multiple quantification. Same as Philosophy A220. Students completing Math A220 may not receive credit for Philosophy A220. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A230 — Introduction to Discrete Mathematics — 5 units**

**Prerequisite:** Math A182H or A185 or A185H or qualifying placement score.

Introduction to logic, sets, relations, algorithms, number theory, combinatorics, graphs, trees, and Boolean algebra. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A235 — Applied Linear Algebra — 3 units**

**Prerequisite:** Math A185 or A185H or A182H.

Introduction to linear algebra, classical linear algebra problems, and applications to computer science and related technologies including matrices, determinants, linear spaces, linear transformations, and eigenvalues. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A280 — Calculus 3 — 4 units**

**Prerequisite:** Math A182H or A185 or A185H or qualifying placement score.

Multivariable calculus including vectors, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, calculus of vector fields, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A280H — Honors Calculus 3 — 5 units**

**Prerequisite:** Math A182H or A185 or A185H or qualifying placement score.

Mathematics A280 in a regular section with an additional one hour per week of honors material. Multivariable calculus including vectors, vector-valued functions, functions of several variables, partial derivatives, multiple integrals, calculus of vector fields, Green's Theorem, Stokes' Theorem, and the Divergence Theorem. Selected introductory topics in differential geometry will be discussed in the honors-specific portion of this course. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A285 — Introduction to Linear Algebra and Differential Equations — 4 units**

**Prerequisite:** Math A182H or A185 or A185H or qualifying placement score.

Introduction to linear algebra and differential equations. Topics include matrices, determinants, vector spaces, linear systems of equations, inner product spaces, first and second order differential equations, systems of differential equations, and Laplace transforms. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A285H — Honors Introduction to Linear Algebra and Differential Equations — 5 units**

**Prerequisite:** Math A182H or A185 or A185H or qualifying placement score.

Introduction to linear algebra and differential equations. Topics include matrices, determinants, vector spaces, linear systems of equations, inner product spaces, first and second order differential equations, systems of differential equations, and Laplace transforms. Additional honors topics include Jacobian matrices, properties of  $R^3$  and simple abstract topological spaces, and some exterior algebra. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Mathematics A290H — Honors Introduction to Tensors and Calculus on Manifolds — 5 units**

**Prerequisite:** Math A280 or A280H and A285 or A285H.

Introductory study of elementary tensor algebra and calculus, differential and integral calculus in higher dimensions, differential forms, and calculus on manifolds. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**MEDICAL ASSISTING**

**Medical Assisting A150 — Medical Assisting Core — 3 units**

**Prerequisite:** Allied Health A111, and Biology A221 or A220 and A225

**Co-requisite:** Allied Health A115.

Introduction to Medical Assisting, Student Success, Safety in the Health Care Workplace, Intro to Computers and Electronic Health Records, Medical Office Emergencies, Ethics and Law, Psychology for the Medical Assistant, Basics of Patient Education, Communication/Multiculturalism in Healthcare, and Nutrition Basics for the Medical Assistant. Lecture. **Transfer Credit: CSU.**

**Medical Assisting A175 — Administrative Medical Assisting Procedures — 3 units**

**Co-requisite:** Medical Assisting A150.

Introduction to the role of the administrative medical assistant in health care delivery. Lecture. **Transfer Credit: CSU.**

**Medical Assisting A181 — Clinical Medical Assisting 1 — 5 units**

**Co-requisite:** Medical Assisting A150.

Theory and techniques in basic microbiology; performing blood and urine collection; CLIA waived lab test performance; sterilization principals and assisting with minor surgery; medication preparation and administration, including parenteral medications; assisting with general and specialty physical examinations in an outpatient setting. Lecture, Lab. **Transfer Credit: CSU.**

**Medical Assisting A205 — Administering Medical Assisting 2 — 5 units**

**Prerequisite:** Medical Assisting A175.

Introduction to the skills required to perform medical office bookkeeping, accounting (accounts receivable and payable), payroll, and banking procedures. Insurance coding and claims preparation used in the medical office setting and facility management skills to facilitate the ability to engage in marketing and community service. Lecture. **Transfer Credit: CSU.**

**Medical Assisting A281 — Medical Assisting Clinical Experience — 3.5 units**

**Prerequisite:** Medical Assisting A181.

Supervised clinical medical assisting experience in a medical office, clinic, or related outpatient facility. One-third hour lecture, 10.6 hours clinical. **Transfer Credit: CSU.**

**Medical Assisting A289 — Clinical Medical Assisting 2 Specialty Procedures — .5 units**

**Prerequisite:** Medical Assisting A181.

Basic concepts of preparing patients for special diagnostic tests and techniques in the medical office, including pulmonary function and electrocardiography. Lecture, Lab. **Transfer Credit: CSU.**

## MUSIC

**Music A100 — History and Appreciation of Music — 3 units**

A survey of Western Classical Music. The students will gain an appreciation of music from the Medieval to the Modern period. The class will cover the stylistic features of musical genres from the six major historical periods of Western Music. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MUS 100.**

**Music A105 — Music from Bach Up to Rock — 3 units**

History and appreciation of Western music from the birth of opera to modern times. Listen to and discuss the development of classical masterworks including Handel's *Messiah*, Beethoven's symphonies, the operas of Mozart, Verdi, and Wagner, and Tchaikovsky's *Nutcracker*. Overview of modern music from Stravinsky and Schoenberg to the diverse multicultural origins of jazz and rock. Distinguish between various musical styles and develop aural skills that enhance personal listening enjoyment. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Music A110 — Computers in Music 1 — 3 units**  
**Formerly Music A102.**

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Music A111 — Computers in Music 2 — 3 units**  
**Prerequisite: Music A110.**

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Music A112 — Computers in Music 3 — 3 units**  
**Prerequisite: Music A111.**

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Music A113 — Computers in Music 4 — 3 units**  
**Prerequisite: Music A112.**

Designed to introduce the layman or computer professional to the rapidly evolving use of computers and related digital technology in music. Emphasis will be given to professional music software, dedicated music systems, MIDI (Musical Instrument Digital Interface) and digital audio. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Music A115 — Fundamentals of Music — 3 units**

For those with no previous music theory background. Fundamentals of music including key signatures, intervals, chords, 7th chords, and functional harmony. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Music A116 — Basic Guitar — 2 units**

**Advisory:** Students provide their own acoustic nylon or steel-string guitar.

Fundamentals of guitar, music and musicianship. Music notation, terminology, scales, key signatures and time signatures. Basic guitar chords, rhythms and fingering techniques. Beginning level classical, folk and popular guitar literature. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A120 — College Choir — 1 unit**

Open to all students interested in singing in a college choir. In addition to public performances of standard choral literature, this course includes basic vocal techniques, basic music theory, improvement of sight reading, musicianship skills, music fundamentals, and music history and appreciation as it relates to choral literature. Prerequisite training is not necessary. Lab. **Transfer Credit: CSU, UC.**

**Music A122 — Chamber Singers — 1 unit**

**Prerequisite:** Successful audition; this prerequisite will be validated in class during the first week of the course.

A select vocal ensemble which performs suitable music from all historical periods. Extensive participation in concerts on and off campus. Occasional brief section rehearsals. Schedule of performances announced at the beginning of each semester. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU. C-ID MUS 180.**

**Music A127 — Jazz Lab Ensemble — 1 unit**

**Prerequisite:** Eligibility based on successful audition.

Study and performance of modern big band jazz music. Special emphasis on ensemble skills for rehearsal and concerts. Public performances with guest artists will be scheduled during each semester. Guest jazz artists will meet and work with the group periodically. Studio, arranged. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A129 — Guitar Ensemble — 1 unit**

**Advisory:** Able to sight read standard musical notation on the guitar. Must provide own acoustic guitar.

Designed for guitarists who read standard musical notation. Rehearsal and performance of guitar ensemble literature from Renaissance to the present including music of the Baroque, Classical, Romantic and Modern eras. Students in this class will present a public concert with guest artists. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Music A132 — Wind Ensemble — 1 unit**

**Prerequisite:** Eligibility based on successful audition.

Open to advanced performers on brass, woodwind and percussion instruments. Rehearsal and performance of music from standard symphonic and wind ensemble literature. Regularly scheduled public concerts. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A133 — Orchestra — 1 unit**

**Prerequisite:** Eligibility based on successful audition.

Rehearsal and performance of music from the standard symphonic orchestral literature. Open to advanced performers of string, brass, woodwind, and percussion instruments. Regularly scheduled public concerts during the school year. Lab. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A139 — History of Rock Music — 3 units**

*Formerly Music A109*

The study of social and musical influences on rock music and the influence of rock music on society and the music industry, 1950s through modern rock. CDs, videos, computer-generated multimedia presentations. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Music A140 — Beginning Instruments — 2 units**

Elementary instruction on a selected orchestral instrument. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A141 — Piano 1 — 1 unit**

Group instruction for the beginner that develops musicianship and basic piano technique. Recommended for elementary teachers, required of music majors in many transfer schools. One-half to one hour minimum daily practice. Practice pianos available on campus. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A142 — Piano 2 — 1 unit**

**Advisory:** Music A141 or successful audition.

Continuation of Music A141 (Piano 1). Rhythms through sixteenth notes, harmonizing of folk tunes, and pieces by contemporary masters will be studied. One-half to one hour daily practice. Practice pianos available on campus. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A143 — History of Jazz — 3 units**

*Formerly Music A173*

History and development of jazz in the United States, including evolving styles and important musicians. Influence of pre 1900 popular music: (Ragtime, Blues, and Dixieland), recognition of playing styles, merging of other musical forms with the Jazz idiom, Jazz as an art form and the composer/improviser in jazz today. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Music A144 — Popular Vocal Techniques — 1.5 units**

Designed to meet the changing needs and challenges of performing currently popular singing styles including solo, group and background singing in jazz, rock, blues, country, folk and easy listening. Also covered are microphone technique, self accompaniment and popular music terminology. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Music A145 — Voice 1 — 1 unit**

This course is for beginning singers. It prepares beginning singers voice for solo and group singing by improving breathing, vocal tone, range, agility, volume, diction, health, expression, and self-confidence. Students will sing songs from musical theatre, film, folk, popular, and classical repertory, in English and students first language, memorized from printed music. One hour daily practice and attendance at one approved recital is required. A pianist accompanies classes. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A146 — Voice 2 — 1 unit**

This course is a continuation of Music A145 for singers with two years of choral experience or one semester of private lessons or voice class. It prepares for solo and group singing by improving breathing, vocal tone, range agility, volume, diction, health, expression and self-confidence at the second semester level. Sing songs from musical theatre, film, folk, popular, and classical repertory in English, Italian and students first language memorized from printed music. One hour daily practice and attendance at one approved voice recital required. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A148 — Classical Guitar 1 — 2 units**

Group instruction in basic techniques for classical guitar including tuning, correct posture, left and right hand position, and sight reading. Students are required to perform selected classical pieces from memory. Recommended for those wishing instruction in finger-style guitar. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A149 — Classical Guitar 2 — 2 units**

**Prerequisite:** Music A148 or audition.  
Continuation of Classical Guitar 1 with emphasis on advanced classical guitar performance techniques and literature. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A150 — Intermediate Band/Orchestra — 2 units**

**Prerequisite:** Music A140 or audition.  
Intermediate instruction on a selected band or orchestral instrument. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A151 — Studio Guitar 1 — 1.5 units**

**Students must bring their own guitar.**  
Group instruction in studio guitar techniques including styles such as jazz, rock, and other popular genres. Chart reading, finger style guitar, and plectrum guitar are included. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A152 — Studio Guitar 2 — 1.5 units**

**Advisory:** Music A151 or successful audition.  
Continuation of Studio Guitar 1. Group instruction in studio guitar techniques including styles such as jazz, rock, and other popular genres. Emphasis on picking technique, notes reading in positions, scales, chords, music theory, sight reading, solo and ensemble performance. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A180 — Theory 1 — 3 units**

**Co-requisite: Music A181**  
**Advisory: Music A141,** and ability to locate treble and bass clef pitches on a keyboard and name the notes.  
Notation, terminology, scales, key signatures, intervals, chords, rhythms and form. Also includes four-part writing with primary triads, seventh chord analysis, harmonization of melodies in major and minor keys. Lecture. **Transfer Credit: CSU, UC. C-ID MUS 120.**

**Music A181 — Musicianship 1 — 1 unit**

**Advisory:** Ability to locate treble and bass clef pitches on a keyboard and name the notes. This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory I through ear training, sight singing, analysis, and dictation. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID MUS 125.**

**Music A185 — Theory 2 — 3 units**

**Co-requisite:** Music A186  
**Prerequisite:** Music A180  
**Advisory:** Music A141 or A142.  
This course incorporates the concepts from Music Theory I. In addition, through guided composition and analysis, the course will include: voice leading involving four-part chorale writing; diatonic harmony; and an introduction to secondary/applied chords and modulation. May be taken for a letter grade or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MUS 130.**

**Music A186 — Musicianship 2 — 1 unit**

**Advisory:** Music A142 and A181.  
This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory 2 through ear training, sight singing, analysis, and dictation. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID MUS 135.**

**Music A187 — Sightreading Workshop — 2 units**

**Advisory:** Basic music-reading skills. Students must have a knowledge of key signatures and scales.  
A class to develop skill in sightreading rhythm and melodies. Students will learn to perform melodic and rhythmic musical phrases at sight. This course includes computer-assisted aural learning. Students should have basic music-reading skills, including knowledge of key signatures and scales. May be taken for letter grade or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Music A213 — Voice 3 — 1 unit**

**Formerly Music A244.**  
This course is the third semester continuation of Voice 2. Songs in English, Italian, German, and French, and students first language. Daily practice and review of a voice recital is required. No audition is required. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A214 — Voice 4 — 1 unit**

This course is the fourth semester continuation of Music A213. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A215 — Voice 5 — 1 unit**

This course is the fifth semester continuation of Music A214. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A216 — Voice 6 — 1 unit**

This course is the sixth semester continuation of Music A215. Songs in English, Italian, German, and French, and students first language. In-depth study of characterization and song presentation. Daily practice and review of a voice recital is required. No audition is required. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A230 — Jazz Improvisation — 1 unit**

**Prerequisite:** Eligibility based on successful audition.  
Development of the individual musician's technical tools and performing skills in jazz music improvisation. Includes usage of appropriate idiomatic forms, harmonies, scales, stylistic articulations. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A233 — Symphonic Chamber Orchestra — 1 unit**

**Prerequisite:** Eligibility based on successful audition.  
Open to advanced performers of string, brass, woodwind and percussion instruments. Rehearsal and performance of music from the standard symphonic and chamber orchestra literature. Regularly scheduled public concerts during the school year. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A234 — Studio Jazz Ensemble — 1 unit**

**Prerequisite:** Eligibility based on successful audition.  
A group of advanced instrumentalists that will discuss, write, rehearse and perform modern big band jazz music. Emphasis on a laboratory environment that will stress articulation, phrasing, improvisation, ensemble skills, and style for the professional performer. Students will have the opportunity to write, rehearse and conduct their own jazz oriented compositions. Guest jazz artists will meet and work with the group periodically. Public performances will be scheduled during the semester. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC. C-ID MUS 180.**

**Music A240 — Sophomore Recital — .5 units**

**Prerequisite:** Three semesters of Music A290 or audition.  
Assists the sophomore music student to organize, arrange and schedule recital performance to meet department and Associate in Arts degree requirements. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Music A241 — Piano 3 — 2 units**

**Prerequisite: Successful audition.**  
**Advisory:** Music A142 or successful audition.  
Early intermediate classical piano literature. Emphasis on development of technical proficiency and stylistically appropriate interpretation. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A242 — Piano 4 — 2 units**

**Prerequisite: Successful audition.**  
**Advisory:** Music A241 or successful audition.  
Intermediate/advanced classical piano literature in master class performance. Emphasis on artistic development of student performers. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A247 — Advanced Pop Vocal Techniques — 1.5 units**

**Advisory:** Music A144.  
Designed to meet the changing needs and challenges of performing currently popular singing styles including solo, group and background singing in jazz, rock, blues, country, folk, and easy listening. Also covered are basic appropriate stylistic embellishments for various pop styles as well as the jazz genre. Vocal jazz ensemble training will be a strong focus for this class, as this will prepare students for a degree in vocal jazz at other universities. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A248 — Classical Guitar 3 — 2 units**

**Prerequisite:** Music A149 or successful audition.  
Designed for the serious music student who seeks more extensive awareness in technical facility, musical literature, musicianship and self-discipline. Lecture, Lab. **Transfer Credit: CSU, UC.**



**Music A249 — Classical Guitar 4 — 2 units**

**Prerequisite:** Music A248 or audition.

Designed for the serious classical guitar student who seeks more extensive awareness in technical facility, musical literature, musicianship and self discipline. Involves ensemble performance with an emphasis on technique and sight reading. A continuation of Music A248. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A261 — Recording Techniques 1 — 3 units**

A course in recording studio techniques based upon Pro Tools HD. An introductory workshop for musicians and sound engineers who will record, edit and produce live performances in a studio environment. Included is analysis of studio acoustics, vocal and instrumental recording and mixing board characteristics. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Music A262 — Music as a Business — 2 units**

For students planning a career in the music industry including contracts, negotiations, taxes, agents, producers, club owners, contractors and managers. Guest lecturers from the industry. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Music A265 — Recording Techniques 2 — 1.5 units**

An advanced course in recording studio techniques based upon Pro Tools HD. Requires basic knowledge of studio acoustics, vocal and instrumental mic techniques, control board and off-board effects units and general studio activity. Students will develop their own recorded materials including support musicians and production staff. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU.**

**Music 267 — Piano Master Class 1 — 2 units**

**Prerequisite:** Minimum two years prior piano study, to be verified during first week of class.

Students perform works in a masterclass setting. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music 268 — Piano Master Class 2 — 2 units**

**Prerequisite:** Minimum two years prior piano study, to be verified during first week of class.

Students perform works in a masterclass setting with emphasis on the Romantic and Contemporary Styles. Historical precedents from the Beethoven's Later Period and examples from the Romantic and Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A271 — Studio Guitar 3 — 1.5 units**

**Advisory:** Music A152 or successful audition.

Continuation of Studio Guitar 1 and 2. Emphasis on linear note reading across the guitar fretboard, chord substitutions, altered chords, chordal progressions, turnarounds, music theory, chordal analysis, sight reading, ensemble and solo performance, arranging for solo guitar. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A272 — Studio Guitar 4 — 1.5 units**

**Advisory:** Music A271 or successful audition.

Continuation of Studio Guitar 1, 2 and 3. Emphasis on intermediate and advanced picking techniques, analysis of styles, history and appreciation, improvisation, arranging and performance of chordal solos for the guitar. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Music A277 — Piano Master Class 3 — 2 units**

**Advisory:** Minimum three years prior piano study, to be verified during first week of class.

Students perform works in a masterclass setting with emphasis on the Sonata-Allegro Form. Historical precedents from the late Baroque Period and examples from the Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Lecture, Lab. **Transfer Credit: CSU.**

**Music A278 — Piano Master Class 4 — 2 units**

**Advisory:** Minimum three years prior piano study, to be verified during first week of class.

Students perform works in a masterclass setting with emphasis on the Romantic and Contemporary Styles. Historical precedents from the Beethoven's Later Period and examples from the Romantic and Classical Period will be covered. Functional skills including technique, memorization, sight-reading, transposition, and ensemble playing. Lecture, Lab. **Transfer Credit: CSU.**

**Music A280 — Theory 3 — 3 units**

**Co-requisite:** Music A281

**Prerequisite:** Music A185

**Advisory:** Music A242

This course incorporates the concepts from Music Theory 2. In addition, through writing and analysis, the course will include: introduction to chromatic harmony; secondary/applied chords; modulation; borrowed chords; introduction to Neapolitan and augmented-sixth chords. May be taken for letter grade or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MUS 140.**

**Music A281 — Musicianship 3 — 1 unit**

**Advisory:** Music A186 and A240.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory 2I through ear training, sight singing, analysis, and dictation. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID MUS 145.**

**Music A285 — Theory 4 — 3 units**

**Co-requisite:** Music A286.

**Prerequisite:** Music A280.

**Advisory:** Music A242.

This course incorporates the concepts from Music Theory 2I. In addition, through writing and analysis, the course will include: post-Romantic techniques such as borrowed chords and modal mixture, chromatic mediants, Neapolitan and augmented-sixth chords, 9th, 11th and 13th chords, altered chords and dominants; and 20th century techniques such as: Impressionism, tone rows, set theory, pandiatonicism and polytonalism, meter and rhythm. May be taken for letter grade or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID MUS 150.**

**Music A286 — Musicianship 4 — 1 unit**

**Advisory:** Music A242 and A281.

This course applies and develops the rhythmic, melodic, and harmonic materials of Music Theory 4 through ear training, sight singing, analysis, and dictation. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID MUS 155.**

**Music A290 — Applied Music — .5 unit**

**Prerequisite:** Audition.

**Co-requisite:** Concurrent enrollment in an OCC music performing group.

Students will take private lessons in applied music, composition, theory, orchestration, arranging or computer music from an approved teacher. Students will participate in public performances. Students will be required to practice on campus, perform in a music performing group and attend on-campus music performances. This course may be taken four times. Arranged Lecture. **Transfer Credit: CSU, UC. C-ID MUS 160.**

**NATURAL SCIENCE**

**Natural Science A112 — Introduction to Physical Science — 4 units**

**Prerequisite:** Math A010.

An introduction to the basic physical principles that govern the universe. This course will present an overview of the general aspects of physics and chemistry including: forces, motion, energy, electricity, magnetism, heat, waves, light, the atom, acids and bases. Satisfies part of the laboratory science requirement for the Elementary Education transfer degree. Lecture, Lab. **Transfer Credit: CSU.**

**NEURODIAGNOSTIC TECHNOLOGY**

**Neurodiagnostic Technology A110 — Basic Electroencephalography — 4 units**

**Prerequisite:** Allied Health A010.

Fundamentals of EEG, including application of electrodes using the International 10/20 system, basic EEG wave forms, artifacts, and introduction to the EEG machine. Opportunity is given to perform limited EEG tests and to observe EEG labs in health care facilities. All enrollees must be accepted into either the Neurodiagnostic or Polysomnography program. Lecture, Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A115 — Advanced Electroencephalography — 4 units**

**Prerequisite:** Neurodiagnostic Technology A110, Allied Health A130.

Introduction to the abnormal electroencephalogram (EEG), maturational changes, and the basic electronic principles upon which successful electroencephalographic techniques are based. Lecture, Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A116 —  
Clinical Experience 1 — 3.5 units**

**Prerequisite:** Neurodiagnostic Technology A110 and Allied Health A115.

Beginning clinical practice of electroencephalographic testing on patients at various affiliated neurodiagnostic labs. This will include observation, application of electrodes, performance of EEG testing on clinical patients, medical record keeping, and clinical history reporting. Students must purchase a uniform for this course. Offered on a pass/no-pass basis only. Lecture, 256 hours clinical. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A117 —  
Clinical Experience 2 — 3 units**

**Prerequisite:** Neurodiagnostic Technology A115 and A116.

Continued clinical experience in Electroencephalography at a selected Neurodiagnostic Lab in an affiliated health care facility, under the direct supervision of a physician and/or EEG technologist. This clinical will build on skills attained in NDT A116, and will include performance of EEG testing on clinical patients, medical record keeping, and clinical history taking. Offered on a pass/no-pass basis only. 256 hours clinical. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A190 — Introduction  
to Neuro Anatomy and Physiology — 3 units**

**Prerequisite:** Biology A221 or A220 and A225.

An introduction to the anatomy of the central and peripheral nervous system with correlation to related symptoms and pathology as needed by a Neurodiagnostic and/or Polysomnographic technologist. Provider approved by the California Board of Registered Nursing, Provider #CEP 12655 for 54 hours. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A191 — EEG  
Record Review--Normal — 1 unit**

**Co-requisite:** Neurodiagnostic Technology A115.

Practice in electroencephalograph (EEG) record review of normal adult and pediatric patients. Technical description of normal EEG patterns. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A200 —  
Neurodiagnostic Lab Practice — .5 units**

**Prerequisite:** Neurodiagnostic Technology A110.

Application of basic technical skills to successfully record routine EEG, and EP procedures according to published ACNS guidelines. Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A280 —  
Neurologic Disorders — 3 units**

**Prerequisite:** Neurodiagnostic Technology A115 and A190.

Clinical and electroneurodiagnostic correlations to various physical conditions and disease states which are commonly dealt with in neurodiagnostic technology. Relationship of technologists to various medical specialties: neurology, neurosurgery, pathology, radiology, internal medicine, and psychiatry. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A284 —  
Introduction to Transcranial Doppler — 1 unit**

**Prerequisite:** Neurodiagnostic Technology A190.

An introduction to Transcranial Doppler (TCD) procedures and recording techniques. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A285 — Introduction  
to Nerve Conduction Velocity — 1 unit**

**Prerequisite:** Neurodiagnostic Technology A117.

An introduction to nerve conduction velocity (NCV) testing procedures and recording techniques. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A286 —  
Clinical Experience 3 — 3.5 units**

**Prerequisite:** Neurodiagnostic Technology A117.

Continued clinical experience in EEG at an affiliated health care facility under the direct supervision of an EEG technologist or physician. This clinical will build on skills attained in NDT A117. There will also be opportunities to observe and possibly perform evoked potential studies. Offered on a pass/no-pass basis only. 256 hours clinical. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A287 — EEG  
Record Review – Abnormal — 1.5 units**

**Co-requisite:** Neurodiagnostic Technology A115 and A191.

Practice in electroencephalograph (EEG) record review of neurological subjects covered in Neurodiagnostic Technology A280. Classification of abnormal EEG patterns with correlation to clinical disorders. Lecture. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A288 —  
Evoked Potentials — 4 units**

**Prerequisite:** Neurodiagnostic Technology A110 and A190.

Concepts, terminology, and techniques of Evoked Potential (EP) recording with testing modalities of visual, auditory, and somatosensory systems to be individually discussed. An overview of EP instrumentation and technical concepts. Analyze the clinical correlations of evoked potential testing and will focus on waveform analysis correlating to common neurological diseases. Lecture, Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A289 —  
Clinical Experience 4 — 2 units**

**Prerequisite:** Neurodiagnostic Technology A286 and A288.

Clinical practice in neurodiagnostic testing with an emphasis on evoked potential and more specialized neurodiagnostic testing procedures. This clinical also further develops advanced skills in electroencephalographic recording and analysis. Offered on a pass/no-pass basis only. 192 hours clinical. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A296 — Introduction  
to Intraoperative Monitoring — 2 units**

**Prerequisite:** Neurodiagnostic Technology A288.

An introduction to Intraoperative neurophysiologic monitoring recording strategies. Analysis of signal changes during an operation will be correlated with anesthetic agents, metabolic effects, and/or the effects of surgical trauma. Intraoperative monitoring scenarios will be demonstrated and practiced in the classroom laboratory. Lecture, Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A297  
— Microcomputer Applications in  
Neurodiagnostics — 2 units**

**Prerequisite:** Neurodiagnostic Technology A115. **Advisory:** Computer Information Systems A100.

Specialized computer applications in Neurodiagnostic Technology. Testing modalities of Electroencephalography, evoked potentials, epilepsy monitoring, and automated diagnostic techniques will be presented. Opportunities for hands-on use of digital equipment will be integrated into the classroom and during field trips. Lecture, Lab. **Transfer Credit: CSU.**

**Neurodiagnostic Technology A298 —  
Clinical Internship — 1 unit**

**Corequisite:** Neurodiagnostic Technology A289.

Specialized neurodiagnostic clinical internship at an affiliate hospital site. Specialized areas may include intraoperative neurophysiologic monitoring, neonatal testing, long-term epilepsy monitoring, pediatric testing, transcranial doppler studies, nerve conduction studies and others. Offered on a pass/no-pass basis only. 128 hours clinical. **Transfer Credit: CSU.**

**NUTRITION CARE**

**Nutrition Care A100 — Careers in  
Dietetics and Food Science — 1 unit**

Exploration of the fields of Dietetics and Food Science/Culinology, including trends, future projections and employment opportunities. Guest speakers and field trips to nutrition services in health care and community agencies and food manufacturing plants are included. Same as Food and Nutrition A100. Students completing Nutrition Care A100 may not receive credit for Food and Nutrition A100. Lecture, Lab. **Transfer Credit: CSU.**

**Nutrition Care A175 — Health Care  
Field Experience — 3.5 units**

**Prerequisite:** Food Service Management A150 and Food and Nutrition A170

**Co-requisite:** Nutrition Care A180.

Importance and scope of providing food and nutrition services in health care or community facilities to include clinical experience. Team concept approach and public relations will be emphasized. Students will be required to follow dress standards set by the facility in which they are working. TB clearance required. Lecture, 144 hours field experience (lab). **Transfer Credit: CSU.**

**Nutrition Care A180 — Introduction to  
Medical Nutrition Therapy — 3 units**

**Prerequisite:** Food and Nutrition A136, or A170, or Health Education A136.

The principles of nutrition as they relate to special and abnormal physical conditions and diseases and the dietary modifications necessary. Healthcare diets are studied and planned. Lecture, Lab. **Transfer Credit: CSU.**

**Nutrition Care A280 — Intermediate  
Nutrition Care — 2 units**

**Prerequisite:** Nutrition Care A180

**Co-requisite:** Nutrition Care A281.

Nutrition education principles and techniques for individual, family, and small group instruction in normal and preventive nutrition care. Consideration is given to community and cultural influences on nutrition. Lecture, Lab. **Transfer Credit: CSU.**

**Nutrition Care A281 — Supervised Practice 1 — 3.5 units****Co-requisite:** Nutrition Care A280.

Supervised clinical practice in community agencies and schools dealing with nutritional aspects of dietary evaluation, nutrition education and counseling. Students will be required to follow 180 hours clinical. **Transfer Credit: CSU.**

**Nutrition Care A285 — Advanced Nutrition Care — 3 units****Prerequisite:** Nutrition Care A281.**Co-requisite:** Nutrition Care A286.

Advanced application of knowledge and skills related to food service management and the nutrition care process in preparation for entry-level practice as dietetic technicians in health care facilities. Lecture, Lab. **Transfer Credit: CSU.**

**Nutrition Care A286 — Supervised Practice 2 — 3 units****Co-requisite:** Nutrition Care A285.

Supervised practice in food service management and nutrition care in acute medical care facility. Rotation through the various job responsibilities of the dietetic technician. Students will be required to follow dress standards set by the facility. Lecture, 180 hours clinical. **Transfer Credit: CSU.**

**PHILOSOPHY****Philosophy A100 — Introduction to Philosophy — 3 units**

A survey of the fundamental problems of philosophy: ethics and aesthetics, logic, philosophy of religion, metaphysics, persons and personal identity, freedom and/or determinism, theory of knowledge, society, and political issues. Basic questions asked about the universe and our place in it. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID PHIL 100.**

**Philosophy A115 — Philosophy of Religion — 3 units**

An examination of key issues and problems of religion, including the nature and significance of religion and religious experience, arguments for and against the existence of God, the nature of God, the problem of evil, and the relation between science and religion. Same as Religious Studies A115. Students completing Philosophy A115 may not receive credit for Religious Studies A115. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Philosophy A118 — Aesthetics/Philosophy of Art — 3 units**

A philosophical approach to a critical evaluation of works of art (literary, musical, visual). May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Philosophy A120 — Ethics — 3 units**

An introduction to ethical theories and problems. An analysis of the theories and principles on which moral judgments are based and the way these judgments are used in moral problems such as abortion, euthanasia, capital punishment, sexual equality, discrimination, censorship, and economic justice. Special attention will be given to the kinds of arguments used in ethical discussion. Same as Religious Studies A120. Students completing Philosophy A120 may not receive credit for Religious Studies A120. Lecture. **Transfer Credit: CSU, UC. C-ID PHIL 210.**

**Philosophy A125 — History of Ancient Philosophy — 3 units**

This introductory course surveys ancient philosophy. It explains the philosophical positions of the ancients, their religious attitudes, and the cultural milieu out of which ancient philosophical thought arose. Recommended for philosophy majors, historians, and those interested in the roots of modern civilization. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PHIL 130.**

**Philosophy A150 — Critical Reasoning & Writing — 3 units****Prerequisite:** English A100.

An introduction to the critical analysis and rational evaluation of argument and other forms of expression. Covers the uses of language, distinctions between deductive and inductive reasoning, and practice in detecting formal and informal fallacies. Develop tools for distinguishing between and evaluating beliefs, opinions, claims, explanations, and arguments. A strong emphasis is instruction in writing which models the critical thinking knowledge and skills examined in the course. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Philosophy A155 — Introduction to Logic — 3 units****Advisory:** English A100

An introductory general education course focusing on the use of argumentation in both ordinary and academic discourse, with a particular focus on deductive logic. Emphasis on the role of formal and informal logic in the basic skills of oral communication (speech/listening) and written communication (reading/writing.) Various deductive and inductive reasoning techniques will be identified, distinguished and evaluated for logical correctness and logical mistakes. Recommended for all humanities, social science, business and natural science majors, and for those planning to transfer to four-year colleges or universities. **Transfer Credit: CSU. C-ID PHIL 110.**

**Philosophy A165 — The Theory of Knowledge — 3 units**

A critical survey of theories of truth, knowledge and belief, perception, and related problems. An evaluation of the limits and extent of human reasoning. The survey includes the mathematic-deductive method, the problem of induction, and an assessment of the conditions of the possibility of experience. Assesses how evidence is assembled, interpreted and evaluated, and addresses what counts as a good reason to believe, i.e. the problems of justifying evidence. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Philosophy A185 — Contemporary Philosophy — 3 units**

Methods and problems of contemporary philosophy. Continental European and Anglo-American philosophy since 1900, including Logical Positivism, Ordinary Language Movements, and Pragmatism, together with European Philosophy: Phenomenology, Existentialism, Structuralism, and Post-Modernism. Problems of the self, freedom, time, choice and action, language, thought and interpretation, science, evidence, and justification. Lecture. **Transfer Credit: CSU, UC.**

**Philosophy A220 — Introduction to Symbolic Logic — 3 units**

Translate simple, quantified, and multiple quantified English sentences to symbolic form. Determine the validity of arguments containing simple sentences and sentences involving single quantification. Prove arguments composed of simple sentences, sentences involving single and multiple quantification. Same as Mathematics A220. Students completing Philosophy A220 may not receive credit for Mathematics A220. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PHIL 210.**

**PHOTOGRAPHY****Photography A100 — Basic Digital Photography — 2 units**

Designed to help the photo enthusiast increase their visual literacy, increase knowledge of the historic use of photographs in all aspects of society, and to take better pictures. A practical foundation in the use of digital cameras will be introduced, including exposure, composition, lighting, color, as well as, current methodology of image processing. A strong foundation of the historic context of photographs will be provided as a way of students learning to develop their ability to communicate through their images and to place them in context, to analyze, and evaluate photographs. Lecture, Lab. **Transfer Credit: CSU.**

**Photography A101 — Photography and Society — 3 units**

Lecture/discussion class that explores how photographs function in society, and, in turn, how society determines our visual environment. Images will be analyzed in context of the total photographic milieu: news, advertising, snapshots, art, the internet, TV, etc. Fulfills "100" elective course requirement for Photography Certificate of Achievement. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Photography A102 — Careers in Photography — 1 unit**

Introduction to careers in photography and the Photography program at Orange Coast College. Recommended to anyone interested in pursuing photography as a career goal. Lecture. **Transfer Credit: CSU.**

**Photography A110 — Photography: Theory and Practice — 3 unit**

This course focuses on the historical development, cultural significance and aesthetic experience of photography. Also included is an examination of the techniques and methods of digital photography. Students will learn camera functions and develop their ability to analyze, evaluate, and compose photographs. May be taken for grades or on a pass/no-pass basis. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Photography A120 — Introduction to Photography — 3 units**

Introduction to the processes, principles, and tools of photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography. Discussion and demonstration of basic black & white 35mm photography. Instructions in the theory and technique of camera use, processing film, and making enlargements. Emphasis on the historical development of photography and its use as a means of communication, personal expression and on the critical evaluation of student work. May be taken for a grade or on a pass-no pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Photography A127 — Darkroom For Photography Majors — 2 units**

**Prerequisite:** Photography A110, A120, or A120H, or A123.

An introduction to 35mm and medium format techniques. Topics will include; Beginning to intermediate film handling, developing, printing methods and working applications of film based equipment. This class gives the student an opportunity to explore their creative vision with the use of film based photography equipment. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A120H — Introduction to Photography Honors — 3 units**

Introduction to the processes, principles, and tools of photography. Topics include the development of technical and aesthetic skills, elements of design and composition, camera technology, materials and equipment, and contemporary trends in photography. Discussion and demonstration of basic black & white 35mm photography. Instructions in the theory and technique of camera use, processing film, and making enlargements. Emphasis on the historical development of photography and its use as a means of communication, personal expression and on the critical evaluation of student work. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Photography A122 — Personal Expression — 3 units**

**Prerequisite:** Photography A120 or Photography A123 or Photography A125.

Through making photographs, this class explores the development of ideas, and an individual point of view. Discussion of aesthetics and current trends in photography. Students may work with analog or digital media. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Photography A123 — Introduction to Digital Photography — 3 units**

Instruction in photography as a creative art, emphasizing photography as a means of communication and personal expression. Includes examination of the theory of aesthetics, composition, content, and technical elements of photography, as well as, critical evaluation of student work. Introduces DSLR camera operation and digital imaging techniques. This course is required for the Photography Certificates. May be taken for a grade or on a pass-no pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Photography A125 — Imaging with Photoshop 1 — 3 units**

**Prerequisite:** Photography A123, or concurrent enrollment.

Designed to introduce the student to DSLR cameras and photographic image processing with computers. Lectures and demonstrations of camera features, basic image manipulation, color managed digital printing, and archiving of images. May be taken for grades or on a pass/no-pass basis. Two hours lecture, four hours laboratory. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A128 — Medium and Large Format Film Capture — 2 units**

*Formerly Photography A121*

**Prerequisite:** Photography A120 or A120H.

An introduction to intermediate medium format and large format camera techniques. Topics will include; Camera movements, medium format and large format film handling, developing, printing methods, and working applications of medium and large format film based equipment. This class gives the student an opportunity to explore their creative vision with the use of film-based photography equipment. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A130 — History and Aesthetics of Still Photography — 3 units**

Provides an overview of the history of photography from 1800 to the present. The work of major practitioners is discussed, as well as lesser known figures, and the trends, movements, and artist groups that have shaped the course of the medium. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC.**

**Photography A141 — Black and White Photography Laboratory 1 — 1-2 units**

*Formerly Photography A160*

**Prerequisite:** Photography A120 or A120H.

Instruction and assistance with intermediate black & white laboratory, using 35mm, RC Papers, and camera projects. Students determine their own projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A142 — Black and White Photography Laboratory 2 — 1-2 units**

**Prerequisite:** Photography A141.

Instruction and Assistance with intermediate/advanced black & white laboratory using 120 film, fiber based paper, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at intermediate and advanced levels. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A143 — Black and White Photography Laboratory 3 — 1-2 units**

**Prerequisite:** Photography A142.

Instruction and assistance with advanced black & white laboratory, using 4x5 film, fiber based paper, a variety of different film/paper developer combinations, and camera projects. This is a workshop course intended as, but not limited to, an augmentative laboratory course for those enrolled in certificate studio/production photography classes. Students determine their own projects. Instruction is offered at advanced levels. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A152 — Photo Gallery — 2 units**

Aids students in the appreciation and critical analysis of contemporary art photography. Presentations and discussions provide background for weekly field-trips to museums and galleries in the Los Angeles area. Course content differs each semester due to the local exhibition calendar. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Photography A161 — Digital Photography Laboratory — 1-2 units**

**Prerequisite:** Photography A125.

Students requiring additional digital laboratory experience. Assistance provided with scanning and printing projects. This is a workshop course intended as an augmentative laboratory course for those enrolled in advanced digital photography classes. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A180 — Introduction to Professional Photography — 4 units**

**Prerequisite:** Photography A123.

Instruction in the basic professional techniques and the use of professional cameras and lighting stressing technical excellence in all phases. Required for photography majors entering the program. Three hours lecture, two hours laboratory, two hours arranged. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A187 — Laboratory Practices — 3 units**

**Prerequisite:** Photography 120.

Study of professional black and white photographic techniques. Emphasis on the following areas; film, developer and paper selection and testing, exposure, contrast control (zone system), advanced fine printing techniques, alterations of photographic materials through intensification and reduction, basic sensitometry and practical photochemistry. Counts towards "100" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A188 — Commercial Photography — 5 units**

**Prerequisite:** Photography A180.

Overview of the profession of photography. Study and application of the techniques of commercial photography with emphasis on tungsten, strobe and available lighting; small and large products, advertising illustration, special effects image techniques, and basic business practices. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A196 — Photo Bookworks — 3 units**

**Prerequisite:** Photography A125.

Major course projects are the production of several unique photographic books. Layout, typography, editing of photos, and makeup of a book are covered. Attention will be paid to viewing and discussing a wide range of photographic bookworks. Instruction is offered at intermediate and advanced levels. Recommended for photography majors. Counts towards "100" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A200 — Documentary Photography — 3 units**

**Prerequisite:** Photography A125.

Concepts, aesthetics and history of documentary photography. Strongly recommended for students interested in journalism, material culture and social/political issues. Students may use B&W, color or digital photography. Instruction is offered at intermediate and advanced levels. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A220 — Fashion Photography — 3 units**

**Prerequisite:** Photography A180.

Editorial and advertising fashion photography as it is practiced professionally. Previous knowledge of color materials is useful. Instruction is offered at beginning, intermediate, intermediate/advanced and advanced levels. For repeating students this becomes a contemporary issues course with course content and independent portfolio work varying according to evolutions in the field and selected area(s) of specialization. Counts toward "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A223 — Action Sports Photography — 3 units**

**Prerequisite:** Photography A180.

A course designed to address topics and skills associated with photographing in the professional Action Sports industry, for the purpose of illustrating a concept or an idea as it relates to publishing, advertising, web and social media. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A225 — Professional Digital Workflow and Color Management — 3 units**

**Prerequisite:** Photography A125 or Digital Media Arts and Design A193.

Emphasis on current techniques of advanced digital printing workflow, digital file preparation, color management and advanced digital retouching techniques. Recommended for those with an interest in commercial, editorial, or fine art work. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A230 — Photography Since 1945 — 3 units**

**Prerequisite:** Photography A130.

A critical history of photography from 1945 to the present. Works will be considered from social, political, and art historical perspectives. Will survey the work of major photographers, exhibitions, and critical writers, as well as the ever-increasing role of photography in contemporary cultural life. Counts towards "200" level elective course requirement. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Photography A241 — Business Practices for Photographers — 3 units**

**Prerequisite: Photography A180**

This course provides an introduction to basic business practices in photography. Topics include: establishing a photographic business, current pricing structures, marketing procedures, principles of accounting, calculating fixed and variable expenses, possible legal and ethical problems, general small business practices and a review of professional organizations. Helps students to identify and achieve professional photographic goals and objectives. Strongly recommended for photography majors. Counts toward "200" level elective class requirement. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Photography A260 — Art Portfolio Development 1 — 1 unit**

**Prerequisite:** Photography A180.

Faculty directed study into the history, criticism, interpretation, literature, theory, or business of art photography, not involving any lab work. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate levels. Recommended for photography majors. Must be taken for letter grade. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A261 — Art Portfolio Development 2 — 1 unit**

**Prerequisite:** Photography A120 or A123.

Faculty-directed study into the history, criticism, interpretation, literature, theory, or business of photography, not involving any lab work. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate, intermediate/advanced and advanced levels. Recommended for photography majors. Counts toward "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A262 — Commercial Portfolio Development 1 — 1 unit**

**Prerequisite:** Photography A180.

Faculty-directed study into the history, criticism, interpretation, literature, theory, or business of photography, not involving any lab work. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate, intermediate/advanced and advanced levels. Recommended for photography majors. Must be taken for letter grade only. Counts toward "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A263 — Commercial Portfolio Development 2 — 1 unit**

**Prerequisite:** Photography A262

Faculty directed in-depth study of the preparation of a professional commercial portfolio and portfolio presentation. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Must be taken for letter grade only. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A264 — Exhibition Preparation 1 — 1 unit**

**Prerequisite:** Photography A120, or A120H, or A123.

Faculty directed study into the conception, development, planning and installation of photographic exhibitions. Students work closely with faculty in the running of the photography department's three gallery spaces. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A265 — Exhibition Preparation 2 — 1 unit**

**Prerequisite:** Photography 264.

Faculty directed study into the conception, development, planning, and installation of a personal photographic exhibition. Instruction is offered at intermediate/advanced and advanced levels. Recommended for photography majors. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A266 — Marketing and Self Promotion 1 — 1 unit**

**Prerequisite:** Photography A180.

Faculty directed in-depth study of a specific area of photographic marketing and self-promotion. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Faculty directed in-depth study of a specific area of photographic marketing and self-promotion. Topic(s) and faculty chosen by the student. Instruction is offered at intermediate and intermediate/advanced levels. Recommended for photography majors. Must be taken for letter grade only. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A267 — Marketing and Self Promotion 2 — 1 unit**

**Prerequisite:** Photography A180.

Faculty directed, in depth study of the implementation and application of a created marketing and self-promotion plan. Topic(s) and faculty chosen by the student and will include, but not be limited to, branding and identity, logo design, websites, and internet marketing. Instruction is offered at advanced levels. Recommended for photography majors. Must be taken for letter grade only. Counts towards "200" level elective course requirement. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A280 — Professional Digital Techniques — 3 units**

**Prerequisite:** Photography A180.

A course on professional digital techniques for emerging digital photographers. A strong technical basis will be introduced, but primary orientation will be toward solving practical problems in professional digital photography. Areas covered will include advanced post-production practices, simulating professional working situations, and professional digital methodologies. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A282 — Professional Portraiture — 3 units**

**Prerequisite:** Photography A180.

Prepares for employment in professional portrait photography or management of a portrait photography. Includes studio lighting techniques, studio practices, and the variety of specialized services offered by a professional portrait photographers. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A283 — Art Photography — 4 units**

**Prerequisite:** Photography A125.

A critique based studio class focusing on photography as a contemporary art medium-- concepts, aesthetics and history of art photography in relation to contemporary art practice in general. Students may use black and white, color or digital photography. Instruction is offered at intermediate and advanced levels. Required for photography majors. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A285 — Wedding and Event Photography — 3 units**

**Prerequisite:** Photography A180.

**Advisory:** Photography A188 and Photography A225.

A course in professional wedding and event photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A287 — Alternative Methods — 3 units**

**Prerequisite:** Photography A180.

An intermediate to advanced course covering modern photographic techniques involved with alternative photographic processes. Technical and creative experimentation will be emphasized. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A288 — Editorial and Advertising People Photography — 3 units**

**Prerequisite:** Photography A188.

Addresses the topics and skills associated with commercial photography of people, usually on location, for the purpose of conveying a message, idea, or concept in advertising, editorial, and annual report applications. Topics include commercial and retail portraiture, concepts communicated through portraiture, location scouting and lighting. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A289 — Architectural Photography — 3 units**

**Prerequisite:** Photography A180.

A course in professional architectural photography techniques, methodology and workflow. This course is designed to prepare the student for the professional industry by introducing a high technical level. Exterior and interior architectural photography are covered with an emphasis on different light sources, perspective and color correction. Some fieldwork with instructor. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Photography A290 — Advertising Illustration Photography — 3 units**

**Prerequisite:** Photography A188.

This course is designed for the advanced photography student and professional photographers with specific interest in the commercial photography field of advertising illustration. Counts towards "200" level elective course requirement. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**PHYSICAL EDUCATION**

See *Kinesiology*

**PHYSICS**

**Physics A110 — Conceptual Physics — 3 units**

**Advisory:** Math A010 and A020.

A brief, but complete presentation of the fundamental phenomena and laws in physics, with experimental illustrations, enhancing the development of conceptual scientific thinking. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Physics A111 — Introductory Physics Laboratory — 1 unit**

**Prerequisite:** Physics A110 or concurrent enrollment.

Introductory physics laboratory for students to complement Physics 110. Not open to those who hold credit for any other college physics laboratory course. May be taken for grades or on a pass/no-pass basis. Lab. **Transfer Credit: CSU, UC.**

**Physics A120 — Algebra-Based Physics: Mechanics — 4 units**

**Prerequisite:** Math A120 or A170 or A180 or concurrent enrollment.

The first semester of a two-semester sequence (with Physics A125) covering all topics in basic physics. Requires algebra and trigonometry. Satisfies the requirements for biological sciences and technical programs except physics, chemistry, and engineering. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID PHYS 105.**

**Physics A125 — Algebra-Based Physics: Electricity, Magnetism — 4 units**

**Prerequisite:** Physics A120.

The second semester of a two-semester sequence (with Physics A120) covering all topics in basic physics. Requires algebra and trigonometry. Satisfies the requirements for biological sciences and technical programs except physics, chemistry, and engineering. May be taken for grades or on a credit no-credit basis. Lecture, Lab. **Transfer Credit: CSU, UC.C-ID PHYS 110.**

**Physics A130 — University Physics 1 (non-major) — 4 units**

**Prerequisite:** Math A182H, A185 or concurrent enrollment.

A study of general principles of mechanics, waves, and thermodynamics. Emphasis will be on Newton's three laws of motion, theory of gravity, conservation laws, laws of thermodynamics, generation and propagation of mechanical waves. The first semester of a two-semester sequence (with Physics A135) requiring calculus. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Physics A135 — University Physics 2 (non-major) — 4 units**

**Prerequisite:** Physics A130 and Math A180 and A185 or Math A182H or concurrent enrollment.

A study of general principles of electricity, electromagnetism, optics, theory of relativity, and quantum theory with applications to atoms, nuclei and elementary particles. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Physics A185 — Calculus-Based Physics: Mechanics — 4 units**

**Prerequisite:** Math A180 and Math A185, or Math A182H. Concurrent enrollment is permissible for Math A185 or Math A182H.

**Advisory:** One year of high school physics or a semester of college physics.

The Physics A185, A280, A285 sequence is required for students planning to major in physics, chemistry or engineering. Newton's laws of motion, dynamics of particles in a given force field, gravitation, conservation laws of energy, momentum, angular momentum, and the kinematics of rigid body rotation. Propagation of mechanical waves in different elastic medium, waves on the string, water waves, sound waves. Lecture, Lab. **Transfer Credit: CSU, UC.C-ID PHYS 205.**

**Physics A185H — Calculus-Based Physics: Mechanics Honors — 4 units**

**Prerequisite:** Math A180 and Math A185, or Math A182H. Concurrent enrollment is permissible for Math A185 or Math A182H.

**Advisory:** One year of high school physics or a semester of college physics.

The Physics A185, A280, A285 sequence is required for students planning to major in physics, chemistry or engineering. Newton's laws of motion, dynamics, gravitation, energy, momentum, angular momentum, the kinematics of rigid body rotation, fluids, oscillations and waves. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Physics A280 — Calculus-Based Physics: Electricity and Magnetism — 4 units**

**Prerequisite:** Physics A185 and Math A180 and A185 or Math A182H.

Continuation of Physics A185. Coulomb's law, electrostatics fields, conductors and insulators. Gauss's law and electromagnetic fields. Magnetic fields and Ampere's law. Faraday's law of induction and Maxwell's equations of electromagnetic fields. Electromagnetic energy transfer by means of cables, transmission lines and transparent media. Lecture, Lab. **Transfer Credit: CSU, UC.C-ID PHYS 210.**

**Physics A285 — Calculus-Based Physics: Modern — 4 units**

**Prerequisite:** Physics A185 with grade of 'C' or better.

Heat, Light, Modern Physics. The dynamics of the transformation of thermal energy into mechanical work, heat engines, heat pumps and refrigerators. Light laws viewed in terms of geometric optics and physical optics. The relevance of special theory of relativity to modern physics. Introduction to quantum mechanics. Lecture, Lab. **Transfer Credit: CSU, UC.C-ID PHYS 215.**

## POLITICAL SCIENCE

### Political Science A101 — Survey of Current Issues — 3 units

Survey of current issues and events in American and/or world politics. Focus will be on issues and problems of political significance, opposing viewpoints in the political realm, analysis and evaluation of arguments, and ideological and political conflict. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

### Political Science A110 — International Relations — 3 units

Introduction to international relations theory with an examination of national, international, transnational, and sub-national actors and their institutions interactions and processes as they relate to global issues. Study of the functions of power, ideology, diplomacy, international law, and organization, as well as military and economic factors. Consideration of United States, Russian, and Chinese foreign policy and prominent cold war and post-cold war problems as they illustrate concepts of international politics. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID POLS 140.**

### Political Science A180 — American Government — 3 units

An introduction to the principles and problems of government with particular emphasis on the American political system at all levels. This course satisfies the state college requirements in the Constitution of the United States, state, and local governments. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID POLS 110.**

### Political Science A180H — American Government Honors — 3 units

An introduction to the principles and problems of government with particular emphasis on the American political system at all levels. This course satisfies the state college requirements in the Constitution of the United States, state and local governments. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID POLS 110.**

### Political Science A185 — Comparative Politics — 3 units

An introduction to comparative empirical analysis of selected political systems, including advanced democracies, communist and former communist countries, and less developed countries, with an emphasis on governmental institutions and political processes. Particular attention is placed on the relationship between institutions and behavior. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID POLS 130.**

### Political Science A188 — Introduction to Political Theory — 3 units

An introduction to selected political theorists and concepts from Plato to the present. Focus on the Western tradition and its major texts by reading ancient, modern, and contemporary political thinkers to examine their arguments on the nature of government and politics. Lecture. **Transfer Credit: CSU, UC. C-ID POLS 120.**

### Political Science A190 — Introduction to American Legal System — 3 units

An overview of the American legal system, its structure, and history. Reviews many aspects of the law and judicial process: the adversarial system, powers and jurisdiction of the federal and state courts, judicial review, legal education, the legal profession, and other related topics. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

### Political Science A200 — Introduction to Political Science — 3 units

An introduction to the study of politics. Explores the approaches, theories, methods, and models of the discipline and its subfields to prepare students for a systematic examination of the political world and its many faces around the globe. Lecture. **Transfer Credit: CSU. C-ID POLS 150.**

### Political Science A201 — Introduction to Political Science Research Methods- 3 units

**Prerequisite:** Political Science A180 or A180H

Introduction to the techniques used for research in the study of politics, including framing and clarifying research questions, systematic thinking about research design, the relationship between data and theory, using and assessing qualitative and quantitative methods, and learning the toolbox of methods of the discipline. Lecture. **Transfer Credit: CSU. C-ID POLS 160.**

## POLYSOMNOGRAPHIC TECHNOLOGY

### Polysomnography A100 — Polysomnography Basics — 1 unit

**Prerequisite:** Allied Health A130 or concurrent enrollment.

An introduction to the pathological condition of a variety of sleep-related disorders, including basic set-up of the polysomnogram, types of disorders, and treatment modalities for advanced respiratory care and neurodiagnostic technology students. Lecture. **Transfer Credit: CSU.**

### Polysomnography A150 — Introduction to Polysomnography — 3 units

**Co-requisite:** Polysomnography A160.

A fundamental and detailed study of the various sleep disorders, their symptoms, consequences, treatments, and polysomnographic manifestations. Sleep stage scoring, pattern recognition and data computation are covered. Instruction in patient examination and history taking for sleep disorders is included. Lecture. **Transfer Credit: CSU.**

### Polysomnography A160 — Polysomnography Testing 1 — 2 units

**Prerequisite:** Neurodiagnostic Technology A110 or concurrent enrollment.

**Co-requisite:** Polysomnography A150.

Hands-on experience and instrumentation theory of various polysomnographic recording equipment utilized for recording polysomnographic studies and includes patient hookup, calibration, and simulated testing in the lab. Continuous Positive Airway Pressure and oxygen titration demonstration. Lecture, Lab. **Transfer Credit: CSU.**

### Polysomnography A165 — Polysomnography Clinical 1 — 1 unit

**Co-requisite:** Allied Health A115 and Polysomnography A150, A160, and A170. Clinical application of polysomnographic testing at an affiliated sleep disorder center to include patient interaction, application of testing equipment, and monitoring sleep behavior. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

### Polysomnography A170 — Polysomnography Practice — .5 units

**Co-requisite:** Polysomnography A150 and A165.

Preparatory course for polysomnography clinical experience. Topics will include medical ethics, clinical emergencies, behavioral and performance objectives, and employability skills. Lecture. **Transfer Credit: CSU.**

### Polysomnography A175 — Polysomnography Clinical 2 — 1 unit

Clinical application of Polysomnographic testing at an affiliated sleep disorder center to include patient interaction, application of testing equipment, and monitoring sleep behavior. Offered on a pass/no-pass basis only. 96 hours clinical. **Transfer Credit: CSU.**

### Polysomnography A250 — Polysomnography Record Review — 2 units

**Prerequisite:** Polysomnography A150, A160, and A165.

Review of normal and abnormal polysomnographic recordings. Learn to recognize normal and abnormal sleep and breathing patterns and behaviors, artifacts, titration of CPAP, BiPAP, and oxygen. Scoring and calculation of polysomnographic recordings. Lecture. **Transfer Credit: CSU.**

### Polysomnography A260 — Polysomnography Testing 2 — 2 units

**Prerequisite:** Polysomnography A160.

Advanced aspects of polysomnographic technology, testing, instrumentation, ancillary testing, basic management skills, and computerized scoring. 24 hours lecture, 12 hours non-lecture. **Transfer Credit: CSU.**

### Polysomnography A265 — Polysomnography Clinical 3 — 2 units

**Prerequisite:** Polysomnography A175 or concurrent enrollment.

**Co-requisite:** Polysomnography A250 and A260.

Continued clinical application of Polysomnographic testing at an affiliated sleep disorder center. Includes patient interaction, application of testing equipment, and monitoring sleep behavior. Offered on a pass/no-pass basis only. Lecture, 144 hours clinical. **Transfer Credit: CSU.**

### Polysomnography A270 — Physician Lecture Series — 1 unit

**Prerequisite:** Neurodiagnostic Technology A190 or concurrent enrollment.

Physician lectures on current topics in polysomnography and related areas of medicine. Time will be allotted for discussion with physicians about individual clinical problems. Lecture. **Transfer Credit: CSU.**

**Polysomnography A285 — Polysomnography Internship — 2 units**

**Co-requisite:** Polysomnography A265 or concurrent enrollment.

Final clinical experience in an affiliated Sleep Disorders Center. Students will work with patients and technologists at night in the laboratory to obtain interpretable polygraphs. Offered on a pass/no-pass basis only. 144 hours arranged. **Transfer Credit: CSU.**

**PORTUGUESE**

**Portuguese A180 — Elementary Portuguese 1 — 5 units**

The focus is on the development of elementary proficiency in listening, speaking, reading, and writing in Portuguese with an introduction to cultures related to the Portuguese language. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC.**

**Portuguese A185 — Elementary Portuguese 2 — 5 units**

**Prerequisite:** Portuguese A180 or completion of two years high school Portuguese Continuation of Portuguese A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Portuguese language. This course is equivalent to three years of high school Portuguese. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC.**

**PSYCHOLOGY**

**Psychology A100 — Introduction to Psychology — 3 units**

This course is a scientific study of mental processes and behavior. The following ..... topics are explored: methodology, physiology, sensation, perception, states of consciousness, learning, memory, intelligence, thought, language, development, motivation, emotion, sexuality, health, stress, personality, abnormal disorders, and therapies. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID PSY 110.**

..... topics are explored: methodology, physiology, sensation, perception, states of consciousness, learning, memory, intelligence, thought, language, development, motivation, emotion, sexuality, health, stress, personality, abnormal disorders, and therapies. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID PSY 110.**

**Psychology A100H — Honors Introduction to Psychology — 3 units**

This course is a scientific study of mental processes and behavior. The following psychology topics are explored: methodology, physiology, sensation, perception, states of consciousness, learning, memory, intelligence, thought, language, development, motivation, emotion, sexuality, health, stress, personality, abnormal disorders, and therapies. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID PSY 110.**

**Psychology A105 — Psychology of Women — 3 units**

Evaluates traditional theories of the psychology of women and how they relate to women today. Will examine what science has taught us about the nature of women and how their psychology is both similar to and different from that of men. Topics include communication styles, social relationships, body image, sexuality, motherhood, work, and physical and mental health. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC.**

**Psychology A110 — Psychology of Adjustment — 3 units**

The study of concepts and principles of personal and social adjustment. Theories (e.g., biological, psychodynamic, behavioral, cognitive, humanistic) of healthy adjustment are explored and coupled with personal discipline and responsibility of the individual student. The material is geared to be relevant and applicable to contemporary society. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC.**

**Psychology A125 — Introduction to Counseling Psychology — 4 units**

Designed for students who seek to acquire a basic understanding of counseling psychology and helping roles in the mental health profession. Theoretical and practical approaches to treating emotionally, intellectually, and cognitively impaired clients will be explored within the context of the rehabilitation and recovery model and other treatment models. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU.**

**Psychology A130 — Life Span Developmental Psychology — 3 units**

Psychological study of human development across the lifespan from prenatal development through childhood, adolescence, adulthood, and dying. Theories and research of physical, cognitive, personality, and social development are examined, as well as attention to developmental problems. Institutions impacting each stage of development also addressed. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID PSY 180.**

**Psychology A160 — Statistics for the Behavioral Sciences — 4 units**

**Prerequisite:** Mathematics A030 or qualifying placement score.

This course emphasizes the calculation, interpretation, and application of descriptive and inferential statistics in the behavioral sciences. Topics include research methods, mathematical concepts, distributions, estimation, correlation, regression, sampling and probability, hypothesis testing, z and t Tests, ANOVA, nonparametric tests, and statistical analysis and interpretation using technology such as SPSS and Excel. Application of statistical concepts will incorporate data from social and behavioral sciences, business, life science, health science, and education. Students completing Mathematics A160 may petition for alternative credit for Psychology A160. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID MATH 110.**

**Psychology A165 — Principles of Human Sexuality 1 — 3 units**

Scientific analysis of human sexual behavior from the psychological, sociological, and physiological points of view. Designed to provide the academic and theoretical basis for the entire field of human sexuality. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU, UC. C-ID PSY 130.**

**Psychology A185 — Principles of Psychology — 3 units**

**Prerequisite:** Psychology A100.

This course is a survey of contemporary and classic research in the subfields of psychology particularly addressing applications, critical thinking, and the processes which underlie behavior. An emphasis on contemporary interests, recent discoveries, and innovations in the field of psychology will be addressed. This class is recommended for general education and for students majoring in the behavioral sciences. **Transfer Credit: CSU, UC.**

**Psychology A190 — Cross-Cultural Psychology — 3 units**

**Advisory:** Psychology A100.

This course is an introduction to essential theories and research in cross-cultural psychology. The course will explore how culture influences human behavior and psychological processes including cognition, lifespan development, emotion, language, personality, mental health, self concept, and social behavior. Topics include identity development, worldview, stereotypes, prejudice, discrimination, enculturation, acculturation, cultural competence, and mental health, with particular emphasis placed on the influence of race, ethnicity, sex, gender, disability, socioeconomic status, nationality, sexual orientation, and religion. Examination of these topics will prepare students to more fully engage in an increasingly diverse society where cross-cultural contact is a routine occurrence. **Transfer Credit: CSU, UC.**

**Psychology A190H — Cross-Cultural Psychology Honors — 3 units**

**Advisory:** Psychology A100.

This course is an introduction to essential theories and research in cross-cultural psychology. The course will explore how culture influences human behavior and psychological processes including cognition, lifespan development, emotion, language, personality, mental health, self concept, and social behavior. Topics include identity development, worldview, stereotypes, prejudice, discrimination, enculturation, acculturation, cultural competence, and mental health, with particular emphasis placed on the influence of race, ethnicity, sex, gender, disability, socioeconomic status, nationality, sexual orientation, and religion. Examination of these topics will prepare students to more fully engage in an increasingly diverse society where cross-cultural contact is a routine occurrence. **Transfer Credit: CSU, UC.**

**Psychology A199 — Current Topics in Psychology — .5-3 units**

Study and discussion of topics and issues of current interest in psychology. Units vary according to topic selected, semester offered, and number of meetings scheduled. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU.**

**Psychology A200 — Positive Psychology — 3 units**

Focus on presenting practical ways to promote and maintain well-being and happiness by managing emotions, strengthening positive character traits, and fostering better relationships. Topics include compassion, mindfulness, creativity and flow, self-knowledge, self-esteem, love, parenting, friendships, work ethics and achievement, spirituality, tolerance, resilience and humor. May be taken for grades or on a pass/no-pass basis. **Transfer Credit: CSU.**



**Psychology A220 — Psychology of Personality — 3 units****Prerequisite:** Psychology A100.

A survey of classical and contemporary personality theory, research and applications. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Psychology A250 — Psychobiology — 3 units****Prerequisite:** Psychology A100.

This course is an examination of the relationships between the brain and behavior and their application to self-management. The anatomy and physiology of the following will be explored: neurological disorders and their treatments, sensation, perception, sexuality, drug use, emotion, sleep, learning, memory, and internal bodily states. This course may also be offered online. Lecture. **Transfer Credit: CSU, UC. C-ID PSY 150.**

**Psychology A255 — Abnormal Psychology — 3 units***Formerly Psychology A158***Prerequisite:** Psychology A100.

A survey course emphasizing the scientific study of abnormal psychology. Topics include defining and describing the history of abnormal psychology, comprehensive models of psychopathology, assessment and classification of current psychological disorders, etiology and treatment, legal and ethical issues, and contemporary trends in the field. This course emphasizes a critical thinking approach for understanding content in the context of a culturally diverse society. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PSY 120.**

**Psychology A260 — Social Psychology — 3 units**

The scientific study of the influence of others on an individual's mental processes and behavior. Topics explored include self-perceptions, attitudes and behavior, group influence and persuasion, attraction and relationships, stereotypes, prejudice, aggression, helping, and the application of social psychology to health, business, and law. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PSY 170.**

**Psychology A270 — Psychology of Learning — 3 units**

Investigates types of learning, the background and research that led to their discovery, and current models of learning, memory, and problem solving. Critical and analytical thinking applied to instances of everyday learning and memory. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Psychology A280 — Introduction to Experimental Methods — 4 units****Prerequisite:** Psychology A100 or Psychology A100H and completion of or concurrent enrollment in Psychology A160 or Mathematics A160 or Mathematics A160H.

This course addresses the principles and techniques which enter into experimental research concerning behavior and emphasizes designing, conducting, analyzing, and reporting research in the behavioral sciences. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID PSY 200.**

**PUBLIC HEALTH***Formerly Health Education***Public Health A100 — Personal Health — 3 units****Advisory:** English A099.

This course focuses on the exploration of major health issues and behaviors in the various dimensions of health. Emphasis is on positive health behaviors and personal responsibility. Topics include mental health, stress, drugs, alcohol, smoking, exercise, nutrition, weight control, chronic and infectious diseases, sexuality, consumer health, violence, aging and environmental health. Same as HLED A100. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID PHS 100.**

**Public Health A160— Peer Health Education - Level 1 — 3 units**

This course prepares students to serve as a member of the Peer Health Action Team (PHAct) at OCC. Topics covered include strategies for behavior change, referrals, programming, presentation and group success. Students will be certified as Peer Health Educators through BACCHUS national certification exam. 36 hours in the classroom; 54 hours arranged. Previously known as HLED A160 - Peer Health Education Level 1. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Public Health A200— Introduction to Public Health — 3 units****Advisory:** English A099.

The factors that influence health and disease from a population-based perspective, with focus on basic concepts and terminologies of public health and the history and accomplishments of public health officials and agencies. An overview of the functions of various public health professions and institutions and an in-depth examination of the core public health disciplines are covered. Topics will include: history; health promotion; determinants of health and burden of disease; legal and ethical issues; epidemiology of communicable and non-communicable disease; environmental health; community organizing and health promotion programming; environmental health and safety; global health; and healthcare policy and management and career opportunities in public health. Previously known as HLED A220 - Concepts in Public Health. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU. C-ID PHS 101.**

**Public Health A202 — Drugs, Health, and Society — 3 units**

Examination of the use, misuse and abuse of drugs, both licit and illicit, in American society and the pharmacologic, neurologic and physiologic effects of selected substances on the human brain. Includes psychosocial, legal, historical, political, social, economic and health related aspects; drug dependency, treatment, rehabilitation, and prevention education. Focuses on the impact of psychoactive drugs on the individual and society, including the epidemiology and toxicology of substance abuse and its relevance to personal and public health. Epidemiologic data on the prevalence, incidence, and trends of smoking, alcohol, prescription and other drug dependencies in the U.S. will be covered, as well as risk factors associated with the use and abuse of these substances. Current options for recovery and a survey of local resources will be reviewed. Previously known as HLED A122 - Drugs, Health, and Society. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU C-ID 103.**

**Public Health A203— Health and Social Justice — 3 units**

This course provides an introduction to the health inequities in the United States that stem from unequal living conditions. Students will explore how education, socioeconomic status, race/ethnicity, sexual orientation, age, and gender and other social factors shape health epidemics and policy development. The basic skills necessary for advocating for health and social justice will be theoretically demonstrated. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU. C-ID PHS A102.**

**Public Health A230— Assessing and Analyzing Health Information — 3 units**

Students develop skills and knowledge required to locate and critically appraise online health information; review measurements and methods to access public health data located in surveillance systems and vital records, and provide an overview of public health informatics. Same as INHL A230. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Public Health A260 — Peer Health Education - Level 2 — 3 units**

Second-semester course for students who have completed HLED A160 or PUBH A160 and have been certified as peer health educators by BACCHUS. Students will continue their development of skills related to health promotion program planning and implementation. Emphasis will be on leadership and organizational skills, bystander intervention and health topic content, ie, alcohol, sleep, nutrition, exercise, etc. Students will serve as members of the Peer Health Action Team (PHAct) at OCC. 36 hours in the classroom; 54 hours arranged. Previously known as HLED A260 - Peer Health Education.. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**RADIOLOGIC TECHNOLOGY**

**Radiologic Technology A100 — Radiologic Physics — 2 units**

**Advisory:** Proficiency in math skills up to Intermediate Algebra.

The fundamentals of radiation and radiological physics. Operation of medical radiographic X-ray units. Study of the effects of radiation in humans. Introduction to health-physics instrumentation with a study of radiation control regulations. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A105 — Radiation and Imaging Safety — 1 unit**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

A study of the effects of radiation in humans and the principles of protection as applied to radiography. Introduction to health-physics instrumentation with a study of radiation control regulations. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A165 — Beginning Radiologic Practice — 1.5 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

Introduction to the radiology environment, emphasizing professionalism, humanistic approach to patients, medical/radiology records responsibilities, and medical/legal principles. Student obligations to clinical education are identified. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A170 — Radiographic Positioning and Critique 1 — 3 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

Introduction to radiographic positioning principles, study of contrast media, acquaintance with x-ray apparatus, and laboratory practice and film critique of chest, abdominal studies and upper extremities. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A171 — Clinical Lab 1 — 2 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

**Corequisite:** Radiologic Technology A105 and Allied Health A115.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills in chest and abdomen procedures will be emphasized. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A172 — Clinical Lab 2 — 2 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel utilizing a condensed format. Radiographic skills to include assisting with routine contrast media studies of the GI and GU tracts. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A175 — Radiographic Positioning and Critique 2 — 3 units**

**Prerequisite:** Radiologic Technology A170.

Radiographic positioning principles, laboratory practice, and image analysis of the lower extremities, vertebral column, and basic skull. Overview of common pathologies of identified areas. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A176 — Clinical Lab 3 — 7 units**

**Co-requisite:** Radiologic Technology A175.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills to be emphasized will be fluoroscopic procedures, GI tract, upper and lower extremities, and routine spinal column. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A177 — Clinical Lab 4 — 4.5 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

Clinical experience in an affiliated radiology department under the supervision of certificated radiology and health care personnel. Radiographic skills to be emphasized will be routine skull radiography, portable radiography, minor special procedures, and introduction to pediatric and trauma radiography. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A180 — Radiographic Imaging — 3 units**

An introductory course to the factors influencing radiographic image formation, principles of film processing, digital imaging, exposure techniques, and essentials of radiographic image quality. Radiographic image critique skills will be developed. 36 hours lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A185 — Radiographic Pathology — 1 unit**

Advanced study, identification, and critique of common radiographic pathologies in major body systems. Assists the learner in providing quality patient care. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A211 — Advanced Clinical Mammography Lab — 2 units**

**Prerequisite:** Completion of a community college radiologic technology program and current or pending application for ARRT licensure/certification and current CRT license. Prerequisites will be validated during the first class session.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making in clinical mammography. Professional growth and program exit skills are expected. Sixteen hours of clinical per week. Offered on a pass/no-pass basis only. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A212 — Advanced Clinical Lab Computed Tomography (CT) — 2 units**

**Prerequisite:** Completion of a community college radiologic technology program and current or pending application for ARRT licensure/certification and current CRT license. Prerequisites will be validated during the first class session.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and healthcare personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Sixteen hours of clinical per week. Offered on a pass/no-pass basis only. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A216 — Advanced Radiologic Patient Care — 2 units**

Multi-skill preparation for the allied health professional including management communication skills and business management concepts, and contrast media administration limited to the upper extremity. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A221 — Topics in Mammography — 1 unit**

**Prerequisite:** Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.

This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Mammography. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A222 — Topics in Computed Tomography — 1 unit**

**Prerequisite:** Students will need to be graduates of the OCC Radiologic Technology Program or licensed radiographers by the State of California.

This course will help prepare the student for the American Registry of Radiologic Technologists (ARRT) certification examination in Computed Tomography. This course may also be offered online. Offered on a pass/no-pass basis only. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A265 — Principles of Digital Imaging and Computer Applications — 2 units**

**Prerequisite:** Acceptance into the OCC Radiologic Technology Program.

Introduction to computer aided medical imaging as used in radiology departments. Applications include computed and digital radiography (CR/DR), CT, MRI, and other modalities. Basic imaging principles are applied, including physics, imaging protocols, and systems electronics. Software and display strategies for varying modalities will be discussed. Course does not include clinical experience. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A270 — Radiographic Positioning and Critique 3 — 2.5 units**

**Prerequisite:** Radiologic Technology A175.

**Co-requisite:** Radiologic Technology A271.

Radiographic positioning, film critique of advanced skull to include sinuses, TMJs, mastoid, mandible, facial bones, bony thorax and pelvic girdle. Introduction to ancillary imaging modalities including sectional anatomy. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A271 — Clinical Lab 5 — 9 units**

**Prerequisite:** Radiologic Technology A177.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Advanced cranial studies and torso exams will be emphasized. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A275 — Radiographic Positioning and Critique 4 — 3 units****Prerequisite:** Radiologic Technology A270.**Co-requisite:** Radiologic Technology A277.

Introduction to advanced imaging principles and procedures to include diagnostic specials, interventional angiography CT and MR sectional anatomy as related to these imaging procedures. Principles of mammographic imaging per California state (RHB) regulations. Introduction to quality assurance principles and techniques. Elements of professional development. Lecture, Lab. **Transfer Credit: CSU.**

**Radiologic Technology A276 — Clinical Lab 6 — 2 units****Co-requisite:** Radiologic Technology A270.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Radiographic skills emphasized are advanced contrast media procedures, trauma, portable radiography, pediatric and surgical exams. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A277 — Clinical Lab 7 — 7 units****Corequisite:** Radiologic Technology A276.

Clinical experience in an affiliated radiology department under the supervision of certified radiology and health care personnel. Emphasis on independent radiography and decision making. Professional growth and program exit skills are expected. Work Experience. **Transfer Credit: CSU.**

**Radiologic Technology A285 — ARRT Board Preparation — 1 unit**

Comprehensive categorical review of diagnostic radiologic technology in preparation for State and National Certification boards. Lecture. **Transfer Credit: CSU.**

**Radiologic Technology A290 — Applied Physics & Fluoroscopy — 2.5 units**

Applied principles of physics for current radiographic equipment including fluoroscopy, image viewing and recording systems, and tomography. Study of knowledge and skills required to qualify student for fluoroscopy component of state licensure exam. Review of imaging concepts (analog and digital), x-ray beam quantity and quality, and radiation protection. Lecture. **Transfer Credit: CSU.**

**REAL ESTATE****Real Estate A110 — Real Estate Principles — 3 units**

Designed for those preparing for the state real estate license examination for those with investments in real estate. Includes real property laws on such subjects as estates, title transfer, encumbrances, contracts, landlord/tenant, escrow, title insurance, real estate finance, financial institutions, appraisal, subdivision laws, taxation, licensing, education, and real estate management. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Real Estate A120 — Legal Aspects of Real Estate — 3 units****Advisory:** Real Estate A110.

Escrows, sales contracts, trust deeds, landlord tenant, liens, probate sales, joint tenancy, etc. Emphasizes the more complex aspects of real estate law. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Real Estate A130 — Real Estate Practice — 3 units****Advisory:** Real Estate A110.

Covers the day to day practice of real estate including sales, working with buyers and sellers, the listing and purchase agreement, finance, taxation, property management and investing for real estate. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Real Estate A140 — Real Estate Appraisal — 3 units****Advisory:** Real Estate A110.

This is an introductory course designed for brokers or those seeking entry level appraisal positions. The basic principles, theories and methods of appraising are discussed. Analysis of data and factors influencing value conclusions are emphasized. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Real Estate A150 — Real Estate Finance — 3 units****Advisory:** Real Estate A110.

The factors of the general national economy, Federal Reserve System, sources of mortgage funds, money terms, real estate finance math, appraisal for financing purposes, loan processing, qualifying borrowers, assuming vs. subject to financing, various categories, and lending institutions. This course may also be offered online. Lecture. **Transfer Credit: CSU.**

**Real Estate A190 — Leasing of Commercial Properties — 3 units**

Planning, evaluating and negotiating of leasing techniques, protocol for commercial properties including retail, office, industrial and apartment rentals. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**RELIGIOUS STUDIES****Religious Studies A100 — Introduction to Religious Studies — 3 units**

An introduction to the study of religion as an academic discipline with particular emphasis on the nature of religion, the methods used to study religious life, ways of expressing religious experience, and the practice of religion. May be Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A110 — World Religion — 3 units**

An identification of the nature of religious thinking and belief. The variety of patterns developed in both the West and the East are explored with a special emphasis on the relevance to the contemporary intellectual world. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A115 — Philosophy of Religion — 3 units**

An examination of key issues and problems of religion, including the nature and significance of religion and religious experience, arguments for and against the existence of God, the nature of God, the problem of evil, and the relation between science and religion. Same as Philosophy A115. Students completing Religious Studies A115 may not receive credit for Philosophy A115. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A120 — Ethics — 3 units**

An introduction to ethical theories and problems. An analysis of the theories and principles on which moral judgments are based and the way these judgments are used in moral problems such as abortion, euthanasia, capital punishment, sexual equality, discrimination, censorship and economic justice. Special attention will be given to the kinds of arguments used in ethical discussion. Same as Philosophy A120. Students completing Religious Studies A120 may not receive credit for Philosophy A120. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A125 — Introduction to the Bible — 3 units**

This course covers the field of general Biblical introduction, including higher criticism, canonicity, methods of textual transmission, and history of the Bible in English. A survey of how the Bible was written, compiled, copied, and transmitted to the present. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A128 — History of Christianity — 3 units**

A history of Christianity focusing on its central periods, personalities and ideas from its origins to the present. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A130 — Life and Times of Jesus — 3 units**

A study of the historical situation of the world of Jesus's day and an investigation of the main outlines of his life and teachings. The contributions made by Judaism and the Greek and Roman worlds to the shaping of the Christian religion. May be taken for grades or Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A140 — History of Judaism — 3 units**

This course surveys the history of Judaism from the earliest possible time to the present time. It describes the time prior to Abraham and discusses the development of the literature, rituals, and ceremonies through the centuries to the present time. It shows the impact of Jewish practices and thought on the changing world. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A145 — Mysticism and Meditation — 3 units**

An identification of the nature of mysticism. An examination of the varieties of mysticism in the world with special emphasis on their development and practices. Meditation techniques related to mysticism will be examined and explained. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A150 — Eastern Thought — 3 units**

An introduction to the religions of Asia including Hinduism, Buddhism, Taoism, and Confucianism. In addition to historical background and the current status of the religion, the course will focus on the scripture of each religion. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A160 — Contemporary Religious Topics: Islam — 3 units**

Islam, the youngest of the world's major religions, has evolved to play a significant role in world politics. The course will introduce students to the beliefs and practices of Islam, its history and development, its contribution to the arts and sciences, and its significant role in the 21st century. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Religious Studies A180 — The Bible as Literature — 3 units**

**Advisory:** English A100.

Read, analyze, and write on important Biblical works from both the Old and New Testament canon. Explore the historical, cultural, philosophical, and aesthetic implications of representative works, their origins and adoption. Formulate and produce written analysis of assigned works. Same course as English A141. Students completing Religious Studies A180 may not receive credit for English A141. Lecture. **Transfer Credit: CSU, UC.**

**RESPIRATORY CARE**

**Respiratory Care A185 — Respiratory Anatomy and Physiology — 3 units**

Anatomy and physiology of the cardiopulmonary system with emphasis on function & clinical assessment by respiratory therapists. Includes pulmonary and cardiac anatomy, pulmonary ventilatory mechanics, pulmonary blood flow, oxygenation transport, hypoxemia and hypoxia, carbon dioxide transport, acid-base balance and regulation of respiration. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A190 — Basic Respiratory Care Equipment — 3 units**

**Co-requisite:** Respiratory Care A185 and A195.

Theories of equipment operation, procedures, and use for treatment of cardiopulmonary disease, including the use of humidity and aerosol, oxygen, infection control, hyperinflation techniques, basic ventilatory measurement, respirators, chest physiotherapy, and equipment related to compressed gases. Emphasis is placed on clinical application of equipment & techniques. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A191 — Clinical Lab 1 — 1.5 units**

**Prerequisite:** Respiratory Care A190.

Beginning clinical practice of procedures presented in Respiratory Care A190. Includes hospital and respiratory therapy department orientation, recordkeeping, patient chart evaluation, use of compressed gases, medical gas therapy, humidity and aerosol therapy, drug administration, sterilization and culturing of equipment, incentive spirometry, IPPB and chest physiotherapy, and patient assessment. Offered on a pass/no-pass basis only. Lab, Clinical. **Transfer Credit: CSU.**

**Respiratory Care A192 — Clinical Lab 2 — 3 units**

**Prerequisite:** Respiratory Care A190 and A191.

Continued applications of procedures and concepts of basic clinical therapy presented in the first year of the respiratory care program. Application and skills evaluations in advanced administration of aerosol therapy, IPPB, pharmacological agents, chest physiotherapy, medical gases, and patient assessment. Offered on a pass/no-pass basis only. Clinical. **Transfer Credit: CSU.**

**Respiratory Care A195 — Respiratory Pharmacology — 1 unit**

**Co-requisite:** Respiratory Care A185 and A190.

A study of the drugs used to treat respiratory pathologies and their administration. Includes bronchodilators, steroids, mucokinetics, antibiotics, and respiratory stimulants and depressants. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A255 — Home Care and Rehabilitation — 1 unit**

**Prerequisite:** Respiratory Care A190.

Techniques and operation of respiratory home care and pulmonary rehabilitation. Includes special equipment set-up, patient and family education, patient evaluation, and care of the ventilator dependent patient at home. Also includes regulations of home care and third party reimbursement. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A260 — Arterial Blood Gases, Theory and Practice — 2 units**

**Prerequisite:** Respiratory Care A185.

Interpretation of arterial blood gases, arterial puncture technique, blood gas analysis. Interpretation of fluid and electrolyte imbalances, renal physiology on acid base control. Phlebotomy theory. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A265 — Pulmonary Pathology — 3 units**

**Prerequisite:** Respiratory Care A185.

The study of cardiopulmonary disease processes with emphasis on pathophysiology, manifestations, and treatment. Relates each disease state to evaluation, testing, and treatment. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A270 — Ventilators and Respiratory Management — 3 units**

**Prerequisite:** Respiratory Care A260 or concurrent enrollment.

**Co-requisite:** Respiratory Care A276.

Principles and techniques in the management of patients requiring ventilatory support. Includes mechanical descriptions of ventilators in common use (including laboratory demonstrations and hands on practice), as well as patient assessment for need for ventilatory support along with assessment for changes in ventilatory support techniques. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A275 — Respiratory Care Procedures — 3 units**

**Prerequisite:** Respiratory Care A185.

Respiratory care procedures, including physical assessment of the chest, chest x-ray assessment, airway management, bronchoscopy, chest tube drainage, electrocardiogram performance and interpretation, and ALS procedures. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A276 — Clinical Lab 3 — 4 units**

**Prerequisite:** Respiratory Care A192.

**Co-requisite:** Respiratory Care A265, A270.

Clinical application of procedures & concepts from Respiratory Care A260, A270 and A275, continuing experience in the skills from Respiratory Care A191 and A192. Includes ABG puncture & analysis, airway management, artificial airways, bronchial hygiene, bronchoscopy, ventilatory management, patient assessment, monitoring, & other therapeutic measures related to patient treatment. Offered on a pass/no-pass basis only. 336 hours clinical. **Transfer Credit: CSU.**

**Respiratory Care A278 — Pulmonary Case Assessment — 1 unit**

**Prerequisite:** Respiratory Care A276.

Assessment of critical pulmonary patients with emphasis on assessment techniques, critical care procedures, and management techniques as applied to case studies. Includes use of both actual and simulated patient scenarios using information gathering and decision making by the Respiratory Care Practitioner. Lecture, Clinical. **Transfer Credit: CSU.**

**Respiratory Care A279 — Physician Series 1 — .5 units**

**Co-requisite:** Respiratory Care A276.

Physician presentations on current topics in pulmonary medicine emphasizing patient assessment and treatment. Discussion with physicians about individual clinical problems. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A280 — Critical Care Monitoring — 1 unit**

**Prerequisite:** Respiratory Care A260 and A270.

**Co-requisite:** Respiratory Care A286.

Theory, use, and application of medical techniques used to monitor cardiopulmonary status and advanced techniques of diagnosis and treatment. Includes hemodynamic monitoring and non-invasive blood gas monitoring. Lecture. **Transfer Credit: CSU.**

**Respiratory Care A285 — Pulmonary Function Testing — 2 units**

**Prerequisite:** Respiratory Care A260 and A265.

Theory and application of pulmonary function testing by mechanical and electronic devices. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A286 — Clinical Lab 4 — 3 units**

**Prerequisite:** Respiratory Care A276.

**Co-requisite:** Respiratory Care A280 and A290.

Clinical application of respiratory therapy primarily in critical care areas. Includes airway management, patient assessment, ventilator mechanics and management, and monitoring of the critically ill patient. Offered on a pass/no-pass basis only. 240 hours clinical. **Transfer Credit: CSU.**

**Respiratory Care A287 — Clinical Internship — 2 units**

**Co-requisite:** Respiratory Care A286.

Advanced clinical utilization of knowledge and skills in critical care or specialty areas. Cumulative application of assessment, diagnostic, therapeutic, and judgmental skills acquired within the Respiratory Care Program. Offered on a pass/no-pass basis only. 160 hours laboratory/clinical. **Transfer Credit: CSU.**

**Respiratory Care A290 — Neonatal Intensive Care — 2 units**

**Prerequisite:** Respiratory Care A260, A270 and A275.

**Co-requisite:** Respiratory Care A286.

Theory & practice of neonatal intensive respiratory care with emphasis on the role of the R.C.P. Includes fetal anatomy & physiology, delivery & assessment, resuscitation, neonatal pathologies, respiratory care diagnostic & therapeutic procedures, & techniques for mechanical ventilation. Provider approved C.B.R.N, CEP #12655 for 56 hours. Lecture, Lab. **Transfer Credit: CSU.**

**Respiratory Care A296 — Respiratory Care Board Review — 1 unit****Co-requisite:** Respiratory Care A278.

Comprehensive categorical review of diagnostic and therapeutic modalities in Respiratory Care to prepare for national certification, national registry, and state licensing board examinations. Lecture. **Transfer Credit: CSU.**

**SCHOOL HEALTH ASSISTANT****School Health Assistant A100 — School Health Assistant — 3 units**

The principles and skills required of a School Health Assistant in the educational setting. Includes the role and documentation of legal, and ethical responsibilities, cultural issues, office management, health records, and reporting. Students concerns to include physical findings, illnesses, emergency care, communicable diseases, screening, treatments, and medications. Lecture. **Transfer Credit: CSU.**

**SOCIOLOGY****Sociology A100 — Introduction to Sociology — 3 units***Formerly Sociology A180*

The study of social interrelationships and human group organization. Attention is given to the foundations of society, culture, group organization, social differentiation, and the methods of sociological study. Emphasis is on American social institutions. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI 110.**

**Sociology A100H — Introduction to Sociology Honors — 3 units***Formerly Sociology A180H*

The study of social interrelationships and human group organization. Attention is given to the foundations of society, culture, group organization, social differentiation, and the methods of sociological study. Emphasis is on American social institutions. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI 110.**

**Sociology A110 — Introduction to Marriage and the Family — 3 units**

The family, its structures and functions. Emphasis on the sociological theory and research on marriage, kinship systems, components of mate selection, intimate relationships, and child-rearing practices. The family is examined in historical perspective and in relation to social change. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI 130.**

**Sociology A150 — Introduction to Race & Ethnicity — 3 units**

Multicultural approaches to cultural diversity including immigration policy, affirmative action, and bilingual debates. Intercultural comparisons including Native American, African American, Hispanic American, Asian American, and European American cultural traditions. Social science theories and methodologies for development of positive intercultural relationships. Same as Anthropology A150. Students completing Sociology A150 may not receive credit for Anthropology A150. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI A150.**

**Sociology A185 — Analysis of Social Problems — 3 units**

An identification and analysis of contemporary social problems including (1) the role of power and ideology in the definition of social problems, (2) their causes and consequences, (3) evaluations of proposed solutions, and (4) methods of intervention. Topics will vary. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI 115.**

**Sociology A185H — Honors Analysis of Social Problems — 3 units**

An identification and analysis of contemporary social problems including (1) the role of power and ideology in the definition of social problems, (2) their causes and consequences, (3) evaluations of proposed solutions, and (4) methods of intervention. Topics will vary. Lecture. **Transfer Credit: CSU, UC. C-ID SOC 115.**

**Sociology A200 — Introduction to Research Methods — 3 units****Prerequisite:** Sociology A100 or Sociology A100H**Advisory:** Math A160 or A160H, Psychology A160.

Introduces basic steps in the research process and/or basic steps in critically evaluating discussions on social issues using a variety of research methodologies. Emphasizes the scientific investigation of social subject matter. Lecture. **Transfer Credit: CSU, UC. C-ID SOCI 120**

**SPANISH****Spanish A160 — Spanish for Spanish Speakers — 5 units***Formerly Spanish A260*

The focus is on improving proficiency in listening, speaking, reading, and writing in Spanish, with particular attention paid to the unique needs of Spanish-speaking students and to the linguistic and cultural diversity of the Spanish-speaking world. This course is taught in Spanish. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Spanish A165 — Spanish for Spanish Speakers 2 — 5 units****Prerequisite:** Spanish A160 or 2 yrs of high school Spanish with a grade of 'C' or better.

A second level beginning course for Spanish speaking students to improve their command of all aspects of the Spanish language and to broaden their appreciation of the Hispanic culture. The course will be taught in Spanish. Lecture. **Transfer Credit: CSU, UC. C-ID SPAN 230.**

**Spanish A180 — Elementary Spanish 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Spanish, with an introduction to cultures related to the Spanish language. This course is equivalent to two years of high school Spanish. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Spanish A180H — Elementary Spanish 1 Honors — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Spanish, with an introduction to cultures related to the Spanish language. This course is equivalent to two years of high school Spanish. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Spanish A185 — Elementary Spanish 2 — 5 units****Prerequisite:** Spanish A180 or completion of two years of high school Spanish with a grade of 'C' or better.

Continuation of Spanish A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Spanish language. This course is equivalent to three years of high school Spanish. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID SPAN 110.**

**Spanish A185H — Elementary Spanish 2 Honors — 5 units****Prerequisite:** Spanish A180H or completion of two years of high school Spanish with a grade of 'C' or better.

Continuation of Spanish A180H, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Spanish language. This course is equivalent to three years of high school Spanish. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID SPAN 110.**

**Spanish A199 — Current Topics in Spanish — 2-5 units**

Development of listening, speaking, reading, and writing proficiency in Spanish. Extensive exposure to cultures related to the Spanish language through authentic materials and group discussions on a variety of topics ranging from current events to global issues. Emphasis on cross-cultural understanding. This course may also be offered online. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU.**

**Spanish A280 — Intermediate Spanish 1 — 5 units****Prerequisite:** Spanish A185.

Continuation of Spanish A185, with further development of language skills at the intermediate level and exploration of cultures related to the Spanish language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID SPAN 200.**

**Spanish A280H — Intermediate Spanish 1 Honors — 5 units****Prerequisite:** Spanish A185H.

Continuation of Spanish A185, with further development of language skills at the intermediate level and exploration of cultures related to the Spanish language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC C-ID SPAN 200.**

**Spanish A285 — Intermediate Spanish 2 — 5 units****Prerequisite:** Spanish A280 or A280H.

Continuation of Spanish A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the Spanish language in preparation for higher level specialized work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC. C-ID SPAN 210.**

**SPEECH LANGUAGE PATHOLOGY ASSISTANT**

**Speech-Language Pathology Assistant A100 — Introduction to Speech-Language Pathology Assistant — 2 units**

An introduction to the Speech Language Pathology Assistant career. Professional standards and responsibilities, legal and ethical issues, interdisciplinary and supervisory relations, and management of individuals with speech-language and hearing disorders are emphasized. Consideration is given to cultural, ethnic, and linguistic diversity. Lecture. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A115 — Speech, Language, and Hearing Development — 3 units**

Developmental functions of speech, language, hearing and swallowing mechanisms, including acquisition of morphology, semantics, syntax, pragmatics, and phonology from birth to adolescence. Language development models and language differences discussed. Anatomy and physiologic function pertaining to speech, swallowing, and hearing mechanisms. Lecture, Lab. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A120 — Speech-Language Administrative Procedures — 2 units**

Organizational and functional skills required in the speech pathology workplace. Emphasis on office management, client interaction requirements, communication techniques, educational techniques, writing skills related to speech-language pathology, scheduling, and computer applications. Lecture, Lab. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A140 — Introduction to Communication Disorders — 3 units**

Study of communicative disorders in both children and adults to include classification and prevalence, types of disorders, diagnostic techniques, remediation of speech and language, and treatment protocols. The role of the speech-language pathologist and audiologist is covered. Lecture. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A150 — Introduction to Phonetics — 3 units**

An introduction to phonetics including the analysis, description, and transcription of speech. The course encompasses speech production, acoustics, International Phonetic Alphabet, fine phonetic transcription, phonetic measurements, dialects, and the analysis of both normal and abnormal speech sounds. Protocol techniques for therapy are covered. Lecture, Lab. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A180 — Screening and Therapeutic Processes — 3 units**

Screening procedures and equipment used in evaluation of client status and development of treatment protocols. Therapeutic techniques, use of protocol forms, checklists and anecdotal records for speech, hearing, and language disorders. This course includes therapeutic procedures used in client protocol applications and in patient safety issues. Lecture, Lab. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A190 — SLPA Clinical Experience 1 — 2 units**

Application of clinical practice procedures and techniques as required of a speech-language pathology assistant under the supervision of a speech language pathologist. Offered on a pass/no-pass basis only. 192 hours clinical, Lecture. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A200 — Adult and Geriatric Disorders — 2 units**

Therapeutic techniques and assessment directed at adult and geriatric conditions. Special emphasis on acquired conditions and specialized application/adaptation of screening, protocols, and therapy. Lecture. **Transfer Credit: CSU.**

**Speech-Language Pathology Assistant A250 — SLPA Clinical Experience 2 — 4 units**

Advanced application of clinical practice procedures and therapeutic techniques performed under the guidance of a speech pathologist. Client observation, treatment protocols, record keeping procedures, and discussion of case study management issues are also covered. 256 hours clinical, Lecture, Arranged. **Transfer Credit: CSU.**

**TECHNOLOGY**

**Technology A040 — Technical Math — 3 units**

An applied math course designed for the student with minimal background in mathematics to develop "need to know" skills necessary to be successful in technical, science, and vocational courses which require specific mathematical skills. Considerable review of essential math is emphasized. May be taken for grades or on a pass/no-pass basis. Lecture.

**THEATRE ARTS**

**Theatre Arts A100 — Introduction to Theatre — 3 units**

An introductory lecture course which explores the process of creating theatre today, including the contributions of the playwright, actor, director and designer. Plays of varying genres will be viewed and discussed. Students will attend and review two OCC-produced plays. Lecture. **Transfer Credit: CSU, UC.**

**Theatre Arts A101 — Introduction to History and Literature of the Theatre — 3 units**

The study of the history of theatre from the Origins of Theatre to today. The history and development of theatre and drama are studied in relationship to cultural, political and social conditions of the time. Important plays from each era will be viewed and discussed. Students will attend and review one OCC theatre production. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Theatre Arts A103 — Theatre Improvisation-Short Form — 3 units**

The student will rehearse and perform individual and group improvisational scenes and exercises. The goals of the course are to help performers work with ease in front of an audience or camera, and learn Improv Olympics and theatre sports techniques and rules. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Theatre Arts A104 — Improvisation — 3 units**

The student will rehearse and perform individual and group improvisational scenes and exercises. The goal of the course is to help performers work with ease in front of an audience or camera. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A105 — Drama and Acting — 3 units**

An introduction to acting and dramatic literature. Includes analysis of plays and dramatic structure, rehearsal techniques and performance of scenes and monologues. Lecture. **Transfer Credit: CSU, UC.**

**Theatre Arts A106 — Acting Fundamentals — 3 units**

This course prepares a student to apply basic acting theory to performance and develops the skills of interpretation of drama through acting. Special attention is paid to skills for performance: memorization, stage movement, vocal production, and interpretation of text. Required for theatre arts majors. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU, UC. C-ID THTR 151.**

**Theatre Arts A107 — Acting 2 — 3 units**

**Prerequisite:** Theatre Arts A106 or intermediate level acting experience/skills. See the instructor for admission on the first day of class, skill level will be validated by the instructor during the first week of the course.

This course follows Acting Fundamentals and continues the exploration of theories and techniques used in preparation for the interpretation of drama through acting. The emphasis will be placed on deepening the understanding of the acting process through character analysis, monologues, and scenes. Must be taken for letter grade. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A110 — Theatre Laboratory Level 1 — 2 units**

An introduction to technical theatre and the creation of scenic elements. Includes basic concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization, and career possibilities. Students will work on OCC stage productions under faculty supervision. Must be taken for letter grade. Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A111 — Theatre Laboratory Level 2 — 2 units**

**Advisory:** Theatre Arts A110.  
A laboratory course for the creation of scenic elements. Includes concepts of design, painting techniques, set construction, set movement, prop construction, backstage organization. Level 2 students will work on OCC stage productions on intermediate skill-level technical tasks including scenery building and painting, and prop building and backstage crew assignments. Must be taken for letter grade. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A112 — Theatre Laboratory Level 3 — 2 units**

**Advisory:** Theatre Arts A111.  
Level 3 students will work at an advanced skill-level in the scene shop or backstage on OCC stage productions supervising crews and projects and/or building, rigging or painting scenic and prop elements. Includes advanced level concepts of set and prop design and construction, painting techniques, set rigging and movement, backstage organization, and career possibilities. Must be taken for letter grade. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A113 — Theatre Laboratory Level 4 — 2 units**

**Advisory:** Theatre Arts A112.

Students will work on OCC stage productions under faculty supervision. Technical tasks in the fourth semester include working as head carpenter, lead scenic painter or prop master on a production. Must be taken for letter grade. Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A115 — Acting for Camera and Stage — 3 units**

Explores the translation of stage acting techniques into film and television acting. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A120 — Drama Rehearsal and Performance - Beginning — 3 units**

This course provides instruction and supervised participation in theatre rehearsal and performance of a dramatic play. Students will gain practical acting experience at an introductory level. Actors must pass auditions. Cast assignments will be given upon enrollment. Must be taken for letter grade. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A121 — Drama Rehearsal and Performance - Intermediate — 3 units**

**Advisory:** Theatre Arts A120.

This course provides instruction and supervised participation in theatre rehearsal and performance of a romanatic play. Second semester students will gain intermediate skill level experience acting in ensemble or supporting dramatic roles. Assignments will be given upon enrollment. Actors must pass auditions. Must be taken for letter grade. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A122 — Drama Rehearsal and Performance - Advanced — 3 units**

**Advisory:** Theatre Arts A121.

This course provides instruction and supervised participation in theatre rehearsal and performance of a dramatic play. Third semester students will gain advanced level practical acting experience in an ensemble, supporting or leading dramatic role. Assignments will be given upon enrollment. Actors must pass auditions. Must be taken for letter grade. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A123 — Comedy Rehearsal and Performance - Beginning — 3 units**

**Advisory:** Theatre Arts A122.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. Students will gain practical acting experience at a beginning level. Actors must pass auditions. Cast assignments will be given upon enrollment. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A124 — Comedy Rehearsal and Performance - Intermediate — 3 units**

**Advisory:** Theatre Arts A123.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. Second semester students at an intermediate level will gain practical acting experience in comic ensemble or supporting roles. Cast assignments will be given upon enrollment. Actors must pass auditions. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A125 — Comedy Rehearsal and Performance - Advanced — 3 units**

**Advisory:** Theatre Arts A124.

This course provides instruction and supervised participation in theatre rehearsal and performance of a comedic play. The third semester focuses at an advanced level on comic acting techniques and performance. Students in their third semester will gain practical experience in the performance of an ensemble, supporting or leading comic role. Cast assignments will be given upon enrollment. Actors must pass auditions. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A126 — Musical Rehearsal and Performance - Beginning — 3 units**

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students will gain practical acting and singing experience at a beginning level. Actors must pass auditions. Cast assignments will be given upon enrollment. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A127 — Musical Rehearsal and Performance - Intermediate — 3 units**

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students in their second semester will gain practical experience in musical theatre performance. Students will rehearse and perform at an intermediate level in an ensemble or supporting role. Roles will be assigned after enrollment. Actors must pass auditions. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A128 — Musical Rehearsal and Performance - Advanced — 3 units**

This course provides instruction and supervised participation in theatre rehearsal and performance of a stage musical. Students in their third semester will work at an advanced level of skill on characterization, vocal and acting technique in an ensemble, supporting or leading role. Assignments will be given upon enrollment. Actors must pass auditions. May be taken for letter grade or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A129 — Technical Theatre Practicum — 3 units**

Students will gain practical experience in the application of production responsibilities in any of the following: stage management, house management, construction of scenery, properties or costume, lighting, sound, and running crews of a faculty-directed play. Must be taken for letter grade. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A131 — OCC Theatre Repertory 1 — 3 units**

This is "The Rep," a student-run theatre company. Students will collaborate under faculty supervision to plan and produce several plays. First semester students will choose two or more areas of play production in which to take part. Play production aspects include backstage duties such as technical production, crew, or stage management, acting in student-directed plays, or management duties such as planning, publicity and ushering. This course gives students hands-on experience which extends and enriches experience beyond previous beginning acting and technical courses. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A132 — OCC Theatre Repertory 2 — 3 units**

**Advisory:** Theatre Arts A131.

This is "The Rep." Second-semester students will work at a higher skill level on more complex tasks in at least two aspects of play production while staging a series of stage plays. Play production aspects including acting, design, publicity, technical production, stage management and house management will be practiced. This course extends and enriches experience beyond previous courses. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A133 — OCC Theatre Repertory 3 — 3 units**

**Advisory:** Theatre Arts A132.

This is "The Rep." Experienced students in their third semester will collaborate with others to plan and produce several plays at an advanced skill-level in one or more aspects of play production. Aspects of play production include acting, design, playwrighting, publicity, technical production, stage management, production management and house management. This course extends and enriches the student's specific skills and experience at an advanced level. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A134 — OCC Theatre Repertory 4 — 3 units**

**Advisory:** Theatre Arts A133.

Students in their fourth semester with "The Rep" will take part in planning and producing several plays in a position requiring experience, advanced skills and responsibility, such as director, designer, production manager, artistic director, leading actor, etc. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A144 — Summer Theatre Festival — 4 units**

Students participate in the pre-production, planning, audition, rehearsal, and performance of a theatrical production or productions in repertory. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A145 — Touring Production 1 — 3 units**

Students will participate in elements of presenting a show at various locations. These elements will include: acting, set design, set construction, lighting, sound design, costuming, make up, and interaction with audiences through question and answer sessions. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A146 — Touring Production 2 — 3 units**

Students will participate at an intermediate skill level in one or more production aspects presenting a touring show at various locations. These aspects include: acting, technical design and production, and stage management. Students will also learn to interact with audiences during question and answer sessions. Acting roles are assigned through audition. Lecture, Lab. **Transfer Credit: CSU.**

**Theatre Arts A165 — Stagecraft Lab 1 — 1 unit**

Introduction to stage craft activities including scenery construction, set painting, light rigging, stage props and theatre operations. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A166 — Stagecraft Lab 2 — 1 unit**

**Advisory:** Theatre Arts A165.  
Students will work on stage productions practicing various stage craft activities including scenery construction, set painting, prop construction, and working backstage on a theatre production. Level 2 students will work on intermediate skill-level projects and/or backstage as crew leads during performances. Must be taken for letter grade. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**Theatre Arts A170 — Stage Crew Activity — 1 unit**

The student will help produce an OCC stage production. One or more elements of technical theatre will be explored including scenic and prop construction, scene painting, or stage lighting. Strongly recommended for theatre majors. May be taken for grades or on a pass/no-pass basis. Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A172 — Elizabethan Play Workshop and Production — 3 units**

This course provides instruction and supervised participation in theatre and rehearsal and performance of a play from or influenced by the Elizabethan era. Auditions will be held the first week of the class, and students will be assigned roles based on these auditions. 18 Lecture Hours, 90 scheduled Lab Hours, 18 arranged Lab Hours. **Transfer Credit: CSU.**

**Theatre Arts A175 — Stage Scenery — 3 units**

An in-depth study of all the diverse theatre crafts such as scenery construction, scene painting, and properties, and a survey study of theatre design. The historical development and major trends of stagecraft will be studied. Students will prepare a practical project consisting of a scene design or scale model. Required for students planning to transfer to CSU Long Beach and Fullerton. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC. C-ID THTR 171.**

**Theatre Arts A176 — Stage Lighting — 3 units**

This course involves the study and execution of stage lighting with emphasis on equipment, control, color and their relationship to design. Students will participate in the lighting of college productions. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A177 — Make-up — 3 units**

A practical introduction to basic makeup techniques for theatre and film. Must be taken for letter grade. Lecture. **Transfer Credit: CSU, UC. C-ID THTR 175**

**Theatre Arts A178 — Stage Costuming — 3 units**

An introduction to costuming techniques for the theatre and entertainment industry. Topics include basic costume construction and alteration techniques, costume craft tools and materials, mask making and an introduction to costume design methods. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC. C-ID THTR 174.**

**Theatre Arts A181 — Arts Internship — 1-2 units**

**Advisory:** Internship course must be taken during the last year prior to completion of certificate program. A supervised internship related to classroom-based learning at a work site related to the student's certificate program. Arranged. **Transfer Credit: CSU.**

**Theatre Arts A182 — Advanced Makeup — 3 units**

**Advisory:** Theatre Arts A177.  
An advanced course in film and stage make-up techniques. Class will cover advanced make-up application which will include design, sculpting, molding, casting and finishing techniques of a prosthetic make-up. Lecture, Lab. **Transfer Credit: CSU.**

**Theatre Arts A188 — Body Movement for the Actor — 3 units**

Instruction in using the body as an expressive instrument in performance. Strength, flexibility, relaxation, control, and body relationship will be studied. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A189 — Stage Combat — 2 units**

Fundamentals of stage combat emphasizing such weapons as quarterstaff, foil, epee, sabre, broadsword, rapier, and dagger. Such stunt techniques as fist fighting and falls are included. Strongly recommended for acting majors and theatre arts teachers. May be taken for grades or on a pass/no-pass basis. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A200 — Voice and Articulation — 3 units**

This course explores vocal techniques for actors including warm-up techniques, phonetics, projection, articulation and the use of regional accents. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Theatre Arts A206 — Acting 3 — 3 units**

Advanced techniques based on the study, analysis, rehearsal, and performance of dramatic scenes. Areas of concentration include projection and articulation, goal discovery and setting, and the use of imagery and connection. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A207 — Acting 4 — 3 units**

Advanced acting techniques with particular emphasis on stage diction. Units of study include phonetics, voice projection, vocal quality, dialects, and the application of vocal techniques to dramatic literature. Required of theatre arts majors. Lecture, Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A215 — Rehearsal and Performance — 2 units**

Students will work collaboratively to produce and perform a play. Each student's area of involvement will be in one or more of the following areas: acting, technical, stage management, or house management. Student's area of involvement will be determined by the instructor with the student to satisfy individual expectations. Actors must audition for roles. 18 Lecture Hours, 40 scheduled Lab Hours, 14 arranged Lab Hours. **Transfer Credit: CSU, UC.**

**Theatre Arts A216 — Rehearsal and Performance 2 — 2 units**

**Advisory:** Theatre Arts A215  
Students will work collaboratively at an advanced skill level to produce and perform a play. Each student's area of involvement will be in one or more of the following areas: acting, technical, stage management, or house management. Student's area of involvement will be determined by the instructor with the student to satisfy individual expectations. Actors must audition for roles. 18 Lecture Hours, 40 scheduled Lab Hours, 14 arranged Lab Hours. **Transfer Credit: CSU, UC.**

**Theatre Arts A275 — Directing — 3 units**

An examination of the basic principles and problems in stage direction. Students will complete directing assignments by directing a student production or special project, assisting a faculty director with a production, or stage managing a faculty-directed play. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU, UC.**

**Theatre Arts A285 — Advanced Directing — 3 units**

**Advisory:** Theatre Arts A275.  
An advanced practicum in stage direction. Students in their second semester will work independently under faculty supervision to direct or stage manage a play or project in the OCC Theatre Department. Lecture, Lab/Arranged Lab. **Transfer Credit: CSU.**

**TUTORING**

**Tutoring A150 — Tutoring Skills/ Student Success Center — 1 unit**

Designed for students who meet the criteria to be tutors in one of the Student Success Center. Tutoring skills development in the areas of interpersonal and communication skills, learning styles, study skills techniques, diversity/cultural awareness, and Socratic method. Open entry/open exit. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**VIETNAMESE**

**Vietnamese A180 — Elementary Vietnamese 1 — 5 units**

The focus is on development of elementary proficiency in listening, speaking, reading, and writing in Vietnamese, with an introduction to cultures related to the Vietnamese language. This course is equivalent to two years of high school Vietnamese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Vietnamese A185 — Elementary Vietnamese 2 — 5 units**

**Prerequisite:** Vietnamese A180 or completion of two years of high school Vietnamese with a grade of 'C' or better.

Continuation of Vietnamese A180, with further development of listening, speaking, reading, and writing proficiency, and additional exploration of cultures related to the Vietnamese language. This course is equivalent to three years of high school Vietnamese. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**Vietnamese A280 — Intermediate Vietnamese 1 — 5 units**

**Prerequisite:** Vietnamese A185.

Continuation of Vietnamese A185, with further development of language skills at the intermediate level and exploration of cultures related to the Vietnamese language. Additional emphasis on reading and writing, with an introduction to selected literary works. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**



**Vietnamese A285 — Intermediate Vietnamese 2 — 5 units****Prerequisite:** Vietnamese A280.

Continuation of Vietnamese A280, with further refinement of language skills at the intermediate level and investigation of cultures related to the Vietnamese language in preparation for higher level specialized work. May be taken for grades or on a pass/no-pass basis. Lecture. **Transfer Credit: CSU, UC.**

**WELDING TECHNOLOGY****Welding Technology A100 — Arc and Oxy-acetylene Welding — 3 units**

Beginning course in arc and oxy-acetylene welding that covers safety practices, use of equipment, brazing and cutting operations, and applications to various types of steels. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A101 — Arc and Oxy-acetylene Welding — 4 units**

Beginning course in arc and oxy-acetylene welding that covers safety practices, use of equipment, welding in all positions, brazing and cutting operations, and applications to various types of steels. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A102 — Weld Testing GMAW 1 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels I, II, III and/or IV in the Gas Metal Arc Welding process. When completed, may lead to a Certificate of Specialization. A Certification Certificate will also be issued for the appropriate level. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A103 — Weld Testing GMAW 2 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of Gas Metal Arc Welding process to the industry standard set by the Inter-Industry Conference on Auto Collision Repair (I-CAR) required tests. A Welder Qualification Certification will be issued. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A104 — Weld Testing GTAW — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of level I in Gas Tungsten Arc Welding process. When completed, may lead to Certificate of Specialization. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A105 — Weld Testing Basic — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels I, II, III or IV in Shielded Metal Arc Welding process. When completed, may lead to Certificate of Specialization. A Certification Certificate will also be issued for the appropriate level. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A106 — Weld Testing Intermediate — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels V and/or VI in the Shielded Metal Arc Welding process. When completed, may lead to a Certificate of Specialization. A Certification Certificate will also be issued for appropriate levels upon successful completion. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A107 — Weld Testing Advanced 1 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels VII, VIII, and/or IX in Shielded Metal Arc Welding. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A108 — Weld Testing Advanced 2 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels I, II, III, and/or IV in Flux Cored Arc Welding. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A109 — Weld Testing FCAW 1 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels V, VI, VII, VIII in Flux Cored Arc Welding. When completed, may lead to Certificate of Specialization. A certification will also be issued for the appropriate level upon successful completion. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A110 — Weld Testing FCAW 2 — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels IX in Flux Cored Arc Welding. When completed, may lead to Certificate of Specialization. A certification will also be issued for the appropriate level upon successful completion. Enroll only when ready to test. Fee charged for qualification test. Lab. **Transfer Credit: CSU.**

**Welding Technology A111 — Weld Testing Pipe — .5 units****Prerequisite:** Welding Technology A100 or Welding Technology A101, or concurrent enrollment.

Weld testing for mastery of levels I and/or II in the Pipe Welding process or Gas Tungsten Arc and Shielded Metal Arc Welding processes. Enroll only when ready to test. Fee charged for qualification test. Offered on a pass/no-pass basis only. Lab. **Transfer Credit: CSU.**

**Welding Technology A115 — Arc and Oxy-acetylene Welding Practice Level 1 — 1-2 units****Prerequisite:** Welding Technology A100 or A101 or concurrent enrollment.

A laboratory class to develop skills in arc and oxy-acetylene welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A116 — Arc and Oxy-acetylene Welding Practice Level 2 — 1-2 units****Prerequisite:** Welding Technology A100 or A101 or concurrent enrollment.**Advisory:** Welding Technology A115

A second-level laboratory class to develop skills in SMAW and oxy-acetylene welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A117 — Arc and Oxy-acetylene Welding Practice Level 3 — 1-2 units****Prerequisite:** Welding Technology A100 or A101 or concurrent enrollment.

A laboratory class to develop intermediate skills in arc and oxy-acetylene welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A118 — Arc and Oxy-acetylene Welding Practice Level 4 — 1-2 units****Advisory:** Welding Technology A117.

A level four laboratory class to develop skills in arc, oxy-acetylene, and GMAW welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A120 — Mathematics & Fabrication Layout for Welders — 4 units****Advisory:** Technology A040.

The study of mathematics to prepare welders for job skills requiring fabrication layout. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A130 — Gas Tungsten Arc Welding Level 1 — 3 units****Prerequisite:** Welding Technology A100, A101 or A140.

GTAW (Gas Tungsten Arc Welding) Level 1 theory and practice covering aluminum and stainless steels and qualification requirements. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A131 — Gas Tungsten Arc Welding Level 2 — 3 units****Prerequisite:** Welding Technology A100, A101 or A140**Advisory:** Technology A130

GTAW (Gas Tungsten Arc Welding) Level 1 theory and practice covering aluminum and stainless steels and qualification requirements. May be taken for grades or on a pass/no-pass basis. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A140 — Occupational Welding Level 1 — 1.5 units**

Formerly Welding Technology A122

A first-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A141 — Occupational Welding Level 2 — 1.5 units**

A second-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A142 — Occupational Welding Level 3 — 1.5 units**

**Advisory:** Welding Technology A115

A third-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A143 — Occupational Welding Level 4 — 1.5 units**

**Advisory:** Welding Technology A141.

A fourth-level beginning course in arc and oxy-acetylene welding covering safety practices, use of welding, brazing, thermal and mechanical cutting equipment operations on various types of metal. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A180 — Blue Print Reading — 2 units**

A basic course in the reading of blueprints associated with the welding fabrication industry. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A200 — Advanced Welding — 3 units**

**Prerequisite:** Welding Technology A100, A101 or A120.

Advanced welding theory and practice covering thermal cutting, oxy-acetylene and gas shielded arc welding processes, welding of ferrous and non-ferrous metals, qualification and certification requirements to Los Angeles City and American National Standards Institute, use of welding symbols. May also enroll in Welding Technology A215 for additional laboratory units. Each 54 hours of laboratory time earns one unit. Will be given credit for the laboratory course appropriate for the number of hours worked. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A201 — Advanced Welding — 4 units**

**Prerequisite:** Welding Technology A100 or A101.

Advanced welding theory and practice, covering thermal cutting, oxy-acetylene welding and welding of ferrous and non-ferrous metals, qualification and certification requirements to Los Angeles City and the American National Standards Institute. May also enroll in Welding Technology A215 for additional laboratory units. Each 54 hours of laboratory time earns one unit. Will be given credit for the laboratory course appropriate for the number of hours worked. Same as Welding Technology A200 but with added lab hours. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A210 — Welding Inspection and Testing — 4 units**

This course covers physical tests, metallographic analysis, visual inspection, non-destructive examination of welds and chemical analysis of metals and alloys. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A211 — Gas Metal Arc Welding Training Level 1 — 1 unit**

**Prerequisite:** Welding Technology A100, A101 or A140.

This course teaches Gas Metal Arc Welding Theory and practice on ferrous and non-ferrous metals covering welding standards set by the American Welding Society, American National Standards Institute and I-CAR in preparation for qualification and certification requirements. Each 54 hours of laboratory time earns one unit. Students will be given credit for laboratory course appropriate for the number of hours worked. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A212 — Gas Metal Arc Welding Training Level 2 — 1 unit**

**Prerequisite:** Welding Technology A100, A101 or A140.

**Advisory:** Welding Technology A211.

This second level course teaches Gas Metal Arc Welding Theory and practice on ferrous and non-ferrous metals covering welding standards set by the American Welding Society, American National Standards Institute and I-CAR in preparation for qualification and certification requirements. Each 54 hours of laboratory time earns one unit. Students will be given credit for laboratory course appropriate for the number of hours worked. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A215 — Advanced Arc and Oxy-acetylene Lab Level 1 — 1-2 units**

**Prerequisite:** Welding Technology A200, A201, or A223.

A first level advanced laboratory course to develop skills in oxyacetylene, SMAW, GTAW and GMAW welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A216 — Advanced Arc and Oxy-acetylene Lab Level 2 — 1-2 units**

**Prerequisite:** Welding Technology A200, A201, or A223.

A second level advanced laboratory course to develop skills in oxy-acetylene, SMAW, GTAW, and GMAW welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A217 — Advanced Arc and Oxy-acetylene Lab Level 3 — 1-2 units**

**Prerequisite:** Welding Technology A200, A201, or A223.

**Advisory:** Welding Technology A216.

A third level advanced laboratory course to develop skills in oxy-acetylene, SMAW, GTAW, and GMAW welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A218 — Advanced Arc and Oxy-acetylene Lab Level 4 — 1-2 units**

**Prerequisite:** Welding Technology A200, A201, or A223.

**Advisory:** Welding Technology A217.

A fourth level advanced laboratory course to develop skills in oxyacetylene, SMAW, GTAW, GMAW and FCAW welding. Lab. **Transfer Credit: CSU.**

**Welding Technology A220 — Welding Specifications and Codes — 2 units**

Codes and specifications used by governmental agencies and industry in control of products and production. Lecture. **Transfer Credit: CSU.**

**Welding Technology A223 — Advanced Welding Level 1 — 1.5 units**

**Prerequisite:** Welding Technology A100 or A101 or A140.

An advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A224 — Advanced Welding Level 2 — 1.5 units**

**Prerequisite:** Welding Technology A100 or A101 or A140.

**Advisory:** Welding Technology A223.

A second-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A225 — Advanced Welding Level 3 — 1.5 units**

**Prerequisite:** Welding Technology A100 or A101 or A140.

**Advisory:** Welding Technology A224.

A third-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A226 — Advanced Welding Level 4 — 1.5 units**

**Prerequisite:** Welding Technology A100 or A101 or A140.

**Advisory:** Welding Technology A225.

A fourth-level advanced welding course teaching the theory and practice of joining ferrous and non-ferrous metals. Includes certification requirements joint design and use of welding symbols. Lectures include preparation for Los Angeles City testing. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A230 — Welding Metallurgy — 3 units**

Basic metallurgy as applied to welding, metal structures, strength of material. Weld ability of metals, heat treatment, welding procedures, welding stresses and control. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A250 — Pipe Welding Level 1 — 3 units**

**Prerequisite:** Welding Technology A200 or A201 or A226.

Oxygen-Acetylene, Shielded Metal Arc, Gas metal Arc and Gas Tungsten Arc Welding of pipe for welder qualification to achieve American National Standards (ANSI) certification. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A251 — Pipe Welding Level 2 — 3 units**

**Prerequisite:** Welding Technology A200 or A201 or A226.

**Advisory:** Welding Technology A250.

Second-level course for Oxygen-Acetylene, Shielded Metal Arc, Gas Metal Arc and Gas Tungsten Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A252 — Pipe Welding Level 3 — 3 units**

**Prerequisite:** Welding Technology A200 or A201 or A226.

**Advisory:** Welding Technology A251.

Third-level course for Oxygen-Acetylene, Shielded Metal Arc, Gas Metal Arc and Gas Tungsten Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A253 — Pipe Welding  
Level 4 — 3 units**

**Prerequisite:** Welding Technology A200 or A201 or A226.

**Advisory:** Welding Technology A252.

Fourth-level course for Oxygen-Acetylene, Shielded Metal Arc, Gas Metal Arc and Gas Tungsten Arc Welding for pipe welder qualification to achieve American National Standards (ANSI) certification. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A255 — Orbital  
Welding Level 1 — 3 units**

**Prerequisite:** Welding Technology A100, A101 or A140.

First level advanced welding theory and practice covering the process of gas tungsten arc welding using an automatic orbital welding system. Instruction includes safety, equipment use, and certification requirements. Lecture, Lab. **Transfer Credit: CSU.**

**Welding Technology A256 — Orbital  
Welding Level 2 — 3 units**

**Prerequisite:** Welding Technology A100, A101 or A140.

**Advisory:** Welding Technology A255.

Second-level advanced welding theory and practice covering the process of orbital gas tungsten arc welding, cleanroom procedures, piping blueprints and certification. Instruction includes safety, equipment use, and certification requirements. Lecture, Lab. **Transfer Credit: CSU.**

## NONCREDIT COURSE DESCRIPTIONS

### ACCOUNTING

#### Accounting A007N — Not for Profit Recordkeeping and Compliance Noncredit — 54 hours

This is a noncredit course utilizing the theory and fundamentals of generally accepted accounting principles and industry-specific guidance in conjunction with legal and regulatory issues needed for managing the recordkeeping and compliance documentation for Not-for-Profit entities. Creation of recordkeeping systems and various financial statements/reports that will help to evaluate accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will include day to day transaction and special project accounting, tax and audit issues, endowments and grants, reporting obligations and other legal considerations. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

### ALLIED HEALTH

#### Allied Health A001N — Personal Care Aide I: Foundational Knowledge, Attitudes and Skills Noncredit — 36 hours

This noncredit course will provide students with the education needed to meet the skills required to provide personal care services to elders and to consumers with disabilities in a home setting. This course will introduce the students to the key concepts of working within a team and exhibiting professional behavior. Foundational knowledge including working with elders; respecting client differences; communication skills; working with depressed patients; introduction to body systems and common diseases; and correct body mechanics will be taught. ALH A001 is part of the Personal Care Aide Program, designed to prepare students for employment as a Personal Care Aide. Students interested in completing the program should also enroll in ALH A002 and ALH A003. Lecture, Lab. Not Transferable. Not degree applicable.

#### Allied Health A002N — Personal Care Aide II: Person Centered Care Noncredit — 27 hours

**Prerequisite:** Allied Health A001N.

This is a non-credit course. Students will focus on activities of daily living: feeding, bathing and personal care, toileting, bed making and dressing. The student will also be exposed to issues faced when working with patients with dementia and mental illness. The course will conclude with instruction on workers' rights, time management and skills required to obtain employment as a Personal Care Aide. ALH A002 is part of the Personal Care Aide Program, designed to prepare students for employment as a Personal Care Aide. Students interested in completing the program should also enroll in ALH A001 and ALH A003. Lecture, Lab. Not Transferable. Not degree applicable.

#### Allied Health A003N — First Aid and CPR/AED for PCA Noncredit — 9 hours

**Prerequisite:** Allied Health A002N.

This is a noncredit course. Techniques and theory of cardiopulmonary resuscitation will be covered and demonstrated. Completion qualifies the student for the American Heart Association Professional Rescuer CPR/AED certification. ALH A003 is part of the Personal Care Aide Program, designed to prepare students for employment as a Personal Care Aide. Students interested in completing the program should also enroll in ALH A001 and ALH A002. Lecture, Lab. Not Transferable. Not degree applicable.

#### Allied Health A004N — Professional Writing for Health and Consumer Science - Noncredit — 4.5-9 hours

This noncredit class will support the development of writing skills for the science professional. Students will learn standard formats and expressions appropriate for their profession. Students will also work on writing related to the presentation of capstone projects. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

#### Allied Health A005N — Computational Skills for Allied Health Sciences I Noncredit — 4.5 - 9 hours

This noncredit course reviews and practices the basic operations of computations: addition, subtraction, multiplication, and division as applied to specific job skills/tasks in allied health professions/occupations. Medical assisting and respiratory care (to name two examples) require calculations involving multiple elements, students need to understand basic computational concepts to successfully calculate dosage (medical assisting) or volumes (respiratory care). Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

#### Allied Health A006N — Computational Skills for Allied Health Sciences II Noncredit — 4.5 - 9 hours

This noncredit course reviews the Order of Operations as it applies to various uses with the allied health professions, an example would be using Order of Operations to determine quality assurance for fluoroscopy units within a radiology suite. The equation uses a baseline value against an acquired value;  $n\text{mA}/\text{b}\text{mAXn}\text{K}\text{Vp}2/\text{b}\text{K}\text{Vp}2$ . Within the allied health professions there are a multitude of formulas that need to be solved; for example, in respiratory care, the alveolar gas equation; medical assisting requires students to be able to calculate drips per minute based on solution strength. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

#### Allied Health A007N — Computational Skills for Allied Health Sciences

**III Noncredit — 4.5 - 9 hours**

This noncredit course covers measurement fundamentals and scientific notation in the allied health sciences to allow for performance of specific job functions. Scientific notation is a method of recording extremely large and small values. As such, the allied health professional will need to be able to perform addition, subtraction, multiplication, and division of values using scientific notation. Converting between measurement systems. Centigrade and Fahrenheit;  $C = (F-32)/1.8$ , centimeter to inches;  $\text{cm} = \text{inch}/2.54$ , pounds to kilograms;  $\text{kb} = \text{lb}/2.205$  to name a few. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

#### Allied Health A008N — Computational Skills for Allied Health Sciences

**IV Noncredit — 4.5 - 9 hours**

This noncredit course covers ratios and proportions required for dosage calculations, dimensional analysis, and other job-specific applications related to the allied health professions. Allied health professionals need to be able to use, like proportions, to solve problems in a variety of allied health applications. Dental Assisting and Radiologic Technology use, like proportions, to adjust exposure factors for changes in distance. Drug dosage calculations typically use ratios and proportions to solve for differences in concentrations and weight. Sonography signal intensity is calculated by determining the difference between transmitted/received signal and allowing for distance traveled. Offered on a pass/no-pass basis only. Lecture. Not Transferable. Not degree applicable.

### ARCHITECTURE

#### Architecture A004N — Intro to FrameCAD Steel Framing Noncredit — 18 hours

Introduction to FrameCAD Steel Framing is an overview of integrated steel panelization design and fabrication. Instruction includes entry level use of FrameCAD Structure and FrameCAD Detailer software as well as file export to FrameCAD Factory and machine. The class will produce and assemble a small sample project using the OCC FrameCAD F325iT. Lecture, Lab. Not Transferable. Not degree applicable.

#### Architecture A021N — FrameCAD Studio 1 Noncredit — 48 hours

**Advisory:** Architecture A004N.

FrameCAD Studio 1 is a project-based course that develops design skills to produce a steel panel project using FrameCAD software. Basic steel frame design concepts will be covered as well as use of FrameCAD Structure and FrameCAD Detailer. Students will also receive basic machine safety and steel panel assembly experience. Lecture, Lab. Not Transferable. Not degree applicable.

**Architecture A022N — FrameCAD Studio 2 Noncredit — 48 hours**

**Advisory:** Architecture A021N.

FrameCAD Studio 2 is a project-based intermediate course that develops design skills to produce a steel panel project using FrameCAD software. Students will be encouraged to design a project of choice and will work collaboratively to design and prepare each project for production. This is a continuation of FrameCAD Studio 1 and FrameCAD Structure and FrameCAD Detailer software will be used to design the projects and export to FrameCAD Factory software for production. Lecture, Lab. Not Transferable. Not degree applicable.

**Architecture A041N — FrameCAD Workshop 1 Noncredit — 48 hours**

**Advisory:** Architecture A004N.

FrameCAD Workshop 1 is a project-based course that develops beginning level production skills needed to produce a steel panel framing system using FrameCAD software and a FrameCAD F325iT machine. Students will be introduced to FrameCAD machine operation and safety and will be able to visit a steel frame project or production facility. Students will assist in running production jobs and gain experience in panel assembly and workflow. Lecture, Lab. Not Transferable. Not degree applicable.

**Architecture A042N — FrameCAD Workshop 2 Noncredit — 48 hours**

**Advisory:** Architecture A004N and A041N.

FrameCAD Workshop 2 is a project-based continuation of Workshop 1 that develops intermediate level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in running production jobs and learning about panel assembly and fabrication workflow on the machine. Lecture, Lab. Not Transferable. Not degree applicable.

**Architecture A043N — FrameCAD Workshop 3 Noncredit — 48 hours**

**Advisory:** Architecture A004N, A041N and A042.

FrameCAD Workshop 3 is a project-based continuation of FrameCAD Workshop 2 that develops advanced level production skills needed to produce steel panel framing systems using FrameCAD software and a FrameCAD F325iT machine. Students will review FrameCAD machine operation and safety and be involved in coordinating production jobs, panel assembly, and fabrication workflow on the machine. Lecture, Lab. Not Transferable. Not degree applicable.

**Architecture A085N — Environmental Design Systems Noncredit — 144 hours**

**Advisory:** Architecture A180.

This intermediate design course focuses on the environmental, cultural, and physical forces that affect architecture. Students will research and utilize design approaches and building components/systems that respond to human needs and the natural and built environments. Study topics will include site design and cultural context, environmental/climate responsive approaches to design, maintaining structural design integrity, incorporating life safety and access, and ecologically minded approaches to design. Lecture, Lab. Not Transferable. Not degree applicable.

**BUSINESS**

**Business A086N — Not-for-Profit Management NC — 54 hours**

This noncredit course utilizes the many dimensions of business in conjunction with regulatory issues required for the challenges and opportunities of Not-for-Profit entities with a focus on communication and critical thinking skill development for leaders. Explores areas of strategic planning, financial management, capacity building, program evaluation, data management and analysis, legal and ethical issues of compliance, fundraising, governance practices, and volunteer and board development in their relation to the accountability, transparency, and persuasiveness of a Not-for-Profit entity. Topics will also include community outreach, endowments and grants, reporting obligations and other legal considerations. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**Business A087N — Not-for-Profit Marketing NC — 54 hours**

A noncredit course that surveys of the major marketing and branding topics especially for Not-for-Profit entities and new to mid-level professionals. Explores external communications, message development, and conveying the message and mission of the Not-for-Profit. Topics will include communication across a variety of platforms, social and digital media, public events, and one-on-one networking, and fundraising. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**CHEMISTRY**

**Chemistry A010N — Chemistry Skills for Introductory Chemistry Noncredit — 18 hours**

**Co-requisite:** Chemistry A110.

This is a non-credit course designed to provide additional practice of the concepts learned in CHEM A110 -Introductory Chemistry. Students will develop skills necessary to successfully demonstrate competency in CHEM A110. This course is expected to increase retention and student success and is a part of the Chemistry Skills Certificate of Competency. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Chemistry A030N — Chemistry Skills for Preparation for General Chemistry Noncredit — 18 hours**

**Co-requisite:** Chemistry A130.

This is a non-credit course designed to provide additional practice of the concepts learned in CHEM A130 -Preparation for General Chemistry. Students will develop skills necessary to successfully demonstrate competency in CHEM A130. This course is part of the Chemistry Skills Certificate of Competency. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Chemistry A080N — Chemistry Study Skills for General Chemistry A — 18 hours**

**Co-requisite:** Chemistry A180.

This is a non-credit course designed to provide additional practice of the concepts learned in CHEM A180 -General Chemistry A. Students will develop skills necessary to successfully demonstrate competency in CHEM A180. This course is expected to increase retention and student success in CHEM 180 and is part of the Chemistry Skills Certificate of Competency. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Chemistry A081N — Lab Skills for General Chemistry A — 18 hours**

**Co-requisite:** Chemistry A180 or A185.

This is a non-credit course designed to provide additional instruction and practice of the lab skills taught in CHEM A180 - General Chemistry. Students will develop skills necessary to successfully demonstrate competency in CHEM 180 Laboratory. This course will be part of the Chemistry Skills Certificate of Competency and is expected to increase student retention and success in CHEM A180. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Chemistry A085N — Chemistry Study Skills for General Chemistry B — 18 hours**

**Co-requisite:** Chemistry A185.

This is a non-credit course designed to provide additional practice of the concepts learned in CHEM A185 -General Chemistry B. Students will develop skills necessary to successfully demonstrate competency in CHEM 185. This course is expected to increase retention and student success in CHEM A185 and is a part of the Chemistry Skills Certificate of Competency. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Chemistry A086N — Lab Skills for General Chemistry B — 18 hours**

**Co-requisite:** Chemistry A185.

This is a non-credit course designed to provide additional instruction and practice of the lab skills taught in CHEM A185- General Chemistry. Students will develop skills necessary to successfully demonstrate competency in CHEM A185 laboratory. This non-credit course will be a part of the new Chemistry Skills Certificate and is expected to increase student retention and success in CHEM A185. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**CONSUMER STUDIES**

**Consumer Studies A001N — Introduction to the Retail Industry Noncredit — 12 hours**

This noncredit course provides an introduction and exploration of entry-level jobs in the retail industry. Including job titles, skills needed, and related terminology. Introduction to retail basics, as it relates to vendors, products, and customer service. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**Consumer Studies A002N — Retail Opportunities Noncredit — 12 hours**

This noncredit course provides an introduction and exploration of entry-level jobs in the retail industry. Including job titles, skills needed, and related terminology. Introduction to retail basics, as it relates to vendors, products, and customer service. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**ENGLISH**

**English A001N — Grammar Within Reach - Noncredit — 18 hours**

This noncredit course takes community members and college students through a review of grammar fundamentals and provides an opportunity to practice precise grammar and varied sentence styles that are immediately applicable to writing for the workplace and everyday life and for writing in college classes. This noncredit course can be paired with another English noncredit course for a certificate of competency. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**English A002N — Reading Tough Texts - Noncredit — 18 hours**

This noncredit Course supports students and community members in practicing fundamental reading and study strategies necessary for college success and success in the workplace and community at larger by practicing strategies including annotating and summarizing texts, finding the main idea and identifying supporting details, identifying the larger organizational strategy and stylistic devices used to support the claims and main points in a text. This noncredit course can be paired with another English noncredit course for a certificate of competency. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**English A003N — Paragraphs for Many Purposes - Noncredit — 18 hours**

This non-credit course takes students through the process of creating cohesive, organized, college-level paragraphs and essay sections in building essays for a variety of purposes and to be used for writing across many disciplines. This noncredit course can be paired with another English noncredit course for a certificate of competency. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**English A004N — Building A College Essay - Noncredit - Noncredit — 18 hours**

This noncredit course will take students through the process of building a single, focused college essay—from the planning and outlining stage, to creating a thesis or claim, to gathering support and evidence and integrating source material, then formatting per MLA guidelines. This noncredit course can be paired with another English noncredit course for a certificate of competency. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**English A006N — Support Skills for English Composition — 1-6 hours**

This noncredit course will help students build various skills required in their English composition courses. These skills include sentence grammar, sentence fluency, paragraph and essay structure, reading comprehension, source integration, and research writing. May be taken for grades or on a pass/no-pass basis. Lecture. Not Transferable. Not degree applicable.

**ENGLISH AS A SECOND LANGUAGE**

**English as a Second Language A045N — ESL Support for Freshman Composition: Reading and Vocabulary Noncredit — 36 hours**

This course focuses on improving reading skills and reading comprehension by demonstrating reading strategies and building vocabulary for non-native speakers of English enrolled in English 100. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English as a Second Language A046N — ESL Support for Freshman Composition: Sentence Structure Noncredit — 36 hours**

Advanced sentence structures for English 100 non-native students, esp. clauses, compound and complex sentences. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English as a Second Language A047N — ESL Support for Freshman Composition: Spelling Techniques Noncredit — 36 hours**

This course will help students to learn basic spelling patterns of English by focusing on short and long vowels, consonants, consonant blends, prefixes, suffixes, homonyms, and homophones. Students will practice and memorize some of the more common words in English in addition to discussing and identifying some common mistakes that English language learners make in spelling. By learning the sounds of English, students will also improve pronunciation. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English as a Second Language A048N — ESL Support for Freshman Composition: Spelling Techniques Noncredit — 36 hours**

This course is for ESL students at an advanced level of oral expression and pronunciation. It provides instruction in refining pronunciation skills in order to communicate as per the conventions of academic English in order to be able to succeed in Freshman Composition and other college-level courses. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English as a Second Language A049N — ESL Support for Freshman Composition: Advanced Grammar Noncredit — 36 hours**

This course is designed to enhance the knowledge and usage of advanced English grammar and to improve grammatical accuracy in writing and to develop strong editing skills for advanced second-language students. Individual attention is given to sentence structure and usage problems (verb tenses, passive voice, word and verb forms) needed for English 100 and other college-level courses. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**ENGLISH LANGUAGE LEARNING**

**English Language Learning A001N — Oral Communication 1 Noncredit — 36 hours**

This noncredit course is designed for beginning English language learners who want to improve their oral communication skills. Students will practice daily communication skills in the home and community, with an emphasis on listening comprehension. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A002N — Oral Communication 2 Noncredit — 36 hours**

This noncredit course is a continuation of Oral Communication 1 and is designed for beginning English language learners who want to improve their English communication skills. Students will practice daily communication skills in the home and community, with an emphasis on speaking skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A012N — Multi-skills English 1A Noncredit — 54 hours**

This noncredit course is a beginning multi-skills course designed for English language learners. Students will be introduced to the basic conventions of American English, including listening, speaking, reading, and writing skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A013N — Multi-skills English 1B Noncredit — 54 hours**

This noncredit course is a continuation of a beginning multi-skills course designed for English language learners. Students will continue to use the conventions of American English, including listening, speaking, grammar, reading, and writing skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A020N — English Language Learning for U.S. Citizenship 1 — 36 hours**

This noncredit course is one in a series of two courses designed to help non-native speakers of English prepare for U.S. citizenship. In this course, students review and practice basic writing conventions and basic reading skills. They also learn about and discuss the fundamentals of U.S. history, government, and geography. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A021N — English Language Learning for U.S. Citizenship 2 — 36 hours**

This noncredit course is one in a series of two courses designed to help non-native speakers of English prepare for U.S. Citizenship. In this course, students receive direct instruction of English speaking and listening skills. Students also learn about and discuss the naturalization process and civic rights and responsibilities of U.S. citizens. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A022N — Multi-skills English 2A Noncredit — 54 hours**

This noncredit course is a low-intermediate multi-skills course for English language learners. Students will use all conventions of American English, including listening, speaking, pronunciation, reading, writing, and grammar skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A023N — Multi-skills English 2B Noncredit — 54 hours**

This noncredit course is a continuation of Multi-skills English 2A for English language learners. Students will add to their knowledge of the conventions of American English, including listening, speaking, pronunciation, reading, writing, and grammar skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A032N — Beginning Grammar Review Noncredit — 36 hours**

This noncredit course is the first of two courses in a progressive low-intermediate grammar review sequence for non-native speakers of English. This course is designed to provide students additional opportunities to master foundational grammatical structures such as the English verb tense system and basic sentence structures. Students review the rules governing the use and meaning of the target structures and practice identifying and producing them in spontaneous oral and written communication. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A033N — Intermediate Grammar Review Noncredit — 36 hours**

This noncredit course is the second of two courses in a progressive beginning-intermediate grammar review sequence for non-native speakers of English. This course is designed to provide students additional opportunities to master essential grammatical structures such as the English verb tense-aspect system and various complex sentence structures. Students review the rules governing the use and meaning of the target structures and practice identifying and producing them in spontaneous oral and written communication. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A038N — Speaking about Fiction — 36 hours**

This noncredit course is for students who want to discuss fiction writing through participation in small and large group discussions. Students will read stories from a variety of sources and share their summaries and opinions of the stories. Listening, speaking, and conversation skills will also be emphasized. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A039N — Speaking about Nonfiction — 36 hours**

This noncredit course is for students who want to talk about nonfiction topics such as current events, significant speeches, and other areas of interest which may include politics, technology, world events, sports, travel, business, and lifestyle. Listening, speaking, and conversation skills will also be emphasized. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A041N — English Language Learning for Parents of K-2nd Graders — 36 hours**

This noncredit course is one of four in a multi-skill course series designed to help English-learning students with children in the U.S. K-12 school system develop the cultural awareness and knowledge of the American primary school system along with English skills needed to be more effective advocates for their children's education. Listening, speaking, reading and writing will be addressed as necessary for students to communicate with their children's school. Special attention will be given to the cultural and academic expectations of K-2nd grade students in the U.S. This course is recommended for students with at least low-intermediate English skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A042N — English Language Learning for Parents of 3rd-5th Graders — 36 hours**

This noncredit course is one of four in a multi-skill course series designed to help English Learning students with children in the U.S. K-12 school system develop the cultural awareness and knowledge of the American primary school system along with English skills needed to be more effective advocates for their children's education. Listening, speaking, reading and writing will be addressed as necessary for students to communicate with their children's school. Special attention will be given to the cultural and academic expectations of 3rd-5th grade students in the U.S. This course is recommended for students with at least low-intermediate English skills. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A062N — Advanced Grammar Review 1 Noncredit — 36 hours**

This noncredit course is the first of two courses in a progressive advanced grammar review sequence for non-native speakers of English. It is designed for those who are at least at the upper-intermediate level of the ESL program or equivalent, or who are entering college-level courses. This course will focus on a review of grammatical structures, especially pronouns and clauses. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A063N — Advanced Grammar Review 2 Noncredit — 36 hours**

This noncredit course is the second of two courses in a progressive advanced grammar review sequence for non-native speakers of English. It is designed for those who at an advanced level of the ESL program or equivalent, or who are currently in college-level courses. This course will focus on verb moods, the passive voice, and avoiding sentence errors through self-editing. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A080N — ESL for the Workplace 1 Noncredit — 36 hours**

This noncredit course is the first of two courses in a high-intermediate to advanced course series for adult English language learners seeking to improve their employability in the United States. The primary goal of this course is to help students develop the English skills necessary to obtain a job in the U.S. and to familiarize them with the cultural expectations, rules, and regulations of the American workplace. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A081N — ESL for the Workplace 2 Noncredit — 36 hours**

This noncredit course is the second of two courses in a high-intermediate to advanced course series for adult English learners seeking to improve their employability in the United States. The primary goal of this course is to help students develop the English skills and cross-cultural competence necessary to perform and/or advance in the American workplace. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A092N — Listening and Speaking Transition to College Noncredit — 36 hours**

This noncredit course is one of two courses in a high-intermediate to advanced course series for English learners seeking to transition to credit college-level course work. The primary goal of this course is to help students develop the listening and speaking skills necessary to successfully participate in college such as participating in class discussions, delivering oral presentations and taking notes from lectures. The course will also focus on increasing students' understanding of the U.S. college system including admissions and graduation requirements, services, and procedures. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**English Language Learning A093N — Reading and Writing Transition to College Noncredit — 36 hours**

This noncredit course is one of two courses in a high-intermediate to advanced course series for adult English language learners seeking to transition to credit college-level coursework. This course will focus on helping students successfully meet college expectations by developing their reading, writing, and study skills. Students will work on improving reading rate and comprehension, note-taking from textbooks, study skills, and the basics of academic writing. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

**MATHEMATICS**

**Mathematics A001N — Preparation for Elementary Algebra Bootcamp Noncredit — 27 hours**

This is a noncredit course intended to prepare students for elementary algebra before enrollment in Math A010 - Elementary Algebra. The course will review pre-algebra materials. Topics to include simplifying expressions, solving equations and application of pre-algebra concepts. Not graded. Lecture. Not Transferable. Not degree applicable.

**Mathematics A002N — Preparation for Intermediate Algebra Bootcamp Noncredit — 27 hours**

This is a noncredit course intended to prepare students for intermediate algebra before enrollment in Math A030 - Intermediate Algebra. The course will review elementary algebra materials. Topics to include simplifying expressions, solving equations and application of concepts. Not graded. Lecture. Not Transferable. Not degree applicable.

**Mathematics A004N — Math Jam Basic Math Computational Skills Noncredit — 45 hours**

This is a noncredit course focusing on mastering key arithmetic topics. These topics include operations with whole numbers, operations with decimals, introduction to percents, introduction to integers, introduction to fractions, introduction to ratios and proportions, introduction to statistics and an introduction to measurement and basic geometry. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

## **Mathematics A082N — Math Jam for STEM Pathway Noncredit — 36 hours**

This is a noncredit preparation course designed to review prerequisite topics necessary for success in Math A115 or Math A120 covering operations with real numbers, relations and functions, systems of linear equations, factoring, rational expressions, radical equations, quadratic equations, exponential and logarithmic equations, conic sections, and basic geometry. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

## **Mathematics A086N — Math Jam for SLAM Pathway Noncredit — 36 hours**

This is a noncredit preparation course for Math A100 and MATHA160, designed to review prerequisite skills necessary for success. Topics include operations with real numbers; conversion between decimals, percents, and fractions; selected algebraic topics; the graph of a line; and problem-solving strategies. Offered on a pass no-pass basis only. Lecture. Not Transferable. Not degree applicable.

## **TUTORING**

### **Tutoring A050N — Supervised Tutoring — 54 hours**

This noncredit course provides supervised peer tutoring in academic courses for students who want assistance with course content and/or study skills. This is an open entry/open exit course. Offered on a not graded basis only. Arranged. Not Transferable. Not degree applicable

### **Tutoring A060 — Supervised Learning — 9 - 108 hours**

Supervised learning for student academic assistance to help students in historically difficult classes master content while they develop and integrate learning and study strategies. Enrollment is open all semester. Not applicable to an AA/AS degree. Arranged. Not Transferable. Not degree applicable

### **Tutoring A090N — Tutoring Skills 1 Noncredit — 14 hours**

This noncredit course is designed for students who want to work as tutors in a Tutorial or Academic Success Center including the Student Success Center at OCC. Tutoring skills development in the areas of interpersonal and communication skills, learning styles, study skills techniques, diversity/cultural awareness, and Socratic method. One of a sequence of courses leading to a Certificate of Completion. in Tutoring Skills and Strategies. Offered on a pass-no pass basis. Lecture, Arranged Lab. Not Transferable. Not degree applicable.

### **Tutoring A091N — Tutoring Skills 2 Noncredit — 14 hours**

This noncredit course is designed for students who want to work as tutors in an Academic Assistance or Tutorial Center including the Student Success Center at OCC. Tutoring skills development in the areas of communication skills and Socratic method, diversity and cultural awareness, learning disabilities, at-risk students, motivation/grit, and group tutoring. One of a sequence of courses that lead to a Certificate of Completion in Tutoring Skills and Strategies. Offered on a pass-no pass basis. Lecture, Arranged Lab. Not Transferable. Not degree applicable



# Faculty

**ABERNATHY, DEAN (2008)**

Professor, Architectural Technology  
 B.A., California Polytechnic State University, San Luis Obispo  
 M. A., University of California, Los Angeles  
 Ph.D., University of California, Los Angeles

**ALABI, JESSICA (2007)**

Professor, Sociology  
 A.A., Santa Ana College  
 B.A., Chapman University  
 M.A., Ph.D., University of California, Irvine

**ALTOBELLI, JOHN (1993)**

Assistant Professor, Kinesiology and Athletics  
 Head Coach, Baseball  
 B.S., University of Houston, Texas  
 M.A., Azusa Pacific

**AMARAL, CHRISTINA (1985)**

Professor, Fashion  
 A.A., Orange Coast College  
 B.A., California Polytechnic State University, San Luis Obispo  
 M.A., California State University, Long Beach

**ANDERSON, COURTNEY (2006)**

Professor, Speech  
 B.A., George Mason University, Virginia  
 M.A., California State University, Long Beach

**APPEL, MATTHEW (2005)**

Assistant Professor, Chemistry  
 B.S., California Polytechnic State University, San Luis Obispo  
 M.S., University of California, Irvine  
 Ph.D., University of California, Irvine

**ARCHIBALD, MELISSA (2019)**

Instructor, History  
 M.A., B.A., California State University, Long Beach

**ARISMENDI-PARDI, EDUARDO (1991)**

Professor, Mathematics  
 A.A., Cerritos College  
 B.A., California State University, Long Beach  
 M.S., West Coast University  
 Ed.D., Nova Southeastern University, Florida

**ASBELL, JESSICA LEE (2019)**

Instructor, Astronomy  
 M.S., California State University, Long Beach  
 B.S., University of California, Los Angeles  
 A.S., El Camino Community College

**AVETISIAN, SONIA (2000)**

Professor, Mathematics  
 A.A., Rio Hondo College  
 B.A., California State University, Los Angeles  
 M.S., California State University, Los Angeles

**BAGATOURIAN, LINDA (2002)**

Professor, Counseling Services  
 B.S., University of California, Irvine  
 M.A., Chapman University

**BAHRAINI, KAVEH (2015)**

Assistant Professor, Counseling Services  
 B.S., California State University, Fullerton  
 M.S., San Diego State University

**BAKER, CHERRYLL (2001)**

Professor, Biology  
 B.A., California State University, Fullerton  
 M.A., California State University, Fullerton

**BAKER, KAREN (2008)**

Associate Professor, Marine Science  
 B.S., University of California, Irvine  
 M.S., San Diego State University

**BARBER, WILLIAM B. (1990)**

Professor, Culinary Arts  
 A.O.S., Culinary Institute of America, New York

**BARNARD, DONNA (1995)**

Professor, English  
 B.A., California State University, Long Beach  
 M.A., California State University, Long Beach

**BARNES, CAROL (1985)**

Professor, Counseling Services  
 A.A. Coastline Community College  
 B.B.A., University of Wisconsin  
 M.A., Ph.D., Michigan State University

**BARTON, LAURIE (1999)**

Professor, English as a Second Language  
 B.A., Mills College  
 M.S., California State University, Fullerton  
 M.F.A., Antioch University

**BARVARZ, PARNIAN (1999)**

Professor, Computer Information Systems  
 B.A., California State University, Fullerton  
 M.S., California State University, Fullerton

**BEAU, LESLIE (2006)**

Associate Professor, Business  
 B.A., California State University, Fullerton  
 M.B.A., Pepperdine University

**BECKER, LAUREN (2015)**

Assistant Professor, Fashion  
 M.A., California State University, Los Angeles  
 B.A., California State University, Fullerton

**BEHR, LAURA (2005)**

Professor, Kinesiology and Athletics  
 Head Coach, Women's Crew  
 B.A., Purdue University  
 M.S., University of Wisconsin

**BEICHER, BRIAN (2016)**

Instructor, Emergency Medical Services  
 B.S., Concordia University  
 B.S., University of California, Riverside  
 M.S., Purdue University

**BENDER, EDWARD ERIK (1995)**

Professor, Geology  
 B.S., Rider University, New Jersey  
 M.S., Vanderbilt, Tennessee  
 Ph.D., University of Southern California

**BERG, CHRISTOPHER (2018)**

Instructor, Geology  
 B.S., University of Cincinnati  
 M.S., University of Kentucky  
 Ph.D., The University of Texas at Austin

**BIALECKI, MICHAEL (2006)**

Professor, Biology  
 B.S., University of Michigan  
 Ph.D., University of Utah

**BLAIR, JAMIE (1987)**

Professor, Mathematics  
 B.A., M.A., California State University, Long Beach

**BLAKE, ELIZABETH (2009)**

Associate Professor, Nutrition and Dietetic Technology  
 B.S., M.A., California State University, Long Beach

**BLYSTONE, ALLISSA (2018)**

Instructor, Anatomy  
 B.S., M.A., Baylor University  
 Ph.D., University of Dayton

**BOOGAR, TYLER (2017)**

Instructor, Mathematics, Basic Skills  
 B.S., M.S., California State University, Long Beach

**BOYER, DEREK (2007)**

Assistant Professor, Microbiology  
 B.S., M.S., California State University, Long Beach

**BRITO, FRANCISCO (2019)**

Instructor, English  
 Ph.D., University of California, Berkeley  
 B.A., Harvard University

**BROWN, CAMERON (2015)**

Assistant Professor, Kinesiology and Athletics  
 Head Coach, Men's Crew  
 B.A.Sc., M.A., University of Queensland, Australia

**BROWN DESHANO, TINA (2019)**

Instructor, Hospitality, Travel and Tourism  
 D.M., University of Phoenix  
 M.S., Louisiana State University, Baton Rouge  
 B.S., California State University, Fullerton

**BROWN, JEFFERY (2006)**

Assistant Professor, Spanish  
 B.S., University of California, Berkeley  
 M.A., St. Louis University, Missouri

**BRUNO, THOMAS (2014)**

Professor, Theatre Arts  
 B.F.A., State University of New York, Purchase  
 M.F.A., Pennsylvania State University

**BUDWIG, ERIC (2019)**

Instructor, Welding  
 B.S., Western Governor's University  
 A.S., Orange Coast College

**CABANEL-BLEUER, DENISE (1999)**

Professor, Spanish  
 B.A., M.A., University of California, Davis

**CAMPBELL, LAURIE (1997)**

Professor, Early Childhood Education  
B.S., California State University, Fullerton  
M.A., California State University, Long Beach

**CARTER, JOHN (2016)**

Instructor, Aviation Maintenance

**CASSIDY, LORI (2008)**

Associate Professor, Librarian  
B.I.S., Shawnee State University  
M.S., National University  
M.L.S., San Jose State University

**CASTANO, ROBERT (1991)**

Professor, Electronics Technology  
B.A., California State Polytechnic University, Pomona

**CERVANTES, AURELIANO (2012)**

Assistant Professor, Machine Technology  
A.A., Santa Ana College  
B.S., California State University, Long Beach

**CHAIYAKAL, JENNIFER (2006)**

Professor, Early Childhood  
A.A., Orange Coast College  
B.S., California State University, Fullerton  
M.A., California State University, Long Beach

**CHAVEZ JIMENEZ, IRVING (2019)**

Counselor, Disabled Student Services and Programs  
M.S., B.A., California State University, Los Angeles

**CLARK, GREGORY (1998)**

Professor, Leadership Studies/Management  
B.A., University of California, Davis  
M.A., Chapman University  
Ed.D., University of Southern California

**COATY, PATRICK (1999)**

Professor, Political Science/History  
B.S., University of Wisconsin-Madison  
M.A., Ph.D., Claremont Graduate School

**COCO, FELICIA (2001)**

Professor, Speech  
B.A., M.A., California State University, Long Beach

**CODDING, HEATHER (2016)**

Professor, Counseling Services  
B.A., California State University, Fullerton  
M.A., Azusa Pacific University

**COLVIN, DIANE (1994)**

Professor, English as a Second Language  
B.A., California State University, Long Beach  
M.A., School for International Training, Vermont  
Ed.D., California State University, Long Beach

**CONGLETON, JOHN (2002)**

Assistant Professor, Chemistry  
B.A., M.S., University of California, San Diego

**CONNOR, SEAN (2016)**

Instructor, Communication Studies  
M.A., California State University, Los Angeles  
B.A., California State University, Long Beach

**CONTOPOULOS, NICHOLAS (1991)**

Professor, Astronomy  
A.S., Merritt College  
B.S., California State University, Hayward  
M.S., San Diego State University

**COOLEY, TIMOTHY (2006)**

Assistant Professor, Math  
B.A., M.A., California State University, Fullerton

**CORLEY, CYNTHIA (1997)**

Professor, Theatre Arts  
B.A., University of California, Irvine  
M.A., University of Exeter, England

**COSTAS, JOSE (1999)**

Professor, Dance  
B.S., M.Ed., Catholic University of Puerto Rico  
M.F.A., Tisch School of the Arts, New York University

**COTTRELL, LYNNE (2010)**

Associate Professor, Medical Assisting  
Certificate in Medical Clinical Assisting, Bryman School,  
Long Beach  
A.A., Golden West College  
B.S., M.S., California State University, Dominguez Hills

**COX, STEVEN (2001)**

Professor, Art  
B.A., M.A., California State University, Fullerton

**CRANER, MICHELLE (2017)**

Instructor, Fashion Merchandising  
B.A., M.A., California State University, Long Beach

**CUELLAR, ERIC (1999)**

Associate Professor, Counseling Services  
B.A., M.Ed., University of San Diego

**CUTENESE, CHARLES (1999)**

Professor, Kinesiology and Athletics  
Head Coach, Women's Volleyball  
A.A., Orange Coast College  
B.A., California State University, Fullerton  
M.Ed., Azusa Pacific University

**DALE, JOHN (2006)**

Associate Professor, Librarian  
B.A., University of California, Irvine  
M.L.S., San Jose State University

**DAVARI, SHAUHIN (2015)**

Assistant Professor, Communication Studies  
A.A., Orange Coast College  
B.A., University of California, Irvine  
J.D., University of California, Davis

**DELLA MARNA, JODI (1997)**

Professor, Librarian  
B.A., California State University, Fullerton  
M.L.S., University of California, Los Angeles  
M.A., California State University, Dominguez Hills

**DENNEY, MATTHEW D. (2017)**

Instructor, Heating, Ventilation, Air Conditioning, and Refrigeration  
A.A., Universal Technical Institute, Arizona  
B.S., DeVry University, Illinois

**DE SURRA, CHRISTOPHER (1999)**

Professor, Speech  
B.A., M.A., San Diego State University

**DREW, RENDELL (2004)**

Professor, Political Science/American Government  
B.A., San Diego State University  
M.P.A., National University  
Ed.D., Pepperdine University

**DRUM, STEPHEN (2002)**

Professor, Physics  
B.S., M.S., University of California, Irvine

**DUBROVSKIY, STANISLAV (2017)**

Instructor, Mathematics  
M.S., State University of New York at Stony Brook  
Ph.D., Northeastern University

**ELLIOTT, KELLI (2005)**

Professor, Biology  
B.S., San Diego State University  
M.S., California State University, Fullerton

**ELLIS, JEANETTE (2012)**

Instructor, Early Childhood  
B.F.A., M.A., California State University, Long Beach

**ELLIS, ROBERT (2013)**

Assistant Professor, Marine Science  
B.S., M.S., University of California, Santa Barbara

**ERNSBERGER, GABRIELA (2008)**

Professor, Computer Science  
B.S., University of California, Irvine  
M.S., California State University, Fullerton

**ESPOSITO, ANGELO (2017)**

Instructor, Engineering  
M.S., B.S., University of Naples Federico II  
Ph.D., The Ohio State University

**EVANS, CHRISTOPHER (1997)**

Professor, English  
B.A., M.A., California State University, Long Beach

**FANG, JEROME (2015)**

Assistant Professor, Astronomy  
B.S., University of California, Los Angeles  
M.S., Ph.D., University of California, Santa Cruz

**FARIDI, ABBAS (1989)**

Professor, Physics  
B.S., Fairleigh Dickinson University, New Jersey  
Ph.D., New York University

**FELTS, KAREN (2000)**

Professor, English  
B.S., M.A., University of California, Riverside

**FIGUEROA, BENJAMIN (1999)**

Associate Professor, Counseling Services  
A.A., Cerritos College  
B.A., California State University, Fullerton  
M.S., San Francisco State University

**FORSSELL, ERIK (2015)**

Professor, Film and Video  
A.A., Orange Coast College  
B.A., Art Center College of Design

**FOSTER, RODNEY (1991)**

Professor, Aviation Maintenance Technology  
B.S., M.B.A., Amberon University, Texas

**FRANZ, KATHLEEN (1995)**

Associate Professor, English as a Second Language  
B.A., Whittier College  
M.S., California State University, Fullerton

**FRECHEN, RICHARD (2006)**

Professor, Chemistry  
B.S., California Institute of Technology  
M.S., California State University, Fullerton

**FRIEDMAN, KATIE (2017)**

Instructor, English Basic Skills and Writing  
B.A., M.A., California State Polytechnic University,  
Pomona

**FUCHS, STEVEN (2012)**

Assistant Professor, Architectural Technology  
A.S., A.A., Los Angeles Harbor College  
B.S., Thomas Edison State College, New Jersey  
M.Arch., Southern California Institute of Architecture

**FERGUSON, MELISSA (2019)**

Instructor, Psychology  
Ph.D., University of Southern California  
M.A., B.A., San Diego State University

**GAYTAN, DONOVAN (1991)**

Professor, English  
B.A., M.A., California State University, Los Angeles

**GILBERT, STEPHEN (1997)**

Professor, Computer Science  
B.S., California State University, Long Beach  
M.S., Azusa Pacific University

**GILLISSEN, BLADE (2007)**

Professor, Photography  
A.A., Orange Coast College  
A.A., Rancho Santiago College  
B.S., California State University, Dominguez Hills

**GOERRISSEN, JAN (2012)**

Associate Professor, Biological Sciences  
B.S., University of California, Santa Cruz  
Ph.D., University of California, Davis

**GOLSON, CHRISTOPHER "RICK" (1990)**

Professor, Theatre Arts  
A.A., Orange Coast College  
B.A., University of California, Santa Cruz  
M.A., San Francisco State University

**GONZALES, JARREN (2008)**

Professor, Psychology  
B.A., University of Portland, Oregon  
M.A., Ph.D., University of Notre Dame, Indiana

**GONZALES, SHIRLEY L. (1993)**

Assistant Professor, Chemistry  
B.S., Ph.D., University of California, Irvine

**GONZALEZ, JOEL (2019)**

Instructor, Kinesiology and Head Football Coach  
M.A., Concordia University  
B.A., University of Nevada, Las Vegas

**GORDON, LEE (1989)**

Assistant Professor, Business Education  
B.S., Indiana University  
M.A., Indiana University

**GOTSCHALL, NORIKO (2016)**

Instructor, Counseling Services  
B.A., University of Wisconsin, Madison  
M.S., California State University, Long Beach

**GOULD, BRIAN (1995)**

Professor, Music  
B.A., University of California, Irvine  
M.M., D.M.A., University of Southern California

**GRATZ, ERIN (2019)**

Librarian  
Ed.D., University of La Verne  
MLIS, University of Illinois, Urbana-Champaign  
M.A., University of Amsterdam  
B.A., Manchester College

**GREEN, ULRIKE (2017)**

Instructor, Anthropology  
A.A., Orange Coast College  
B.A., University of California, Irvine  
M.A., Ph.D., University of California, San Diego

**GROOMS, MARK (2016)**

Instructor, Business  
B.S., Indiana University, Bloomington  
M.B.A., University of California, Irvine

**GUERRA, ARNOLD, III (2002)**

Professor, Physics  
M.S., Ph.D., University of California, Irvine

**GUILLEN, DENIA (2008)**

Associate Professor, Counseling Services  
B.A., California State University, Fullerton  
M.S., California State University, Long Beach

**HAGHIGHAT, HANNAH (2019)**

Instructor, Communication Studies  
M.A., B.A., California State University, Long Beach  
A.A., Orange Coast College

**HALL, JENNIFER (2019)**

Counselor, Enrollments and Retention  
M.S., California State University, Long Beach  
M.S.Ed., Concordia University  
B.A., University of Minnesota, Twin Cities

**HAMAMURA, MARK (2018)**

Instructor, Physics  
B.S., B.A., M.S., Ph.D., University of California, Irvine

**HANLON, ANNA (2003)**

Professor, Public Health  
B.S., M.S., M.P.H., EdD, California State University,  
Fullerton

**HARLOW, RICHARD (2005)**

Assistant Professor, Horticulture  
B.S. California State Polytechnic University, Pomona

**HARRIMAN, STANLEY (2015)**

Assistant Professor, Aviation Pilot Training  
B.S., Andrews University, Michigan  
M.S., Ph.D., Purdue University, Indiana

**HELLMAN, AMY (2016)**

Instructor, Chemistry  
B.S., University of California, Santa Barbara  
M.S., Ph.D., University of California, San Diego

**HENDERSON, KARL (2015)**

Assistant Professor, Manufacturing Technology  
A.S., ITT Technical Institute of Technology

**HIDDEN, MARTA L. (2001)**

Professor, Mathematics  
B.A., M.A., California State University, Sacramento

**HITCHINGS, JAMIE (2017)**

Instructor, Film & Television  
A.A., Munson Williams Proctor Institute College of Art  
B.F.A., Kansas City Art Institute  
M.A., New York University

**HOFFMAN, GLYNIS (1997)**

Professor, English  
B.A., M.A., California State University, Fullerton

**HOGUE, STEVEN (2000)**

Professor, Counseling Services  
A.A., A.S., Mt. San Antonio College  
B.S., California State University, Los Angeles  
M.A., California State University, San Bernardino

**HOLLANDER, GENA (1999)**

Associate Professor, Anthropology/Sociology  
B.A., Queens College (New York)  
M.A., California State University, Fullerton

**HOLT, KELLY (2012)**

Professor, Radiologic Technology  
A.A., Long Beach City College  
B.A., California State University, Long Beach  
M.S., California State University, Dominguez Hills

**HUNTER, AMELIE (2001)**

Professor, Dance  
B.A., M.A., University of California, Los Angeles  
M.F.A., Tisch School of the Arts, New York University

**HUSSAIN, SYED (2008)**

Professor, Mathematics; Engineering  
M.S., South Dakota School of Mines and Technology

**IACOPETTI, ANTHONY (2007)**

Assistant Professor, Kinesiology and Athletics  
Head Coach, Women's Water Polo; Swimming and  
Diving  
B.B.A., University of New Mexico  
M.A., Azusa Pacific University

**IBRANOSSIAN, AGATHA (2006)**

Professor, Photography  
B.F.A., Art Center College of Design

**ICARO-BOISER, RUBIROSA (2012)**

Assistant Professor, Counseling Services:  
International/General  
A.A., Cerritos College  
B.S., California State University, Fullerton  
M.S., University of La Verne

**ISAAC, DARRYL (1995)**

Professor, Cardiovascular Technology  
B.A., University of California, Irvine

**JOHNSON, DOUGLAS (2012)**

Assistant Professor, Accounting  
B.S., California State University, Fullerton  
M.S., California State University, Dominguez Hills  
M.S.D., Arizona State University

**JUDD, FREDERICK (2017)**

Instructor, Business and Business Law  
B.S., Arizona State University  
J.D., Brigham Young University Law School

**KAGAWA, AKEMI (1999)**

Professor, Japanese  
B.A., M.A., California State University, Los Angeles  
M.A., University of Southern California

**KAMPHUIS, JACQUELINE (1999)**

Professor, Student Success Center  
B.A., M.A., California State University, Long Beach

**KANG, HANNAH (2016)**

Instructor, Psychology  
B.A., University of California, San Diego  
Ph.D., University of California, Irvine

**KEITH, ARLETE BEATRIZ (2005)**

Assistant Professor, Spanish  
B.A., M.A., University of California, Irvine

**KENNEDY, MARILYN (1999)**

Associate Professor, English  
A.A., Cypress College  
B.A., California State University, Long Beach  
M.A., California State University, Fullerton

**KENNEDY, PATRICK (1990)**

Professor, English  
B.A., M.A., California State University, Long Beach

**KERINS, JOHN CHRISTOPHER (2017)**

Instructor, Commercial Art  
B.A., California Polytechnic University, San Luis Obispo  
M.F.A., University of California, Los Angeles

**KETCHAM, CHRISTOPHER (2017)**

Instructor, Kinesiology & Head Coach, Men's/  
Women's Tennis  
B.A., Chapman University  
M.S., Azusa Pacific University

**KINGS, ROSE ANNE (2000)**

Professor, Architectural Technology  
B.Arch., California Polytechnic State University, San  
Luis Obispo

**KIRCH, STACY (2001)**

Professor, Counseling Services  
B.A., Concordia University  
M.S., California State University, Long Beach

**KOINES, ANDREW (2001)**

Professor, Mathematics  
B.A., University of California, Berkeley  
M.S., Ph.D., University of California, Irvine

**KOMENDA, VIRGINIA (2012)**

Associate Professor, English  
B.A., Humboldt State University  
M.S., California State University, Long Beach  
M.A., University of Southern California

**KRAFT, RICHARD (2002)**

Professor, Photography  
B.F.A., Parsons School of Design, New York  
M.F.A., University of Michigan

**KUBIAK, RENEE (2000)**

Professor, Interior Design  
B.A., California State University, Long Beach  
M.S.D., Arizona State University

**KULIK, CHRISTOPHER (2016)**

Instructor, Counseling Services, CAFYES/EOPS  
B.A., Saint Lawrence University  
M.A., University of Northern Colorado

**KUO, DANIEL (2006)**

Professor, Economics  
B.A., University of California, Berkeley  
M.A., University of California, Santa Barbara

**LA MER, EMMA GRACE "JOEY" (1992)**

Assistant Professor, Speech  
B.S., M.A., Arizona State University

**LANE, ANDREA (2017)**

Instructor, Counseling Services  
B.A., California State University, Long Beach  
M.S., Chapman University  
M.A., California State University, Dominguez Hills

**LANNOM, MICHAEL (2014)**

Assistant Professor, Welding Technology  
A.S., Orange Coast College

**LAUX, JOHN M. (2000)**

Professor, Chemistry  
B.S., Pacific Lutheran University, Washington  
Ph.D., University of California, Irvine

**LEGASPI, JODI (2016)**

Instructor, Kinesiology and Athletics, Softball Coach  
B.A., University of California, Los Angeles  
M.A., Concordia University

**LERMA, MARIA (1993)**

Professor, English as a Second Language  
B.A., University of Southern California  
M.A., California State University, Long Beach  
Ed.D., California State University, Long Beach

**LIANG, TABITHA WEI MEI (2016)**

Instructor, Neurodiagnostic and Polysomnographic  
Technology  
B.S., University of California, Irvine

**LIVINGSTON, TAB (1997)**

Professor, Mathematics  
B.A., University of Central Florida  
M.A., California State University, Fullerton

**LLOYD, DOUGLAS (2015)**

Instructor, Mathematics  
B.S., California State University, Long Beach  
M.A., California State University, Los Angeles

**LOHMAN, BENJAMIN (2001)**

Associate Professor, Speech  
B.S., Bradley University, Illinois  
M.F.A., Chapman University

**LOREN, DAVI (2001)**

Professor, English  
B.A., M.A., California State University, Northridge  
M.F.A., University of California, Irvine

**LOVEGREEN, ALAN (2016)**

Instructor, English  
B.A., M.A., Ph.D., University of California, Riverside

**LUCKRING, EVE (1999)**

Professor, Photography  
B.A., University Of Delaware  
M.F.A., University of California, Los Angeles

**MAEKAWA, NAOKO (2008)**

Professor, Mathematics  
B.S., University of California, Irvine  
M.S., University of California, Los Angeles

**MAHER, DEBORAH (1999)**

Professor, Psychology  
B.A., M.A., University of California, Riverside  
Ph.D., University of California, Riverside

**MARCINA, VESNA (2002)**

Professor, Political Science  
B.A., California State University, Long Beach  
M.A., Ph.D., University of California, Santa Barbara

**MARRON, ELIAS (1995)**

Professor, Counseling Services  
B.A., California State University, Fullerton  
M.S., California State University, Dominguez Hills

**MAUGHAN, HELEN (2000)**

Assistant Professor, Chemistry  
B.A., Glassboro State College, New Jersey  
M.A., University of Southern California

**MIRANDA, PEDRO LUIS (2017)**

Instructor, Counseling Services  
A.A., Moorpark Community College  
B.A., California State University, Dominguez Hills  
M.S., California State University, Long Beach

**MCCALL, LESLIE (2001)**

Professor, Photography  
A.A., Cypress College  
B.F.A., Art Center College of Design  
M.F.A., Art Institute of Boston at Lesley University

**MCCLANAHAN, ANNE (2001)**

Professor, Speech-Language  
Pathology Assistant  
B.A., M.A., California State University, Fullerton

**MCCOMB, HELEN (1984)**

Professor, History/Humanities  
B.A., M.A., University of California, Santa Barbara

**MEANS, LELAND (2012)**

Assistant Professor, Sculpture  
B.A., California State University, Sonoma  
M.A., Claremont Graduate University

**MIRANDA, PEDRO LUIS (2017)**

Instructor, Counseling  
A.A., Moorpark Community College  
B.A., California State University, Dominguez Hills  
M.S., California State University, Long Beach

**MOCHIZUKI, JON ATSUSHI (2017)**

Instructor, History  
B.A., University of California, Los Angeles  
M.A., University of California, Irvine

**MONAHAN, GEORGIE (1989)**

Professor, Speech  
B.A., M.A., California State University, Long Beach

**MONTAGNE, MEREDITH (2015)**

Assistant Professor, Physical Anthropology  
B.S., M.A., California State University, Fullerton

**MOORE, ART (1984)**

Professor, Mathematics  
A.B., M.A., University of California, Berkeley

**MOORE, GREGORY (2001)**

Professor, Mathematics  
A.A., El Camino College  
B.A., University of California, Los Angeles  
M.A., Cornell University, New York

**MORGAN, ARABIAN (2006)**

Professor, Accounting  
B.S., M.B.T., University of Southern California

**MORGAN, CARLETON (1991)**

Professor, Librarian  
B.A., California State University, San Bernardino  
M.L.S., San Jose State University

**MORGAN, DENNIS (1999)**

Associate Professor, Business Education  
A.A., El Camino College  
B.S., California State University, Dominguez Hills  
M.B.A., California State University, Long Beach

**MUCCIARO, THOMAS (1999)**

Professor, Chemistry  
A.B., Occidental College  
Ph.D., Stanford University

**MUCINO, PATRICIA (2016)**

Instructor, Counseling Services  
B.S., California State Polytechnic University, Pomona  
M.S., California State University, Long Beach

**MUELAS, MARI-AALA (2005)**

Assistant Professor, Spanish  
B.A., M.A., University of California, Los Angeles

**MUIR, ROBERT (1999)**

Professor, Mathematics  
B.S., California State Polytechnic University, Pomona  
M.S., University of California, Irvine

**MURPHY, TIMOTHY (2000)**

Associate Professor, Computer Information Systems  
B.A., M.A., California State University, Long Beach

**MYERS, JOY (2008)**

Professor, Registered Dental Assisting  
B.S., California State University, Long Beach

**MYERS, KEVIN (1999)**

Associate Professor, Fine Arts/Ceramics  
B.F.A., M.F.A., Otis College of Art and Design

**NAESSE, IRENE (2001)**

Professor, Geography  
B.A., M.A., San Diego State University

**NAVIDAD, APOLINARIO (2005)**

Professor, Music  
B.A., M.A., California State University, Long Beach

**NEIL, JEANNE (2009)**

Professor, Accounting  
A.S., Mt. San Jacinto College  
B.A., M.B.A., California State University, San Bernardino

**NELSON, JESSICA (2016)**

Instructor, Counseling Services: Student Success and Support Programs/Retention  
M.S., California State University, Long Beach  
B.A., University of California, Los Angeles

**NEWMAN, MATTHEW (2019)**

Instructor, Film Production & Immersive Media  
B.A., Chapman University

**NGO, MICHELLE (2009)**

Assistant Professor, Counseling Services  
B.A., California State University, Fullerton  
M.A., California State University, Dominguez Hills

**NGUYEN, CHRISTINA (2019)**

Professor, Counseling Services  
B.A., California State University, Long Beach  
M.A., National University

**NGUYEN, JESSICA (2000)**

Professor, Counseling Services  
M.A., California State University, Dominguez Hills

**NGUYEN, YVETTE (2019)**

Counselor  
M.A.Ed., University of Southern California  
B.A., University of California, Los Angeles  
A.A., East Los Angeles College

**NORFOLK, KRISTY (2017)**

Instructor, Cardiovascular Technology & Diagnostic Medical Sonography  
A.A., Orange Coast College  
M.S., Weber State University

**NORLING, MARCELLA (1982)**

Professor, Religious Studies  
B.A., University of California, Santa Barbara  
M.A., National University

**OBSTFELD, LORETTA (2005)**

Assistant Professor, English  
B.A., California State University, Long Beach  
M.F.A., Chapman University

**OCHOA, MARCO (2002)**

Assistant Professor, Kinesiology and Athletics  
Head Coach, Cross Country  
B.A., M.A., Adams State College, Colorado

**O'HARA, KEVIN (2016)**

Instructor, Film & Television  
A.A., Palomar Community College  
B.A., California State University, San Marcos

**OGAZ, REBECCA (2015)**

Instructor, Counseling Services  
A.A., Golden West College  
B.A., California State University  
M.A., Loyola Marymount University  
Ph.D., Chicago School of Professional Psychology

**ORTIZ, OSCAR (2008)**

Professor, Construction Technology  
A.A., El Camino College  
A.A., Los Angeles Trade Technical College

**OTTOSON, KATHRYN (2018)**

Counselor, Career Education Programs  
A.A., Santiago Canyon College  
B.A., Communication Studies  
M.S., Counseling

**OTWELL, CHARLES (2014)**

Professor, Philosophy  
B.A., M.A., Ph.D., University of California, Irvine

**PAGHUNSAN, RACHEL (2016)**

Instructor, Food Service Management  
A.A., Johnson and Wales University  
B.A., Collins College of Hospitality Management

**PARKER, KENNETH (2005)**

Assistant Professor, English  
B.A., M.F.A., Saint Mary's College of California

**PARSELL, JILL (2014)**

Assistant Professor, Biology  
B.S., M.S., California State University, Pomona

**PAULDING, MICHAEL (2015)**

Instructor, Computer Science  
B.S., Bucknell University, Pennsylvania  
M.S., Ph.D., University of Hawai'i at Manoa

**PENA, MAXIMINO (2017)**

Instructor, Construction Technology  
A.A., El Camino College  
B.S., California State University, Long Beach

**PEREZ-STABLE COX, OLGA (1974)**

Associate Professor, Psychology  
B.A., California State University, Fullerton  
M.A., Chapman College

**PERKINS, MARC (2002)**

Professor, Biological Sciences  
B.S., Harvey Mudd College  
M.S., Arizona State University

**PETERS, TIMOTHY (1999)**

Associate Professor, Construction Technology  
Vocational Equivalency

**PETTUS, CANDICE (2001)**

Professor, Anthropology/Sociology  
A.A., Orange Coast College  
B.A., M.A., California State University, Fullerton

**PHAM, LIEN (2006)**

Professor, Psychology  
B.A., M.A., Ph.D., University of California, Los Angeles

**PHILLIPS, CLYDE (1993)**

Assistant Professor, Counseling Services  
B.A., M.S., California State University, Long Beach

**PLUM, CARYN (2012)**

Associate Professor, Counseling Services: Allied Health/General  
B.A., California State University, Chico  
M.S., University of California, Long Beach

**POLK, SHERANA (2008)**

Associate Professor, Speech  
B.A., Carroll College, Montana  
M.A., California State University, Northridge

**PRIOLEAU, KAREN (2012)**

Assistant Professor, Professional Mariners  
A.A., Orange Coast College

**PULLMAN, LORI (2014)**

Assistant Professor, Horticulture  
B.A., University of California, Los Angeles  
M.A., California State Polytechnic University

**QUINN, CHRISTOPHER (2012)**

Associate Professor, Geography  
B.A., M.A., California State University, Long Beach

**RAILEANU, LIA (1999)**

Professor, French  
M.A., University of Iassy, Romania

**RANGNO, ERIK (2007)**

Assistant Professor, English  
B.A., University of California, Berkeley  
M.A., Ph.D., University of California, Irvine

**RASKIN, DEBRA (2016)**

Instructor, Mathematics  
B.A., University of California, Irvine  
M.A., University of California, Fullerton

**REBER-BONHALL, CYNTHIA (2005)**

Associate Professor, Diagnostic Medical  
Sonography  
A.A., Orange Coast College  
B.S., Weber State University, Utah  
M.A., California State University, San Bernardino

**REED, CHARLENE (2007)**

Professor, Interior Design  
B.A., California State University, Long Beach  
M.A., Pepperdine University

**REESE, LAURA LIGHTER (2017)**

Instructor, Counseling  
A.A., Orange Coast College  
B.A., California State University, Fullerton  
M.A., University of Southern California

**RICKERSON, IRINI (1990)**

Professor, Art  
Doctorate, Florence University, Italy

**RIDNOR, RACHEL (2016)**

Instructor, Sociology  
B.A., M.A., University of California, Irvine

**RIGGIO, ALISON (2012)**

Assistant Professor, Respiratory Care  
A.A., College of St. Catherine, Minnesota  
B.S., St. Cloud State University, Minnesota

**RODGERS, KATHRYN (2016)**

Instructor, Computer Science  
M.S., University of California, Irvine  
B.S., University of Utah

**RODRIGUEZ, DAVID (1999)**

Professor, Construction Technology  
A.A., El Camino College  
B.S., California State University, Long Beach

**ROJAS, ALEXANDRIA (2016)**

Instructor, Counseling Services  
B.A., M.A., Chapman University

**ROSSITER, JAIME (2019)**

Instructor, Geography  
M.A., San Diego State University  
B.A., Southern Connecticut State University

**RUBENSTEIN, ELIZA (2009)**

Associate Professor, Music  
B.A., Oberlin College, Ohio  
M.F.A., University of California, Irvine

**RUDMANN, BRENT (2014)**

Assistant Professor, History  
B.A., California State University, San Marcos  
M.A., University of San Diego

**RUSSELL, GREGORY (2008)**

Associate Professor, Biological Sciences  
B.S., University of Wyoming  
Ph.D., University of California, Riverside

**RUZI, FLAVIA (2017)**

Instructor, English  
B.A., University of California, Los Angeles  
M.A., University of California, Riverside

**SACHS, LOREN (2004)**

Professor, Radiologic Technology  
B.A., M.A., California State University, Dominguez Hills

**SAICHEK, WILLIAM (2001)**

Professor, Computer Information Systems  
A.A., El Camino College  
B.S., M.S., University of California, Irvine

**SAM, THINH (2006)**

Assistant Professor, Math  
B.S., M.S., University of Colorado

**SARAFIAN, JOSEPH (2017)**

Instructor, Architectural Technology  
B.A., University of Southern California  
M.A., University of California, Los Angeles

**SAVAGE, JENNIFER (2008)**

Professor, Economics  
B.A., University of Colorado, Colorado Springs  
M.A., University of California, Irvine

**SCANE, DANIELLE (2006)**

Professor, Business  
B.A., Arizona State University  
M.S., Amberton University

**SCHNEIDERMAN, ROBERT (1997)**

Professor, Counseling Services  
B.S., Arizona State University  
M.A., Chapman University

**SENDOWSKY, GUIDO H. (2015)**

Assistant Professor, Kinesiology and Athletics  
B.S., California State University, Fullerton  
M.H.A., University of Phoenix

**SEVI, KAYLEIGH (2015)**

Assistant Professor, English  
B.A., M.A., California State University, Long Beach

**SHAJIE, VIDA (1996)**

Professor, Counseling Services  
B.A., PARS College, Iran  
M.S., California State University, Fullerton

**SHERMAN FALCIONI, JOCELYN (2009)**

Professor, World Languages  
B.A., Azusa Pacific University  
M.A., University of California, Los Angeles

**SHINE, BRENDA (1993)**

Professor, Hotel Management  
B.A., Southern California College

**SIMPKIN, PHILLIP (2018)**

Instructor, Philosophy and Religious Studies  
A.A., Golden West College  
B.A., M.A., California State University, Long Beach

**SIMPSON, MELISSA (2001)**

Professor, Culinary Arts  
B.S., University of Missouri

**SMITH, C. DOUG (2002)**

Assistant Professor, Kinesiology and Athletics  
Assistant Coach, Football  
B.S., Bowling Green State University  
M.S., California State University, Fullerton

**SMITH, KEVIN (2004)**

Assistant Professor, Kinesiology and Athletics  
Head Coach, Soccer  
B.A., University of California, Irvine  
M.S., National University

**SMITH, WARD (2016)**

Instructor, Librarian  
B.A., Birmingham-Southern College  
M.A., University of California, Los Angeles

**SMOLIN, JAMES M. (2005)**

Professor, Psychology  
B.A., M.A., California State University, Long Beach  
Ph.D., Purdue University, Indiana

**SOGO, L. FARAH (1999)**

Professor, Biology  
B.A., University of California, Riverside  
Ph.D., University of California, San Diego

**SOTO, RICARDO (2001)**

Professor, Music  
B.A., M.A., California State University, Fullerton  
Mus.D., University of Southern California

**SPENCER, STEVEN (2001)**

Assistant Professor, Kinesiology and Athletics  
Head Coach, Men's Basketball  
A.A., College of Marin  
B.A., Sonoma State University  
M.S., California Lutheran University

**STANTON, JORDAN (2017)**

Instructor, History  
B.A., University of Illinois at Champaign-Urbana  
M.A., University of Chicago  
Ph.D., University of California, Irvine

**STUART, ANDREW (2016)**

Professor, English  
B.A., M.A., California State University, Long Beach

**STUART, JOHN (2007)**

Associate Professor, Heating, Ventilation, Air  
Conditioning and Refrigeration  
B.A., California State University, Fullerton  
M.A., California State University, Long Beach

**SUGDEN, JAMES (2008)**

Assistant Professor, Accounting  
B.A., California State University, Northridge  
M.B.A., University of Southern California

**TERNES, LINDA (2018)**

Associate Professor, Mathematics  
B.A., Vanguard University  
M.S., California State University, Long Beach

**TOM, EILEEN (2008)**

Professor, Counseling Services  
B.A., California State University, Long Beach  
M.A., University of California, Los Angeles

**TOPPING, HOLLY (2008)**

Associate Professor, Art  
B.F.A., Otis College of Art and Design  
M.F.A., University of California, Irvine

**TRAVER, MARIA (2007)**

Assistant Professor, Counseling Services  
A.A., Irvine Valley College  
B.S., California State University, Fullerton  
M.A., California State University, Long Beach

**VIDAL, JARED (2019)**

Counselor, Transfer Center  
M.S., California State University, Los Angeles  
B.A., California State University, Fullerton

**VIEAU, ARLENE (1997)**

Assistant Professor, Chemistry  
B.A., University of Hawaii  
M.S., California State University, Fullerton

**VOICU, MARIANA (2001)**

Professor, Mathematics  
B.A., California State University, San Bernardino  
M.S., University of California, Irvine

**VOLKOFF, CORA (2016)**

Instructor, Digital Media Arts and Design  
B.A., University of California, Davis  
M.A., National University

**WAGNER, LAURA (2018)**

Instructor, English  
B.A., Williams College  
Ph.D., University of California, Berkeley

**WANG, YILIN (2017)**

Instructor, Chemistry  
A.A., Santa Fe College  
B.S., University of Florida  
M.S., University of Tennessee, Knoxville  
Ph.D., University of California, Irvine

**WATSON, MARYANN (2001)**

Professor, Computer Information Systems  
A.A., Long Beach City College  
B.A., California State University, Long Beach  
M.Ed., Azusa Pacific University

**WEATHERFORD, LEIGH ANN (2001)**

Assistant Professor, English  
B.A., University of Virginia  
M.A., San Diego State University

**WELLS, JULIE (2016)**

Instructor, Biology  
B.A., University of California, Santa Barbara  
Ph.D., University of California, Irvine

**WERBLIN, CATHLEEN (1999)**

Assistant Professor, Communications  
B.A., University of Arizona

**WHEATON, DANA (1991)**

Professor, Music  
B.A., California State University, Humboldt  
M.A., California State University, Long Beach

**WHITRIDGE, ROGER (1999)**

Professor, Art  
M.A., California State University, Long Beach  
M.F.A., Claremont Graduate School

**WICKREMESINGHE, MANOJ (2005)**

Professor, Counseling Services: Articulation Officer  
B.A., University of California, Los Angeles  
M.A., California State University, Fullerton  
M.A., California State University, Dominguez Hills  
Ed.D., University of Southern California

**WILLIAMS, JENNIFER (2017)**

Instructor, Kinesiology, Head Track and Field Coach  
A.A., Rancho Santiago College  
B.S., San Diego State University  
M.S., Azusa Pacific University

**ZITTER, JEREMY (2001)**

Professor, English  
B.A., M.A., California State University, Long Beach

**ZOMBEK, MARK (1990)**

Professor, Aviation Maintenance Technology  
A.A., Orange Coast College  
B.S.V.E., California State University, Long Beach

**ZUIDERVAART, GENEVIEVE (2012)**

Assistant Professor, English  
A.A., Cypress College  
B.A., M.A., California State University, Long Beach

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A.A., Certificate in Electrodiagnostic Technology-  
Neurodiagnostic Technology, Orange Coast College  
B.V.Ed., Occupational Education, California State  
University, Long Beach  
M.S.Ed., Educational Administration, National University

### **DOUGLAS C. BENNETT**

Executive Director, College Foundation  
B.A., Communications, California State University,  
Fullerton  
M.A., Coaching and Athletic Administration, Concordia  
University, Irvine

### **REBECCA MORGAN**

Director, Human Resources  
B.A., Anthropology/Latino Studies, University of  
Michigan  
M.A., Organizational Management, University of  
Phoenix

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Director, Marketing and Public Relations  
B.A. Business Administration, California State  
University, Bakersfield  
M.B.A. University of Redlands

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Administrative Director, Research, Planning and  
Institutional Effectiveness  
B.A., Psychology, California State University, Long  
Beach  
M.A.Ed., Adult Education, Pennsylvania State University  
Ed.D., Education, Fielding Graduate University

## **OFFICE OF INSTRUCTION**

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Acting Vice President, Instruction  
B.S., Biology, University of Illinois Urbana  
M.S., Ph.D., Biochemistry, University of Missouri  
Columbia

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Executive Director, Marine Programs  
B.A., Journalism, University of Southern California  
M.P.A., Public Administration, California State  
University, Long Beach

### **VICTORIA BLACKSTOCK**

Supervisor, Lecture Services  
A.A., Psychology, Orange Coast College  
B.A., Social Ecology, University of California, Irvine

### **JEFF COURCHAINE**

Acting Dean, Math and Sciences  
B.S., Applied Mathematics, University of California, Los  
Angeles  
M.S., Computer Science, Azusa Pacific University

### **SARA HEAD**

Project Director, Adult Education Block Grant  
B.S., Business Administration, Southeast Missouri State  
University  
M.B.A., Southeast Missouri State University

### **KEVIN D. HENSON**

Dean, Social and Behavioral Sciences  
B.A., Multidisciplinary Social Science, Michigan State  
University  
M.A., Ph. D., Sociology, Northwestern University

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Dean, Business and Computing  
B.A., M.A., Music, West Virginia University  
Ed.D., Education-Community College Leadership,  
Oregon State University

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Dean, Career Services  
B.A., English, University of California, Irvine  
M.A., Education/Leadership, California State University,  
Fullerton

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B.F.A., Film, New York University  
M.F.A., Film, Columbia University  
Ph.D., English, City University of New York Graduate  
Center

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Dean, Consumer and Health Sciences  
B.S., Biochemistry, University of Kansas  
M.S., Ph.D., Microbiology, University of Illinois, Urbana

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Manager, Planetarium  
B.S., Physics, University of Maine  
M.Eng., Engineering Physics, University of Maine

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Dean, Visual and Performing Arts  
Specialist of Fine Arts, Teaching of Dance Disciplines  
and Choreography, Altay State Institute of Arts and  
Culture  
M.F.A., Dance, University of California, Irvine

### **ROCHELLE SANTACRUZ**

Early Childhood Education Lab School Manager  
B.A., Human Development, California State University,  
Long Beach  
M.A.Ed., Education with Specialization in Child  
Development, Ashford University

### **THOMAS M. SELZER**

General Manager, Instructional Food Service  
Operation  
B.S. Business Administration, Hospitality Management,  
Sullivan University

### **DANIEL N. SHRADER**

Dean, Technology  
B.S., Business Administration, California State  
University Los Angeles  
M.A., Operations Management, California State  
University Los Angeles

### **TYLER STALLINGS**

Director, Frank M. Doyle Arts Pavilion  
B.F.A., Atlanta College of Art  
M.F.A., California Institute of the Arts

### **MICHAEL SUTLIFF**

Dean, Kinesiology and Athletics  
B.S., Physical Education, Biola University  
M.A., Educational Administration, National University  
D.A., Physical Education with emphasis in Education,  
Middle Tennessee State University

### **JOHN TAYLOR**

Dean, Library and Learning Support  
B.A., *Biblical Literature*, *Oral Roberts University*  
M.S., *Library Science*, *University of Arizona*  
Ph.D., *Philosophy and Religion*, *California Institute of  
Integral Studies*

### **ANIS WAKIM**

Instructional Food Services Manager  
A.A., Fredrick Polytechnic University, Cypress  
B.S., State University of New York, Utica/Rome

## **STUDENT SERVICES**

### **MADJID NIROUMAND**

Vice President, Student Services  
B.S., Management, and Operations Management,  
California State University, Long Beach  
M.B.A., Management, California State University,  
Dominguez Hills  
D.B.A., Argosy University

### **CECILIA ALVARADO**

Director, Extended Opportunity Programs and  
Services  
B.A., English, California State University of Fullerton  
M.S., Education Administration, Pepperdine University

### **TANISHA BRADFIELD**

Director, Financial Aid  
B.S., Business Administration and Management,  
University of La Verne  
M.A., Business Administration, University of Redlands

### **ROZANNE CAPOCCIA-WHITE**

Dean, Enrollment Services  
A.A., General Studies, Golden West College  
B.A., Speech Communication, California State  
University, Fullerton  
M.A., Organizational Leadership, Brandman University

### **KELLY DALY**

Director, Student Health Services  
B.Sc.N., University of Toronto  
M.S.N., University of Phoenix

### **RENEE DE LONG**

Dean, Counseling  
A.A., Lincoln Land Community College  
B.A., Oral Roberts University  
M.A., Fuller Theological College  
M.S., California State University, Los Angeles  
Ed.D., University of California, Irvine



**DENISE DEVEREAUX**

Child Care Center Supervisor  
B.A., Child Development and Family Studies, California State University, Long Beach  
M.A., Early Childhood Education, Pacific Oaks College

**VANESSA DOMINGUEZ**

Director, Disabled Students Programs and Services  
B.A., Interdisciplinary Studies, University of California, Berkeley  
M.A., Counseling Psychology, Antioch University New England

**EFREN J. GALVAN**

Director, Admissions, Records and Enrollment Technology  
B.A., Organizational Communication, California State University, Stanislaus

**NATHAN JENSEN**

Associate Dean, Global Engagement Center  
B.A., Music, California State University Long Beach  
M.A., Music, California State University Long Beach

**PATRICIA MENDOZA**

Director, Child Development Children's Center  
B.A., Child Development, University of La Verne  
M.A., Education, University of La Verne

**MICHAEL MORVICE**

Director, Student Life  
A.A., General Studies, El Camino College  
B.A., Communication Studies, California State University, Long Beach  
M.S., Counseling, Student Development in Higher Education, California State University Long Beach

**RICHELLE PENALBA**

Manager, Enrollment Services  
B.A., Sociology, Social Welfare, University of California, Berkeley  
M.Ed., University of California, Los Angeles

**SHANNON QUIHUIZ**

Associate Dean, Title IX and Student Relations  
B.A., Communications, Sonoma State University  
M.S., College Student Services Administration, Oregon State University

**MICHELLE RODRIGUEZ**

Manager, Financial Aid  
B.S., Public Administration, University of Southern California

**FELIPE SALAZAR**

Student Success and Support Program Coordinator  
B.A., Latin American Studies, California University, Fullerton  
M.A., Latin American Studies, University of California, San Diego

**MARICELA SANDOVAL**

Student Equity Coordinator  
B.A., Psychology and Social Behavior; B.A., History, University of California, Irvine  
M.A., Public Administration, California State University, Long Beach

**STEVE TAMANAHA**

Dean, Student Success and Support Services  
A.A., English, Orange Coast College  
B.A., English, California State University, Fullerton  
M.S., Counseling, National University

**KRISTOFFER B. TORIBIO**

Assistant Director, International Admission and Recruitment  
B.A., Political Science, University of Hawai'i at Manoa

**LARRY VALENTINE**

Director, Mental Health Services  
B.A., Sociology, College of William and Mary  
M.A., Clinical Psychology, Pepperdine University

**DEREK VERGARA**

Dean of Students  
B.A., Social Work, Azusa Pacific University  
M.A., Social Sciences, Higher Education Administration, Azusa Pacific University  
Ed.D., Education and Organizational Leadership, University of La Verne

**ADMINISTRATIVE SERVICES**

**RICHARD PAGEL**

Vice President, Administrative Services  
B.A., Psychology, California State University, San Diego  
M.B.A., Technology Management, University of Phoenix  
Ed.D., Education Leadership, California State University, Long Beach

**RUBEN BARRIGA**

Swap Meet Supervisor

**HILARIO BELTRAN**

Interim Custodial Supervisor

**JULIA CLEVINGER**

Director, College and Community Support  
A.A., General Studies, Orange Coast College  
B.A., Public Management, Colorado State University

**RACHELLE FAVIS**

Project Manager, Measure M  
B.Arch., Architecture, California State Polytechnic University Pomona

**RACHEL KUBIK**

Director, Fiscal Services and Campus Budget  
B.A., Business, Vanguard University

**JOSE H. RECINOS**

Director, Maintenance and Operations  
A.A., Liberal Arts, Santiago Canyon College

**MICHAEL RICKS**

Grounds Supervisor

**JIM RUDY**

Director, Public Safety  
B.A., Criminal Justice and Sociology, California State University of Fullerton  
M.A., Behavioral Sciences, California State University of Dominguez Hills

**SANDRA M. WHITESIDE**

Director IT, Academic and End User Support  
A.A., Business Education, Orange Coast College  
B.S., Information Systems Management, University of San Francisco

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Respiratory Care

**DE SILVA, BERTRAND R., M.D.**  
Polysomnographic Technology

**GOODWIN, SCOTT C., M.D.**  
Radiologic Technology

**JENNINGS, SALLY, RNP**  
Medical Assisting

**KICIMAN, NAFIZ M., M.D.**  
Cardiovascular Technology

**LIM, LESTER, D.D.S.**  
Registered Dental Assisting

**NUWER, MARC, M.D., PH.D.**  
Neurodiagnostic Technology

**STRATTON, SAM, M.D.**  
Emergency Medical Services

**YU, MAURICE, M.D.**  
Diagnostic Medical Sonography

## Major Clinical Affiliates for the School of Allied Health Professions

American Heart Association  
Anaheim Memorial Medical Center, Anaheim  
Cardiology Specialist of Orange County, Santa Ana  
Care Ambulance Services, Inc., Orange  
Cedars-Sinai Medical Center, Los Angeles  
Children's Hospital of Orange County (CHOC), Orange  
Children's Hospital of Los Angeles, Los Angeles  
Children's Learning Connections, Inc., Santa Ana  
Children's Speech Center, Torrance  
Desert Regional Medical Center, Palm Springs  
Doctor's Ambulance Service, Laguna Hills  
Fountain Valley Regional Hospital and Medical Center, Fountain Valley  
Healthbridge Children's Rehabilitation Hospital, Orange Coast College  
Hoag Memorial Hospital Presbyterian, Newport Beach  
Hoag Memorial Sleep Disorders Center  
Huntington Beach Hospital, Huntington Beach  
Inland Valley Regional Medical Center, Murrieta  
Kaiser Foundation Hospitals, Southern California Region  
Lakewood Regional Medical Center, Lakewood  
Loma Linda University Medical Center, Loma Linda  
Long Beach Memorial Medical Center, Long Beach  
Los Alamitos Medical Center, Los Alamitos  
Los Angeles County/USC Medical Center, Los Angeles  
Los Angeles Harbor/UCLA Medical Center, Torrance  
Mission Hospital Regional Medical Center, Mission Viejo  
Mission Sleep Disorders Institute, Mission Viejo  
Newport Language and Speech Center, Mission Viejo  
Norris Cancer Center, Los Angeles  
Obsterix, Inc., Long Beach

Ocean Sleep Medicine, Aliso Viejo  
Orange Coast Memorial Medical Center, Fountain Valley  
Orange County Department of Education  
Orange County Department of Health and Human Services, WIC Program, Santa Ana  
Pacific Cardiovascular Associates, Costa Mesa  
Palomar Pomerado Health, San Diego  
Pomona Valley Hospital Medical Center, Pomona  
Pomona Valley Sleep Disorders Center, Pomona  
Presbyterian Intercommunity Hospital, Whittier  
Providence Health System - John Wayne Cancer Institute, Santa Monica  
Providence Health System - Little Company of Mary, Torrance  
Providence Health System - St. Elizabeth Care Center, North Hollywood  
Providence Health System - St. John's Health Center, Santa Monica  
Providence Health System - St. Joseph Medical Center, Burbank  
Providence Health System - Tarzana Medical Center, Tarzana  
Providence Health System - 17 Other Facilities, Various Locations  
Rancho Los Amigos Hospital, Downey  
Riverside Community Hospital, Riverside  
Saddleback Memorial Medical Center, Laguna Hills and San Clemente  
St. Joseph Hospital, Orange  
St. Jude Hospital and Rehabilitation Center, Fullerton  
St. Mary Medical Center, Long Beach  
San Bernardino County Medical Center, San Bernardino  
San Clemente Hospital Medical Center  
Shoreline Speech and Language Center, Hermosa Beach  
Sleep Center of Orange County, Irvine  
South Coast Medical Center, Laguna Beach  
Speech, Language and Learning Center, San Juan Capistrano

Stanford University Medical Center, Stanford  
Torrance Memorial Medical Center, Torrance  
Tri-City Medical Center, Oceanside  
UC Davis Health Systems, Sacramento  
UCI Medical Center, Orange  
UCLA Neuropsychiatric Institute, Los Angeles  
UCLA School of Dentistry, Los Angeles  
UCLA Sleep Disorders Center, Los Angeles  
USC University Hospital, Los Angeles  
Veterans Administration Medical Center, Long Beach  
West Anaheim Medical Center, Anaheim  
Western Medical Center, Santa Ana  
Western Medical Center – Anaheim  
Numerous Ambulances Services, Clinics, Convalescent Hospitals, Dental Offices, Physician Offices, School Districts, and Skilled Nursing Facilities

# Emeritus

*Members of the full-time faculty and academic administrators are granted emeritus status upon their retirement in recognition of their service to the college.*

**ADAN, AMINA**

Professor, History; Geography  
1992-2018

**ADELMANN, DANIEL**

Professor, Allied Health/Respiratory Care  
1980-2012

**AKERS, THOMAS M.**

1975-2011

**ANTHONY, PATRICIA**

Professor, Airline Travel Careers  
1978-2003

**ARFSTEN, PATRICIA E.**

Professor, Counseling Services  
1974-2010

**ARNOLD, HERRICK F.**

Professor, Political Science/History  
1969-2016

**ASHBAUGH, STANLEY**

Professor, Chemistry  
1974-98

**ATTORE, LOIS SHAFQAT**

Professor, Psychology  
1979-06

**BAKER, EDWARD R.**

Dean, Fine Arts  
1968-98

**BANDARUK, THEODORE W.**

Professor, Biology  
1971-2010

**BANOCZI, WALTER R.**

Professor, Neurodiagnostic Technology  
1996-2016

**BEARD, DANIEL R.**

Professor, Food Service Management/Business  
1975-2016

**BELCHER, MARY J.**

Professor, Early Childhood Education  
1985-2012

**BELLAH, GEOFFREY**

Professor, English  
1991-2014

**BENNETT, JANE**

Professor, Business Law  
1974-2004

**BENNETT, LAWRENCE T.**

Professor, French/English  
1961-1984

**BERGER, IRINA V.**

Associate Professor, Russian/History  
1963-1984

**BINGO, GEORGE**

Professor, Aviation Technology  
1968-1988

**BISE, ROBERT G.**

Professor, Economics  
1965-2009

**BLANC, GEORGE**

Administrative Dean, Economic Development and  
Community Education  
1974-2003

**BLOOMFIELD, LISA**

Professor, Digital Media Arts and Design  
1999-2016

**BOSSE, DEAN A.**

Professor, Learning Specialist  
1975-2004

**BOUGHEY, ANN**

Professor, Emergency Medical Technology  
1976-2003

**BOWEN, SHIRLEY A.**

Professor, Coordinator of Tutorial Center  
1986-1998

**BRADY, JOHN P. Jr.**

Professor, Electronics  
1977-1998

**BRAND, JOANNA**

Professor, Librarian  
1992-2004

**BRAND, JON S.**

Professor, Geography  
1965-1998

**BREECE, WILLIAM H.**

Professor, Anthropology  
1991-2016

**BROWN, JOHN TORMAY**

Associate Professor, Civil Technology  
1975-1988

**BROWN, SUSAN**

Administrative Dean, Admissions and Records  
1964-1995

**BRUCE, SILAS**

Professor, Wastewater Technology  
1970-1988

**BUCKLEY, JOHN M.**

Division Dean; Professor, Political Science and  
American Studies  
1969-2001

**BULLARD, BARBARA BURGESS**

Professor, Speech  
1966-2004

**BURCHETT, DEAN**

Professor, Psychology/Counselor  
1956-1984

**BURKE, CAROL A.**

Professor, English  
1976-2004

**BUTLER, DENNIS**

Professor, Business Education  
1981-2004

**CABRAL, MARTA**

Professor, Counseling Services  
2001-2018

**CARNETT, JAMES**

Director of Community Relations  
1971-2008

**CARLSON, LAWRENCE A.**

Professor, English  
1966-2000

**CARLSON, N. RAVIN**

Associate Professor, Construction Technology  
1999-2016

**CARROLL, KATHLEEN "KAT"**

Professor, Speech  
1985-2018

**CARTER, MINETTE**

Professor, French  
1966-2004

**CARY, BRUCE**

Professor, Counseling Services; Articulation Officer  
1972-2003

**CASADOS, VICTOR G.**

Professor, Art  
1967-2007

**CESAREO, MILJENKO**

Professor, Physics  
1964-1989

**CHARD, RICHARD**

Administrative Dean, Vocational Education  
1980-1992

**CHARDONNAY, CAROLE**

Professor, Music  
1974-2008

**CHILDS, THOMAS H.**

Assistant Professor, Political Science; Student  
Placement Director  
1964-1985

**CLARK, FRANK L.**

Professor, Business  
1976-1995

**CLARK, LINDA S.**

Professor, Early Childhood Education  
1986-2006

**CLARKE, JAMES E.**

Professor, Construction Technology  
1971-1998

**CLASBY, JOAN M.**

Professor, Diagnostic Medical Sonography  
1982-2004

**CLIFTON, ROBERT B.**

Professor, Aviation Technology  
1969-1999

**COATES, MONA A.**

Professor, Sociology  
1967-2004

**COLE, NORMAN H.**

Professor, Biology  
1973-2004

**COLEMAN, SUSAN**

Professor, Interior Design;  
Coordinator of Career Education  
1975-2004

**COLLINS, DONALD L.**

Professor, Biology  
1969-2004

**CONNOR, GREGORY (1990)**

Professor, English as a Second Language  
1990-2018

**COOL, PHYLLIS**

Professor, Counseling Services  
1980-2003

**COOPER, BARBARA**

Professor, Food Service Management  
1986-2018

**CORTEZ, JOSE O.**

Professor, Machine Technology  
1999-2010

**COWPERTHWAIT, SARAH M.**

Professor, English as a Second Language  
1976-1993

**CRON, JAMES R.**

Professor, Welding Technology  
1971-1993

**CRUTCHER, ROBERT**

Professor, Art  
1977-2000

**CURTIS, ADRIENNE R.**

Associate Professor, Chemistry  
1976-1999

**DANIELS, SHARON CALLAWAY**

Professor, Biological Sciences  
1973-2011

**DANZIGER, LESLEY**

Professor, English  
1990-2006

**DECKER, KAREN G. A.**

Professor, Fine Arts  
1970-2004

**DEES, ROBERT**

President  
1976-2009

**DENTON, BOB C.**

Professor, Mathematics  
1986-2006

**DIMSDALE, JEFFREY M.**

Dean, Student Services  
1968-2000

**DONOFF, SHARON K.**

Vice President, Student Services  
1971-2000

**DOSS, RICHARD**

Professor, Philosophy  
1971-1995

**DOWLING, THOMAS**

Professor, Art  
2000-2017

**DUDDRIDGE, DOROTHY**

Professor, Dance  
1961-1984

**DUONG, NGHIA**

Professor, Counseling Services  
1989-2019

**EARICK, DIANNE**

Associate Professor, English as a Second Language  
1992-2014

**EASTMAN, JUDITH B.**

Professor, English  
1974-2000

**ELDON, FRED A. S.**

Professor, English/Speech  
1962-1995

**ELLIS, GERALD**

Dean, Evening College; Professor, Engineering/Math  
1954-1982

**EVERHART, HOWARD**

Professor, Air Transportation  
1970-1985

**EZELL, MICHAEL**

Professor, Chemistry  
1978-2004

**FARRELL, DAN**

Professor, Allied Health/Respiratory Care  
1980-2012

**FARRELL, GENE**

President  
2002-2005

**FERAZZI, PATRICIA A.**

Professor, Physical Education and Athletics  
1974-2004

**FERZACCA, JOHN B.**

Associate Professor, Theatre Arts  
1970-2003

**FEREIRA, VIRGINIA "GINNY"**

Professor, Physical Education and Athletics  
1975-2003

**FITZEL, GORDON L.**

Professor, Physical Education and Athletics  
1978-2000

**FEISTHAMMEL, AUDREY M.**

Professor, Home Economics  
1968-1986

**FINNEGAN, MICHAEL**

Professor, English  
1965-1998

**FLOWERS, CAROL L.**

Professor, Business Education  
1977-2010

**FOLEY, WILLIAM, H.**

Assistant Professor, Aviation Technology  
1974-1995

**FRATANTARO, EDWARD G.**

Professor, Business Education  
1975-2004

**FRICKER, NORMAN C.**

Assistant Professor, Speech  
1985-2010

**FRUEHAN, ANNETTE**

Professor, Counseling Services and English as a  
Second Language  
1972-2004

**FULLERTON, JACK**

Professor, Physical Education  
1965-1988

**FUNEZ-GONZALEZ, JUANI**

Professor, History  
1991-2018

**GALVER, WILLIAM L.**

Professor, Welding Technology  
1993-2013

**GARNER, CAROL GIERS**

Professor, Management/Marketing  
1973-2004

**GAVIN, JOHN**

Associate Professor, Air Transportation  
1980-1988

**GILBERTSON, LANCE H.**

Professor, Biology  
1965-2002

**GILLIS, TANDY C.**

Associate Professor, Physical Education and Athletics  
1976-2000

**GLEASON, DAVID**

Associate Professor, Physical Education and Athletics  
1978-2011

**GOETZ, STEVEN J.**

Professor, Counseling Services  
1989-2010

**GOLDEN, JILL**

Professor, Food and Nutrition  
1999-2012

**GOLDMANN, TAMAR**

Professor, English as a Second Language  
1985-2018

**GOLODNER, PAMELA**

Professor, Mathematics  
1981-1994

**GOLSON, D. ALEXANDER**

Professor, Theatre Arts  
1986-2013

**GOSHERT, DAVID F.**

Professor, Business Education  
1977-2007

**GRAHAM, SHAINDELL R.**

Professor, English  
1980-2002

**GRAMS, CAROL ANN**

Professor, Psychology  
1968-2003

**GRANT, DAVID A.**

President; Dean of Students  
1962-1995

**GRATTON, MARGARET**

President  
1996-2002

**GRAZAITIS, MARIANA**

Professor/Librarian  
1965-1988

**GREEN, CHARLES B.**

Professor, Psychology  
1971-2004

**GRIGGS, PATRICIA A.**

Associate Professor, Counseling Services  
1984-1995

**GUILLEN, ALEX**

Professor, Counseling Services  
1989-2016

**HALL, WILLIAM**

Professor, Film/Video  
1991-2017

**HANCHETT, FLORENCE L.**

Associate Professor, Sociology  
1969-2003

**HANCOCK, ROBERT J.**

Professor, Mathematics/Engineering  
1969-2003

**HARMER, ANN TONN**

Professor, Biological Sciences  
1978-2008

**HAYES, LAIRD**

Professor, Physical Education and Athletics  
1976-2011

**HAYWARD, VALERIE J.**

Professor, Mathematics  
1989-2010

**HEARLSON, KENNETH W.**

Professor, Political Science  
1980-2011

**HEAVERN, IRENE J.**

Professor, English  
1991-2010

**HENDRICKSON, NOVELLE**

Instructor, Interiors/Clothing and Textiles  
1974-1987

**HENRY, LORRAINE A.**

Professor, Radiologic Technology  
1985-2012

**HOEPPNER, ROBERT L.**

Professor, Counseling Services  
1964-1995

**HOFFMAN, GARY S.**

Professor, English  
1971-2011

**HOFFMAN, THEODORE**

Professor, Electronics  
1965-1991

**HOKANSON, FRED A.**

Dean, Physical Education and Athletics; Professor  
Physical Education  
1969-2003

**HOLBEN, CAROL ANN**

Associate Professor, Mathematics  
1970-1998

**HOWE, RICHARD L.**

Professor, Business Education  
1964-1996

**HUANG, ELEANOR B.**

Professor, Dietetic Technology  
1976-2009

**HUTCHISON, RICHARD**

Professor, Welding Technology  
1999-2019

**ICHINO, PAUL T.**

Associate Professor, Radiologic Technology  
1976-1988

**ISEMAN, TONI E.**

Professor, Counseling Services  
1990-2004

**JACKSON, ANN**

Counselor, Professor of English  
1975-2000

**JACKSON, NICOLETTE A.**

Professor, Counseling Services  
1989-2014

**JAMES, GARY**

Dean, Math and Sciences, Professor  
1967-1993

**JARMAN, DAVID L.**

Professor, Construction Technology  
1975-1998

**JENNINGS, DONALD**

Professor, Fine Arts/Ceramics  
1974-2010

**JOHNSON, STANLEY N.**

Dean, Mathematics and Science  
1971-2005

**JOHNSTON, DAVID W.**

Associate Professor, Philosophy  
1960-1998

**JONES, SHARON S.**

Professor, Health and Physical Education  
1969-2003

**JORGENSEN, JAMES C.**

Professor, Physical Education and Athletics  
1973-2011

**JUPITER, CHERYL**

Instructor, Counseling Services; Director, Transfer  
Center  
1990-2016

**KARASUDA, SHIN**

Professor, Computer Science  
1973-2009

**KARR-POWELL, ARLENE**

Professor, Music  
1976-1995

**KATSUKI, ANNA**

Professor, Counseling Services  
1994-2013

**KATZ, ELEANOR**

Professor, Philosophy and Humanities  
1971-2017

**KEEGAN, DIANE**

Professor, Counseling Services  
1985-2016

**KELLY, DENNIS L.**

Professor, Marine Science  
1974-2013

**KELLY, MARILYN**

Associate Professor, History and Humanities  
1998-2017

**KRYDER, NANCY G.**

Professor, Biological Sciences  
1973-2009

**KIDDER, NANCY L.**

Administrative Dean, Enrollment Services  
1975-2007

**KLAMMER, KAREN**

Associate Professor, Business Education  
1976-2004

**KNOX, JOHN**

Associate Professor, Kinesiology and Athletics; Head  
Coach, Track and Field  
2001-2017

**KOFF, SHEILA S.**

Professor, English  
1985-2010

**KOSTKA, CONNIE MACK**

Associate Professor, Dental Technology  
1972-1991

**KOSUTH, JOAN**

Counselor, Professor of English  
1976-2003

**KOWALSKI, JAMES A.**

Counselor, Professor of Psychology  
1975-2004

**KUNZLER-YETT, BETIL**

Professor, Anthropology  
1989-2010

**LANGHANS, MARGARET**

Professor, English  
1975-2004

**LATTANZIO, STEPHEN P.**

Professor, Astronomy/Natural Science  
1975-2009

**LAWELL, CHERI L.**

Professor, Fashion  
2001-2016

**LAZARUS, ROBERT**

Professor, Film/Video  
2000-2016

**LE BRANE, LAWRENCE P.**

Professor, Art  
1971-2003

**LEIGH, MICHAEL G.**

Professor, Speech  
1976-2008

**LENANTON, JOHN**

Professor, Horticulture  
1970-2006

**LEVINE, JOEL M.**

Professor, Physics  
1985-2010

**LEVITON, CHARLES D.**

Professor, Psychology  
1969-2003

**LEWIS, BRIAN**

Professor, Film/Video  
1970-2010

**LEWIS, RALPH F.**

Professor, Economics  
1969-2004

**LINDER, RICHARD C.**

Assistant Professor, English  
1966-1995

**LISTER, RICHARD S.**

Professor, Psychology  
1968-1998

**LIVSEY, HERB F.**

Professor, English/Physical Education and Athletics  
1969-1996

**LOUIE, DENNIS H.**

Professor, Office Information Systems  
1978-1995

**MACMILLIN, PAUL G.**

Assistant Professor, Business Education  
1966-1998

**MAGDA, MARNI M.**

Professor, English  
1980-2004

**MALATY, MARTHA**

Professor, Computer Science  
1998-2018

**MARAN, JANICE C.**

Professor, Kinesiology and Athletics  
1976-2013

**MARSH, DICK E.**

Dean, Social and Behavioral Sciences  
1968-2003

**MARTIN, LAURI R.**

Professor, Photography  
1968-1996

**MARTIN, MARY MARTHA**

Professor, Physical Education and Athletics  
1990-2003

**MASON, DOUGLAS**

Professor, History  
1974-2010

**MATTIAS, GEORGE R.**

Professor, Physical Education and Athletics, Assistant  
Football Coach  
1963-1993

**MAURER, ERNEST W.**

Professor, Aviation and Space  
1977-2014

**MAYNE, EMMETT "MIKE"**

Professor, Physical Education and Athletics; Baseball  
Coach  
1976-2004

**MCCHESENEY, MARY**

Professor, Spanish  
1950-1983

**MCDONOUGH, CATHERINE**

Director, Student Health Service/Associate Professor  
1971-1995

**MCGILL, JOHN R.**

Executive Dean, Instruction, Dean, Admissions, Records  
and Information Services  
1966-1988

**MCILWAIN, JAMES L.**

Vice President, Administrative Services  
1965-2003

**MELROSE, CHARLENE TICHY**

Professor, Psychology  
1972-2016

**MITCHEL, ROBERT**

Dean, Business Division; Associate Professor, Business  
Education  
1960-1988

**MOELLER, LINDA A.**

Associate Professor, Physical Education and Athletics;  
Head Coach, Women's Crew  
1981-2005

**MOGAN, PATRICIA J.**

Associate Professor, Home Economics  
1959-1995

**MORIN, SYLVETTE**

Professor, English as a Second Language  
1989-1999

**NETOLICZKA, ELISABETH**

Associate Professor, Spanish  
1991-2004

**NAUTA, DALE**

Professor, Mathematics  
1990-2019

**NUDELMAN, JACK**

Assistant Professor, Electronics Technology/Avionics  
1980-2010

**O'CONNOR, ROBIN**

Professor, Kinesiology and Athletics  
2003-2019

**O'KEEFE, THOMAS**

Assistant Professor, English  
1979-2000

**OBERHAUS, MARY ANN**

Professor, Marketing/Management  
1967-1998

**OLDS, MICHAEL V.**

Professor, Economics  
1983-2007

**OLSON, JUDITH O.**

Professor, Airline and Travel Careers  
1974-2004

**OSBORNE, TOM**

Professor, Business Education  
1954-1983

**ORTIZ, KENNETH K.**

Administrative Dean, Special Services  
1976-2004

**OVIATT, VINTA (1997)**

Professor, Librarian  
1997-2018

**PADDEN, WILLIAM E.**

Associate Professor, Aviation and Space  
1991-2000

**PALADINO, ALAN M.**

Professor, Electronics Technology  
1976-2003

**PARKER, JOHN R.**

Professor, Ornamental Horticulture  
1974-2004

**PHAN, DAT HUY**

Professor, Counseling Services  
1985-2009

**PIERSTORFF, DON K.**

Professor, English/Technical Writing  
1985-2004

**PONDER, JOHNNY**

Instructor, Computer Information Systems  
1971-1992

**PRICE, DAVID G.**

Professor, Electro/Mechanical Drafting  
1974-1998

**PRIDY, BARBARA J.**

Professor, Business Education  
1973-1998

**RAGENOVICH, CHRISTINE**

Professor, Political Science  
1989-08

**REES, HENRY M.**

Professor, Construction Technology  
1975-1998

**REESE, JAMES I.**

Professor, Geology  
1972-1988

**REMINGTON, ALAN**

Associate Professor, Music  
1977-2003

**RICHARDS, JERREL T.**

Dean, Counseling, Psychology and Special Services  
1958-1984

**RIDDICK, GLENDA**

Associate Professor, Human Development  
1971-1994

**RING, DAVID C.**

Professor, Philosophy  
1999-2015

**ROBINSON, STEPHEN J.**

Professor, Fine Arts/Sculpture  
1974-2011

**ROGERS, MARCIA A.**

Professor, English  
1997-2016

**ROJAS, EUSTACE**

Professor, Spanish  
1949-1983

**ROMANS, VAN A.**

Professor, Fine Arts  
1973-2003

**ROSE, JUDY**

Professor, Dental Assisting  
1976-2007

**ROUNDY, WILLARD H.**

Professor, Chemistry  
1965-2002

**RUBINSTEIN, NANCY LEE**

Professor, Business Education  
1965-1988

**RUETER, DONALD B.**

Professor, Computer Information Systems  
1971-2004

**SALESSI, SUSANA N.**

Professor, Spanish/Italian  
1974-2004

**SALIBI, NUHA**

Professor, English as a Second Language  
1992-2013

**SALINGER, JOAN A.**

Professor, Art/Photography  
1987-2016

**SANFORD, JOHN R.**

Associate Professor, Photography  
1969-1998

**SCARFONE, PATRICIA M.**

Professor, Spanish/Italian  
1986-2004

**SCHMITZ, JOSEPH**

Associate Professor, Art  
1972-1984

**SCRIPPSMA, KENNETH E.**

Associate Professor, Hotel Management  
1971-1992

**SHANLEY, KAREN L.**

Professor, Dance  
1976-2000

**SHARKEY, DONNA L.**

Professor, Art  
1962-1986

**SHAW, KENNETH H.**

Assistant Professor, Electronics Technology  
1982-2003

**SHROCK, CHERYL R.**

Professor, Computer Aided Design/Drafting  
1990-2009

**SIMON, RICHARD**

Professor, Communications/Business  
1984-2000

**SIMONDS, ROBERT**

Professor, Construction Technology  
1963-1981

**SJULE, GERALD**

Professor, Counseling Services  
1962-2019

**SKEIE, LEON**

Professor, Kinesiology and Athletics  
1973-2016

**SLAUGHTER, ROBERT L.**

Professor, Business Education  
1968-1991

**SLOSBERG, KENNETH**

Professor, Photography

**SMITH, DOUGLAS C.**

Professor, English  
1966-1998

**SMITH, EDITH G.**

Professor, Music  
1971-1998

**SMITH, ROBERT B.**

Professor, Psychology 1971-04  
1985-2014

**SNOW, ROSLYN**

Professor, English  
1962-1998

**SOHL-ELLISON, LINDA**

Professor, Dance  
1980-2016

**STEADRY, FREDERICK A.**

Associate Professor, Photography  
1971-2012

**STEINFELD, THOMAS E.**

Professor, Architecture  
1999-2010

**STEPHENS, ROY L.**

Professor, Aviation and Space  
1976-1994

**STONEKING, JOYCE**

Professor, Business Education  
1978-2004

**STORM, SARA**

Professor, English as a Second Language  
1992-2018

**SUZUIKI, LORI L.**

Professor, History  
1989-2009

**TARLOS, THERESA**

Associate Professor, Geography  
1999-2009

**TAUSSIG, H. ARTHUR**

Professor, Photography  
1972-2003

**TAYLOR, MICHAEL**

Professor, English; Kinesiology and Athletics  
Assistant Coach, Football  
1991-2018

**TENNANT, WAYNE W.**

Professor, Fine Arts  
1972-2011

**TIMMINS, TERRY**

Professor, Sociology/Anthropology  
1971-2013

**THOMPSON, JEAN**

Associate Dean, Community Services  
1957-1981

**TOLSON, JANET M.**

Professor, Counseling Services  
1988-2003

**TOMCHAK, JOSEPH**

Professor, Anthropology  
1958-1986

**TOY, SANDRA E.**

Professor, Business Education  
1975-2003

**UPTON, JOHN**

Professor, Photography  
1965-1998

**VAIL, DOREEN W.**

Professor, Sociology  
1965-2003

**VARGA, JOHN L.**

Professor, Accounting  
1976-2008

**VISCO, FRANK J.**

Professor, Biology  
1968-2004

**VISINTAINER, LINDA L.**

Associate Professor, Radiologic Technology  
1991-2003

**WALLACE, BARRY C.**

Professor, Physical Education and Athletics; Head  
Coach, Men's and Women's Golf  
1968-2003

**WASSERMAN, LARRY**

Professor, Art  
1975-1998

**WEBB, DEBBIE K.**

Associate Professor, Librarian  
1984-2012

**WENDELL, ROBERT**

Associate Professor, Art  
1973-2009

**WESTERMAN, DONNA**

Professor, Art  
1976-2007

**WETZEL, ROBERT C.**

Professor, Physical Education and Athletics  
1964-1995

**WHITMORE, LYNN A.**

Professor, English  
1992-2004

**WILLIS, MARGIE CANFIELD**

Professor, Allied Health/Medical Assisting  
1975-2010

**WILSON, ROBERT L.**

Dean, Business Education; Professor, Business  
Education  
1969-1995

**WIN, U KYAW**

Professor, Counseling Services  
1968-1998

**WINTER, NICOLAS**

Associate Professor, English as a Second Language  
1980-2013

**WOLFE, JUDITH A.**

Associate Professor, Spanish/French  
1975-2003

**WORKMAN, WILLIAM**

Professor, Physical Education and Athletics; Head  
Football Coach  
1986-2000

**WYLIE, JAMES**

Professor, Chemistry  
1953-1985

**WYNNE, ANN M.**

Professor, History  
1985-2011

**YANAGA, RANDALL K.**

Associate Professor, Mechanical Drafting/Machine  
Technology  
1986-2010

**YATES, RONALD L.**

Instructor, Computer Information Systems  
1985-2007

**YETT, JAY R.**

Professor, Geology/Natural Science  
1984-2010

**YOST, BETTY**

Professor, Biology  
1976-1990

**ZELLERBACH, CHARLES**

Associate Professor, Business  
2005-2016

**ZHE, ROBERT R.**

Associate Professor Counselor, Disabled Students  
1989-2014

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| <b>Accounting (Business and Computing Division)</b>              |           |                                |                     |        |
| Accounting Certificate of Achievement                            | 35        | OCC Cert - Accounting          | 1_CT_ACCT           | 61     |
| Accounting AS Degree   | 60        | OCC AS - Accounting            | 1_AS_ACCT           | 61     |
| Entry-Level Accounting Certificate of Specialization             | 11        | OCC Cert - Entry Level Account | 1_CE_ELTA           | 61     |
| Business Taxation Competency Certificate of Specialization       | 14        | OCC Cert - Business Tax        | 1_CE_BTCC           | 61     |
| Cost Accounting Competency Certificate of Specialization         | 14        | OCC Cert - Cost Account        | 1_CE_CACC           | 62     |
| Financial Accounting Competency Certificate of Specialization    | 17        | OCC Cert - Financial Account   | 1_CE_FACC           | 62     |
| Governmental Accounting Competency Certificate of Specialization | 14        | OCC Cert - Financial Account   | 1_CE_GACC           | 62     |
| Individual Taxation Competency Certificate of Specialization     | 14        | OCC Cert - Individual Tax      | 1_CE_ITCC           | 62     |
| Non-Profit Accounting Competency Certificate of Specialization   | 14        | OCC Cert - Non Profit Account  | 1_CE_NPCC           | 62     |
| Payroll Accounting Competency Certificate of Specialization      | 14        | OCC Cert - Payroll Account     | 1_CE_PACC           | 62-63  |
| <b>Anthropology (Social and Behavioral Sciences Division)</b>    |           |                                |                     |        |
| Anthropology AA Degree   | 60        | OCC AA - Anthropology          | 1_AA_ANTH           | 63     |
| Anthropology AA Degree for Transfer                              | 60        | OCC AAT - Anthropology         | 1_AAT_ANTH          | 63-64  |
| <b>Architectural Technology (Technology Division)</b>            |           |                                |                     |        |
| Architecture AS Degree   | 60        | OCC AS - Architecture          | 1_AS_ARCH           | 64     |
| Architectural Design 1 Certificate of Achievement                | 19        | OCC Cert - Arch Tech: Design 1 | 1_CL_ARCD           | 64-65  |
| Architectural Design 1 AS Degree                                 | 60        | OCC AS - Arch Tech: Design 1   | 1_AS_ARCD           | 64-65  |
| Architectural Design 2 Certificate of Achievement                | 40        | OCC Cert - Arch Tech: Design 2 | 1_CT_ARDD           | 65     |
| Architectural Design 2 AS Degree                                 | 60        | OCC AS - Arch Tech: Design 2   | 1_AS_ARDD           | 65     |
| Design/Build Certificate of Achievement                          | 16-17     | OCC Cert - Design/Build        | 1_CB_ATDB           | 65     |
| Digital Fabrication for Architecture Certificate of Achievement  | 12        | OCC Cert - Digital Fab         | 1_CB_ATDF           | 66     |
| Environmental Resource Management Certificate of Specialization  | 11.5-12.5 | OCC Cert - Envirnmntl Recycle  | 1_CE_ERM            | 66     |
| FrameCAD Steel Design Certificate of Specialization              | 7         | OCC Cert - Steel Design        | 1_CE_FCSD           | 66     |
| FrameCAD Steel Production Certificate of Specialization          | 7         | OCC Cert - Steel Prod          | 1_CE_FCSP           | 66     |
| Integrated Project Design Certificate of Achievement             | 12        | OCC Cert - Integrate Proj Des  | 1_CB_ATIP           | 66     |
| Sustainable Design Certificate of Achievement                    | 14.5      | OCC Cert - Sustainable Des     | 1_CB_ATSD           | 67     |
| <b>Art (Visual and Performing Arts Division)</b>                 |           |                                |                     |        |
| Art History AA Degree for Transfer                               | 60        | OCC AAT - Art History          | 1_AAT_ARTH          | 67-68  |
| Art Services Certificate of Specialization                       | 17.5      | OCC Cert - Art Services        | 1_CE_CAAS           | 68     |
| Ceramics Certificate of Specialization                           | 15        | OCC Cert - Ceramics            | 1_CE_CERM           | 68     |
| Narrative Illustration Certificate of Achievement                | 42.5-45.5 | OCC Cert - Narrative Illstr    | 1_CT_CAIL           | 68-69  |
| Narrative Illustration AS Degree                                 | 60        | OCC AS - Narrative Illstr      | 1_AS_CANI           | 68-69  |
| Studio Arts AA Degree for Transfer                               | 60        | OCC AAT - Studio Arts          | 1_AAT_ARTS          | 69-70  |
| <b>Astronomy (Math and Science Division)</b>                     |           |                                |                     |        |
| Astronomy AS Degree  | 60        | OCC AS - Astronomy             | 1_AS_ASTR           | 70     |
| <b>Athletics (Kinesiology and Athletics Division)</b>            |           |                                |                     |        |
| Athletics Certificate of Achievement                             | 18        | OCC Cert - Athletics           | 1_CL_ATHL           | 70-71  |
| <b>Aviation Maintenance Technology (Technology Division)</b>     |           |                                |                     |        |
| Avionics Certificate of Specialization                           | 17        | OCC Cert - Avionics            | 1_CE_AMAV           | 72     |
| Helicopter Theory and Maintenance Certificate of Specialization  | 7         | OCC Cert - Helicopter Theory   | 1_CE_AVHM           | 72     |
| Airframe Certificate of Achievement                              | 40.5      | OCC Cert - Airframe            | 1_CT_AMAF           | 72-73  |
| Airframe AS Degree   | 60        | OCC AS - Airframe              | 1_AS_AMAF           | 72-73  |
| Airframe and Powerplant Certificate of Achievement               | 63        | OCC Cert - Airframe & PwrPlnt  | 1_CF_AMAP           | 73     |
| Airframe and Powerplant AS Degree                                | 81        | OCC AS - Airframe & PwrPlnt    | 1_AS_AMAP           | 73     |
| Powerplant Certificate of Achievement                            | 42        | OCC Cert - PowerPlant          | 1_CT_AMP            | 73-74  |
| Powerplant AS Degree   | 60        | OCC AS - PowerPlant            | 1_AS_AMP            | 73-74  |
| <b>Aviation Science (Technology Division)</b>                    |           |                                |                     |        |
| Aviation Science Certificate of Achievement                      | 32        | OCC Cert - Aviation Science    | 1_CT_AVSC           | 74-75  |
| Aviation Science AS Degree                                       | 60        | OCC AS - Aviation Science      | 1_AS_AVSC           | 74-75  |
| Aircraft Dispatcher Certificate of Achievement                   | 25        | OCC Cert - Aircraft Dispatcher | 1_CN_AIRD           | 75     |
| Airline Transport Pilot Certificate of Specialization            | 9         | OCC Cert - Transport Pilot     | 1_CE_AVTP           | 76     |

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| Commercial Pilot Certificate of Specialization                           | 12           | OCC Cert - Commercial Pilot         | 1_CE_AVCP                  | 76            |
| Flight Operations Certificate of Specialization                          | 17           | OCC Cert - Flight Operations        | 1_CE_AVFO                  | 76            |
| Instrument Pilot Certificate of Specialization                           | 6            | OCC Cert - Instrument Pilot         | 1_CE_AVIP                  | 76            |
| Private Pilot Certificate of Specialization                              | 8            | OCC Cert - Private Pilot            | 1_CE_AVPP                  | 77            |
| Unmanned Aircraft Systems Certificate of Specialization                  | 14           | OCC Cert - Unmanned Aircraft        | 1_CE_UMA                   | 77            |
| <b>Biology (Math and Sciences Division)</b>                              |              |                                     |                            |               |
| Biology AS Degree  | 60           | OCC AS - Biology                    | 1_AS_BIOL                  | 77-78         |
| Biology AS Degree for Transfer   | 60           | OCC AST - Biology                   | 1_AST_BIOL                 | 78            |
| <b>Business (Business and Computing Division)</b>                        |              |                                     |                            |               |
| Business Administration Certificate of Achievement                       | 34-35        | OCC Cert - Business Admin           | 1_CT_BSAD                  | 78-79         |
| Business Administration AS Degree  | 60           | OCC AS - Business Admin             | 1_AS_BSAD                  | 78-79         |
| Business Administration AS Degree for Transfer                           | 60           | OCC AST - Business Admin            | 1_AST_BSAD                 | 79            |
| Entrepreneurship Certificate of Specialization                           | 9            | OCC Cert - Entrepreneurship         | 1_CE_BAEN                  | 79            |
| Finance Certificate of Specialization                                    | 10           | OCC Cert - Finance                  | 1_CE_BAFN                  | 80            |
| Not for Profit Management Certificate of Specialization                  | 9            | OCC Cert - Not for Profit Mgmt      | 1_CE_NFPM                  | 80            |
| <b>Cardiovascular Technology (Consumer and Health Sciences Division)</b> |              |                                     |                            |               |
| Electrocardiography Technician Certificate of Achievement                | 30           | OCC Cert - Electrocardiography      | 1_CT_CTEV                  | 80-81         |
| Echocardiography and Vascular Ultrasound AS Degree                       | 70           | OCC AS - Echo & Vascular Ultra      | 1_AS_CTEV                  | 81            |
| <b>Chemistry (Math and Sciences Division)</b>                            |              |                                     |                            |               |
| Chemistry AS Degree  | 60           | OCC AS - Chemistry                  | 1_AS_CHEM                  | 81            |
| <b>Communications Studies (Literature and Languages Division)</b>        |              |                                     |                            |               |
| Communication Studies AA Degree for Transfer                             | 60           | OCC AAT - Communications            | 1_AAT_CMST                 | 82            |
| Mass Communications/Media Studies AA Degree                              | 60           | OCC AA - Communications             | 1_AA_MCOM                  | 82            |
| Social Media Strategist Certificate of Achievement                       | 16           | OCC Cert - Social Media             | 1_CN_CMSM                  | 83            |
| <b>Computer Information Systems (Business and Computing Division)</b>    |              |                                     |                            |               |
| Business Information Worker Certificate of Specialization                | 16.5         | OCC Cert - Bus Info Worker          | 1_CE_CSOA                  | 83            |
| Computer Information Systems Certificate of Achievement                  | 28           | OCC Cert - Computer Informatio      | 1_CN_CIST                  | 83            |
| Computer Information Systems AS Degree                                   | 60           | OCC AS - Computer Information       | 1_AS_CIST                  | 83            |
| Web Design Certificate of Specialization                                 | 10-11        | OCC Cert - Web Design               | 1_CE_CSWD                  | 84            |
| Enterprise Routing Certificate of Specialization                         | 7-8          | OCC Cert - Enterprise Router        | 1_CE_CSER                  | 84            |
| Network Administration and Operations Certificate of Specialization      | 15-16        | OCC Cert - Network Admin&Op         | 1_CE_CSNO                  | 84            |
| Network Administration - Linux Certificate of Specialization             | 6            | OCC Cert - Network Linux            | 1_CE_CSLX                  | 84            |
| Network Administration - Windows Certificate of Specialization           | 17           | OCC Cert - Network Windows          | 1_CE_CSAW                  | 84-85         |
| Network Infrastructure Certificate of Specialization                     | 12           | OCC Cert - Network Infrast          | 1_CE_CSNI                  | 85            |
| Network Professional Certificate of Specialization                       | 17           | OCC Cert - Network Prof             | 1_CE_CSNP                  | 85            |
| Network Security Certificate of Specialization                           | 6            | OCC Cert - Network Security         | 1_CE_CSNS                  | 85            |
| Network Services and Applications Certificate of Specialization          | 9            | OCC Cert - Network Service&Ap       | 1_CE_CSNA                  | 85            |
| Network Technician Certificate of Specialization                         | 8            | OCC Cert - Network Tech             | 1_CE_CSNT                  | 85            |
| Virtualization and Cloud Computing Certificate of Specialization         | 12           | OCC Cert - Virtualization & CC      | 1_CE_CSVC                  | 85            |
| <b>Computer Science (Business and Computing Division)</b>                |              |                                     |                            |               |
| Computer Science AS Degree for Transfer                                  | 60           | OCC AST - Computer Science          | 1_AST_CS                   | 86            |
| Computer Science Certificate of Achievement                              | 19-21        | OCC Cert - Computer Science         | 1_CN_CSPR                  | 86            |
| Computer Science AS Degree   | 60           | OCC AS - Computer Science           | 1_AS_CSPR                  | 86            |
| C++ Programming Certificate of Specialization                            | 12           | OCC Cert - C++ Programmin           | 1_CE_CSCP                  | 86            |
| Java Programming Certificate of Specialization                           | 12           | OCC Cert - Java Programming         | 1_CE_JAVA                  | 86-87         |
| Python Programming Certificate of Specialization                         | 8            | OCC Cert - Python Programming       | 1_CE_CSPY                  | 87            |
| <b>Construction Technology (Technology Division)</b>                     |              |                                     |                            |               |
| Carpentry Certificate of Specialization                                  | 10           | OCC Cert - Carpentry                | 1_CE_CARP                  | 87            |
| Concrete and Masonry Certificate of Specialization                       | 13           | OCC Cert - Concrete & Masonry       | 1_CE_CNCM                  | 87            |
| Fine Woodworking Certificate of Specialization                           | 17           | OCC Cert - Fine Woodworking         | 1_CE_CTFW                  | 87            |
| Plumbing Certificate of Specialization                                   | 12           | OCC Cert - Plumbing                 | 1_CE_CNPL                  | 88            |
| Residential Electrical Certificate of Specialization                     | 12-16        | OCC Cert - Res Electrical           | 1_CE_CTRE                  | 88            |

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| Construction Technology Certificate of Achievement                            | 25           | OCC Cert - Construction Tech        | 1_CL_CTBP                  | 88            |
| Construction Technology AS Degree   | 60           | OCC AS - Construction Tech          | 1_AS_CTBP                  | 88            |
| Master Construction Specialist Certificate of Achievement                     | 59           | OCC Cert - Mstr Construction        | 1_CT_CTMS                  | 88-89         |
| Master Construction Specialist AS Degree                                      | 77           | OCC AS - Mstr Construction          | 1_AS_CTMS                  | 88-89         |
| Residential Construction Development First Award Certificate of Achievement   | 18           | OCC Cert - Res Construction 1       | 1_CL_RCDS                  | 89            |
| Residential Construction Development First Award AS Degree                    | 60           | OCC AS - Res Construction 1         | 1_AS_CTRS                  | 89            |
| Residential Construction Development Second Award Certificate of Achievement  | 36           | OCC Cert - Res Construction 2       | 1_CT_CTRS                  | 89-90         |
| Residential Construction Development Third Award Certificate of Achievement   | 54           | OCC Cert - Res Construction 3       | 1_CT_RSTA                  | 90            |
| <b>Culinary Arts (Consumer and Health Sciences Division)</b>                  |              |                                     |                            |               |
| Baking and Pastry - Basic Certificate of Specialization                       | 13-14        | OCC Cert - Basic Baking&Pastry      | 1_CE_CABP                  | 90            |
| Advanced Baking and Pastry Certificate of Achievement                         | 39-40        | OCC Cert - Adv Baking&Pastry        | 1_CT_ABP                   | 90-91         |
| Advanced Baking and Pastry AS Degree  | 60           | OCC AS - Adv Baking&Pastry          | 1_AS_ABP                   | 90-91         |
| Culinary Arts - Basic Certificate of Achievement                              | 27-30        | OCC Cert - Basic Culinary           | 1_CT_CAAV                  | 91            |
| Advanced Culinary Arts Certificate of Achievement                             | 51-54        | OCC Cert - Advanced Culinary        | 1_CT_CAAV                  | 91-92         |
| Advanced Culinary Arts AS Degree  | 69-72        | OCC AS - Advanced Culinary          | 1_AS_CAAV                  | 91-92         |
| <b>Culinology® &amp; Food Science (Consumer and Health Sciences Division)</b> |              |                                     |                            |               |
| Culinary Food Science Assistant – Level 1 Certificate of Achievement          | 30           | OCC Cert - Culinology               | 1_CT_CULN                  | 92            |
| Culinology® – Level 2 – Professional Level AS Degree                          | 69           | OCC AS - Culinology                 | 1_AS_CULN                  | 92-93         |
| <b>Dance (Visual and Performing Arts Division)</b>                            |              |                                     |                            |               |
| Pilates Instructor Certificate of Achievement                                 | 18.5         | OCC Cert - Pilates/Dance Condi      | 1_CL_PILA                  | 93            |
| Dance Instructor Certificate of Achievement                                   | 34           | OCC Cert - Dance Instructor         | 1_CT_DNDI                  | 93-94         |
| Dance Instructor AS Degree  | 60           | OCC AS - AS Dance Instructor        | 1_AS_DNDI                  | 93-94         |
| World Dance Certificate of Achievement  | 25-28        | OCC Cert - World Dance              | 1_CL_DNWD                  | 94-95         |
| World Dance AA Degree   | 60           | OCC AA - World Dance                | 1_AA_DNWD                  | 94-95         |
| Dance AA Degree   | 60           | OCC AA - Dance                      | 1_AA_DANC                  | 95-96         |
| <b>Dental Assisting, Registered (Consumer and Health Sciences Division)</b>   |              |                                     |                            |               |
| Dental Assisting, Registered Certificate of Achievement                       | 33           | OCC Cert - Dental Assisting         | 1_CT_DENA                  | 96            |
| Dental Assisting, Registered AS Degree  | 60           | OCC AS - Dental Assisting           | 1_AS_DENA                  | 96            |
| <b>Diagnostic Medical Sonography (Consumer and Health Sciences Division)</b>  |              |                                     |                            |               |
| Diagnostic Medical Sonography AS Degree                                       | 84           | OCC AS - Diagnostic Med Sonogr      | 1_AS_DMS                   | 97            |
| <b>Digital Media Arts and Design (Visual and Performing Arts Division)</b>    |              |                                     |                            |               |
| Animation Certificate of Achievement  | 42           | OCC Cert - Animation                | 1_CT_DMAN                  | 97-98         |
| Animation AS Degree   |              |                                     |                            |               |
| Graphics Design Certificate of Achievement                                    | 38-38.5      | OCC Cert - Graphics Design          | 1_CT_DMAG                  | 98            |
| Graphics Design AS Degree   | 60           | OCC AS - Graphics Design            | 1_AS_DMAG                  | 98            |
| UX Design Certificate of Achievement  | 35-35.5      | OCC Cert - UX Design                | 1_CT_UXDS                  | 98-99         |
| UX Design AS Degree   | 60           | OCC AS - UX Design                  | 1_AS_UXDS                  | 98-99         |
| <b>Economics (Behavioral and Social Sciences Division)</b>                    |              |                                     |                            |               |
| Economics AA Degree for Transfer  | 60           | OCC AAT- Economics                  | 1_AAT_ECON                 | 99            |
| <b>Education (Consumer and Health Sciences Division)</b>                      |              |                                     |                            |               |
| Early Childhood Education AS Degree for Transfer                              | 60           | OCC AST - Early Childhood Educ      | 1_AST_ECE                  | 100           |
| Infant & Toddler Teacher Certificate of Achievement                           | 32.5-34      | OCC Cert - EC: Infant & Toddler     | 1_CT_ECIT                  | 100           |
| Infant & Toddler Teacher AS Degree  | 60           | OCC AS - EC: Infant & Toddler       | 1_AS_ECIT                  | 100           |
| Associate Preschool Teacher Certificate of Achievement                        | 23.5-25      | OCC Cert - EC: Preschool Teach      | 1_CT_ECAP                  | 100           |
| Preschool Teacher Certificate of Achievement                                  | 36-37.5      | OCC Cert - EC: Preschool Teach      | 1_CT_ECPT                  | 101           |
| Preschool Teacher AS Degree   | 60           | OCC AS - EC: Preschool Teacher      | 1_AS_ECPT                  | 101           |
| Early Childhood Administration Certificate of Achievement                     | 48-52.5      | OCC Cert - Early Childhood Adm      | 1_CT_ECAD                  | 101           |
| Early Childhood Administration AS Degree                                      | 63-67.5      | OCC AS - Early Childhood Admin      | 1_AS_ECAD                  | 101           |
| Elementary Teacher Education AA Degree for Transfer                           | 60           | OCC AAT - Elementary Teacher E      | 1_AAT_ETE                  | 102           |
| <b>Emergency Medical Services (Consumer and Health Sciences Division)</b>     |              |                                     |                            |               |
| Emergency Medical Services Certificate of Specialization                      | 15           | OCC Cert - Emergency Medical S      | 1_CE_EMS                   | 102-103       |
| <b>Engineering (Math and Sciences Division)</b>                               |              |                                     |                            |               |
| Engineering AS Degree   | 60           | OCC AS - Engineering                | 1_AS_ENGR                  | 103           |
| <b>English (Literature and Languages Division)</b>                            |              |                                     |                            |               |
| English AA Degree   | 60           | OCC AA - English                    | 1_AA_ENGL                  | 104           |

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| English AA Degree for Transfer  | 60      | OCC AAT - English                   | 1_AAT_ENGL          | 104-105 |
| <b>Fashion (Consumer and Health Sciences Division)</b>  |         |                                     |                     |         |
| Industrial Sewing Certificate of Specialization   | 11.5-13 | OCC Cert - Industrial Sewing        | 1_CE_FAIS           | 105     |
| Apparel Construction Certificate of Achievement   | 44      | OCC Cert - Fashion - Apparel C      | 1_CT_FSAC           | 105     |
| Apparel Construction AS Degree  | 62      | OCC AS - Fashion - Apparel Con      | 1_AS_FSAC           | 105     |
| Apparel Industry Sustainability Certificate of Achievement  | 9       | OCC Cert - Fashion - Apparel Sust   | 1_CE_AIS            | 105-106 |
| Design Certificate of Achievement   | 44.5    | OCC Cert - Fashion: Design          | 1_CT_FSDE           | 106     |
| Design AS Degree  | 60-62.5 | OCC AS - Fashion: Design            | 1_AS_FSDE           | 106     |
| Display and Visual Presentation Certificate of Achievement  | 28      | OCC Cert - Display & Visual Pr      | 1_CL_MKDV           | 106-107 |
| Display and Visual Presentation AS Degree   | 60      | OCC AS - Display & Visual Pres      | 1_AS_MKDV           | 106-107 |
| Fashion Merchandising Certificate of Achievement  | 43      | OCC Cert - Fashion Merchandisi      | 1_CT_FSMC           | 107     |
| Fashion Merchandising AS Degree   | 60-61   | OCC AS - Fashion Merchandising      | 1_AS_FSMC           | 107     |
| Production/Product Development Certificate of Achievement   | 43.5    | OCC Cert - Fashion Production       | 1_CT_FSPD           | 107     |
| Production/Product Development AS Degree  | 61.5    | OCC AS - Fashion Production/Pr      | 1_AS_FSPD           | 107     |
| <b>Film &amp; Television (Visual and Performing Arts Division)</b>  |         |                                     |                     |         |
| Film & Television Certificate of Achievement  | 29      | OCC Cert - Film & TV                | 1_CL_FTV            | 107-108 |
| Film & Television AA Degree   | 60      | OCC AA - Film & TV                  | 1_AA_FTV            | 107-108 |
| Film, Television, and Electronic Media AS Degree for Transfer   | 60      | OCC AST - Film & TV                 | 1_AST_FILM          | 108-109 |
| Immersive Media (VR/AR) Certificate of Achievement  | 31      | OCC Cert - Immersive Media          | 1_CT_VRAR           | 109     |
| Media Arts and Creative Entertainment Certificate of Achievement  | 17      | OCC Cert - Media Arts & Creat Ent   | 1_CB_MACE           | 109-110 |
| <b>Food Service Management Commercial (Consumer and Health Sciences Division)</b>                             |         |                                     |                     |         |
| Catering Certificate of Achievement   | 17-19   | OCC Cert - FSM: Catering            | 1_CB_FSCC           | 110     |
| Quick Service Certificate of Specialization   | 15      | OCC Cert - FSM: Quick Service       | 1_CE_FSQS           | 110     |
| Restaurant Supervision Certificate of Achievement   | 26      | OCC Cert - FSM Restaurant Sup       | 1_CL_FMRS           | 110-111 |
| Restaurant AS Degree  | 62-63   | OCC AS - FSM: Restaurant            | 1_AS_FMCR           | 111     |
| <b>Food Service Management Institutional (Consumer and Health Sciences Division)</b>                          |         |                                     |                     |         |
| Dietetic Service Supervisor Certificate of Achievement  | 21.5    | OCC Cert - Dietetic Srvc Supr       | 1_CL_FSDS           | 111     |
| Dietetic Service Manager Certificate of Achievement   | 40      | OCC Cert - Dietetic Srvc Mgr        | 1_CT_FMDM           | 112     |
| <b>Foreign Languages (Literature and Languages Division)</b>  |         |                                     |                     |         |
| Foreign Language AA Degree  | 60      | OCC AA - Foreign Languages          | 1_AA_FLNG           | 112-113 |
| Spanish AA Degree for Transfer  | 60      | OCC AAT - Spanish                   | 1_AAT_SPAN          | 113     |
| <b>General Education Transfer Certificates — Refer to the Graduation Requirements section of this catalog</b> |         |                                     |                     |         |
| Certificate of Achievement — CSU General Education  | 39      | OCC Cert - CSU General Ed           | 1_CT_CSU            | 44-45   |
| Certificate of Achievement — IGETC  | 37-39   | OCC Cert - IGETC General Ed         | 1_CT_IGETC          | 46-47   |
| <b>Geography (Social and Behavioral Sciences Division)</b>  |         |                                     |                     |         |
| Geography AA Degree   | 60      | OCC AA - Geography                  | 1_AA_GEOG           | 113     |
| Geography AA Degree for Transfer  | 60      | OCC AAT- Geography                  | 1_AAT_GEOG          | 113-114 |
| <b>Geology (Math and Sciences Division)</b>   |         |                                     |                     |         |
| Earth Science AS Degree   | 60      | OCC AS - Earth Science              | 1_AS_ERTH           | 114-115 |
| Geology AS Degree for Transfer  | 60      | OCC AS - Geology                    | 1_AST_GEOL          | 115     |
| <b>Global Studies (Social and Behavioral Sciences Division)</b>   |         |                                     |                     |         |
| Global Studies AA Degree for Transfer   | 60      | OCC AAT - Global Studies            | 1_AAT_GLST          | 115-116 |
| <b>Heating, Ventilation, Air Conditioning &amp; Refrigeration (Technology Division)</b>                       |         |                                     |                     |         |
| HVACR Technology Certificate of Achievement   | 30      | OCC Cert - HVACR Technology         | 1_CT_HVAC           | 116     |
| HVACR Technology AS Degree  | 60      | OCC AS - HVACR Technology           | 1_AS_HVAC           | 116     |
| <b>History (Social and Behavioral Sciences Division)</b>  |         |                                     |                     |         |
| History AA Degree for Transfer  | 60      | OCC AAT - History                   | 1_AAT_HIST          | 117     |
| <b>Horticulture (Math and Science Division)</b>   |         |                                     |                     |         |
| Horticulture Certificate of Achievement   | 24      | OCC Cert - Horticulture             | 1_CL_OH             | 117-118 |
| Horticulture AS Degree  | 60      | OCC AS - Horticulture               | 1_AS_OH             | 117-118 |
| Landscape Site Design Elements Certificate of Specialization  | 9.5     | OCC Cert - Landscape Site Design    | 1_CE_LSCP           | 118     |
| Basic Landscape Design Certificate of Specialization  | 9       | OCC Cert - Basic Landscape          | 1_CE_BLSC           | 118     |
| Intermediate Landscape Design Certificate of Specialization   | 13      | OCC Cert - Intm Landscape           | 1_CE_ILSC           | 118-119 |
| Advanced Landscape Design Certificate of Specialization   | 13.5    | OCC Cert - Adv Landscape            | 1_CE_ALSC           | 119     |
| The Professional Practice of a Landscape Design & Construction Business Certificate of Specialization         | 7       | OCC Cert - Landscape & Construction | 1_CE_LDSN           | 119     |
| Retrofitting California Urban Gardens Certificate of Specialization   | 10.5    | OCC Cert - Retrofitting CA Urb      | 1_CE_RCUG           | 119     |

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| <b>Hospitality, Travel, and Tourism (Consumer Health and Sciences Division)</b> |              |                                     |                            |               |
| Airline Travel Management Certificate of Achievement                            | 49           | OCC Cert - Airline & Travel         | 1_CT_ATM                   | 120           |
| Flight Attendant and Airline and Travel Careers Certificate of Achievement      | 43           | OCC Cert - Flight Attendant         | 1_CT_FAAT                  | 120-121       |
| Flight Attendant and Airline and Travel Careers AS Degree                       | 61           | OCC AS - Flight Attendant           | 1_AS_FAAT                  | 120-121       |
| Front Office Specialist Certificate of Achievement                              | 43           | OCC Cert - Hotel Front Office       | 1_CT_HMFO                  | 121           |
| Hotel Management AS Degree  | 64           | OCC AS - Hotel Room Operations      | 1_AS_HOTL                  | 122           |
| Human Resource Management Certificate of Achievement                            | 34           | OCC Cert - Human Resource Mgmt      | 1_CT_HMHR                  | 122           |
| Human Resource Management AS Degree   | 60           | OCC AS - Human Resource Mgmt        | 1_AS_HMHR                  | 122           |
| Meeting and Event Management Certificate of Achievement                         | 32.5         | OCC Cert - Meeting Event Mgmt       | 1_CT_HTTM                  | 123           |
| Meeting and Event Management AS Degree  | 60           | OCC AS - Meeting Event Mgmt         | 1_AS_HTTM                  | 123           |
| Sales and Marketing Specialist Certificate of Achievement                       | 37           | OCC Cert - Hotel Sales Marketing    | 1_CT_HMME                  | 123           |
| Sales and Marketing AS Degree   | 60           | OCC AS - Sales Marketing            | 1_AS_HMME                  | 123           |
| Spa Management Certificate of Achievement                                       | 34           | OCC Cert - Spa Management           | 1_CT_HMSM                  | 124           |
| Spa Management AS Degree  | 60           | OCC AS - Spa Management             | 1_AS_HMSM                  | 124           |
| Travel Specialist Certificate of Achievement                                    | 52           | OCC Cert - Travel Agent             | 1_CT_TRAV                  | 124           |
| Travel Specialist AS Degree   | 70           | OCC AS - Travel & Tourism           | 1_AS_TRAV                  | 124           |
| <b>Integrative Health (Consumer and Health Sciences Division)</b>               |              |                                     |                            |               |
| Integrative Health Coach Certificate of Achievement                             | 26.5-29.5    | OCC Cert - Integrative Health       | 1_CN_IHC                   | 125           |
| Integrative Health Coach AS Degree  | 60           | OCC AS - Human Resource Mgmt        | 1_AS_IHC                   | 126           |
| <b>Interior Design (Consumer and Health Sciences Division)</b>                  |              |                                     |                            |               |
| Interior Merchandising — Level 1 Certificate of Achievement                     | 27           | OCC Cert - Interior Merch           | 1_CL_IDIM                  | 125-126       |
| Interior Design Assistant — Level 2 AS Degree                                   | 67           | OCC AS - Interior Design: Asst      | 1_AS_IDA                   | 126           |
| Interior Design — Professional Level 3 Certificate of Achievement               | 80-82        | OCC Cert - Interior Design: Pro     | 1_CF_IDP                   | 126           |
| Kitchen & Bath — Advanced Certificate of Specialization                         | 10           | OCC Cert - Kitchen & Bath           | 1_CE_IDKB                  | 126-127       |
| <b>Journalism (Literature and Languages Division)</b>                           |              |                                     |                            |               |
| Journalism AA Degree  | 60           | OCC AA - Journalism                 | 1_AA_JOUR                  | 127           |
| Journalism AA Degree for Transfer   | 60           | OCC AAT - Journalism                | 1_AAT_JOUR                 | 127-128       |
| <b>Kinesiology (Kinesiology and Athletics Division)</b>                         |              |                                     |                            |               |
| Yoga Instructor Training Certificate of Specialization                          | 13           | OCC Cert - Yoga Instructor          | 1_CE_YOGA                  | 128           |
| Athletic Training Level 1 Certificate of Achievement                            | 18-26        | OCC Cert - Athletic Training        | 1_CL_KINAT                 | 128           |
| Fitness Specialist Certificate of Achievement                                   | 19-22        | OCC Cert - Fitness Specialist       | 1_CL_PEPT                  | 129           |
| Fitness Specialist AS Degree  | 60           | OCC AS - Fitness Specialist         | 1_AS_PEPT                  | 129           |
| Kinesiology AA Degree for Transfer  | 60           | OCC AAT - Kinesiology               | 1_AAT_KIN                  | 129-130       |
| <b>Leadership Studies (Business and Computing Division)</b>                     |              |                                     |                            |               |
| Leadership Studies Certificate of Specialization                                | 9            | OCC Cert - Leadership Studies       | 1_CE_LDST                  | 130           |
| <b>Liberal Arts</b>   |              |                                     |                            |               |
| Liberal Arts AA Degree  | 60           | OCC AA - Liberal Arts               | 1_AA_LIB                   | 130           |
| <b>Management (Business and Computing Division)</b>                             |              |                                     |                            |               |
| Management Institute Certificate of Specialization                              | 9            | OCC Cert - Management Institut      | 1_CE_MGMI                  | 131           |
| Management and Leadership Studies Certificate of Achievement                    | 36-37        | OCC Cert - Management & Leader      | 1_CT_MGMT                  | 131           |
| Management and Leadership Studies AS Degree                                     | 60           | OCC AS - Management & Leader        | 1_AS_MGMT                  | 131           |
| Retail Certificate of Achievement   | 24-25        | OCC Cert - Retail                   | 1_CL_MGRT                  | 131-132       |
| Retail AS Degree  | 60           | OCC AS - Retail                     | 1_AS_MGRT                  | 131-132       |
| <b>Manufacturing Technology (Technology Division)</b>                           |              |                                     |                            |               |
| CNC Operator Certificate of Specialization                                      | 8            | OCC Cert - CNC Operator             | 1_CE_MTCO                  | 132           |
| CNC Programmer Certificate of Specialization                                    | 11.5         | OCC Cert - CNC Programmer           | 1_CE_MTCP                  | 132           |
| Machinist Certificate of Achievement  | 24           | OCC Cert - Machinist                | 1_CL_MTMC                  | 132           |
| Machinist AS Degree   | 60           | OCC AS - Machinist                  | 1_AS_MTMC                  | 132           |
| CNC Machine Operator Certificate of Achievement                                 | 32           | OCC Cert - Machine Operator         | 1_CT_MTMO                  | 133           |
| CNC Machine Operator AS Degree  | 60           | OCC AS - Machine Operator           | 1_AS_MTMO                  | 133           |
| CNC Machine Programmer Certificate of Achievement                               | 35.5         | OCC Cert - Machine Programmer       | 1_CT_MTMP                  | 133           |
| CNC Machine Programmer AS Degree  | 60           | OCC AS - Machine Programmer         | 1_AS_MTMP                  | 133           |
| Tooling Certificate of Achievement  | 40           | OCC Cert - Tooling                  | 1_CT_MTTL                  | 133           |
| Tooling AS Degree   | 60           | OCC AS - Tooling                    | 1_AS_MTTL                  | 133           |

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| <b>Marine Science (Math and Sciences Division)</b>                         |           |                                |                     |         |
| Marine Science AS Degree   | 60        | OCC AS - Marine Science        | 1_AS_MRSC           | 134     |
| Aquarium Science Certificate of Achievement                                | 9         | OCC Cert - Aqua Science        | 1_CM_AQUA           | 134-135 |
| <b>Marketing (Business and Computing Division)</b>                         |           |                                |                     |         |
| Advertising Certificate of Specialization                                  | 9         | OCC Cert - Advertising         | 1_CE_MKAD           | 135     |
| Entry Level Marketing Certificate of Specialization                        | 9         | OCC Cert - Entry Level Market  | 1_CE_MKEL           | 135     |
| General Marketing Certificate of Achievement                               | 27        | OCC Cert - General Marketing   | 1_CL_MKGN           | 135     |
| General Marketing AS Degree  | 60        | OCC AS - General Marketing     | 1_AS_MKGN           | 135     |
| International Business Certificate of Specialization                       | 12        | OCC Cert - International Bus 1 | 1_CE_MKIB           | 135-136 |
| International Business Certificate of Achievement                          | 21        | OCC Cert - International Bus 2 | 1_CL_IBUS           | 136     |
| International Business AS Degree   | 60        | OCC AS - International Bus     | 1_AS_IBUS           | 136     |
| Sales Certificate of Specialization  | 9         | OCC Cert - Sales               | 1_CE_MKSL           | 136     |
| <b>Mathematics (Math and Sciences Division)</b>                            |           |                                |                     |         |
| Mathematics AS Degree for Transfer   | 60        | OCC AST - Math                 | 1_AST_MATH          | 136     |
| <b>Medical Assisting (Consumer and Health Sciences Division)</b>           |           |                                |                     |         |
| CCMA Eligible Program Certificate of Achievement                           | 32        | OCC Cert - Medical Assisting   | 1_CT_MACE           | 137     |
| CCMA Eligible Program AS Degree  | 60        | OCC AS - Medical Assisting     | 1_AS_MACE           | 137     |
| <b>Music (Visual and Performing Arts Division)</b>                         |           |                                |                     |         |
| Business Employee Certificate of Achievement                               | 27        | OCC Cert - Music Business      | 1_CL_MBE            | 137-138 |
| Business Employee AA Degree  | 60        | OCC AA - Music Business        | 1_AA_MBE            | 137-138 |
| MIDI Applications Certificate of Achievement                               | 26        | OCC Cert - Music MIDI          | 1_CL_MIDI           | 138     |
| MIDI Applications AA Degree  | 60        | OCC AA - Music MIDI            | 1_AA_MIDI           | 138     |
| Music AA Degree  | 60        | OCC AA - Music                 | 1_AA_MUS            | 138     |
| Music AA Degree for Transfer   | 60        | OCC AAT - Music                | 1_AAT_MUS           | 139     |
| Musical Entertainer—Instrumental Certificate of Achievement                | 28        | OCC AA - Music Instrumental    | 1_CL_MMEI           | 139-140 |
| Musical Entertainer—Instrumental AA Degree                                 | 60        | OCC AA - Music Instrumental    | 1_AA_MMEI           | 139-140 |
| Musical Entertainer—Vocal Certificate of Achievement                       | 22        | OCC Cert - Music Vocal         | 1_CL_MMEV           | 140     |
| Musical Entertainer—Vocal AA Degree  | 60        | OCC AA - Music Vocal           | 1_AA_MMEV           | 140     |
| Studio Guitar Performer Certificate of Achievement                         | 26        | OCC Cert - Music: Studio Guita | 1_CL_MSGP           | 140     |
| Studio Guitar Performer AA Degree  | 60        | OCC AA - Music: Studio Guitar  | 1_AA_MSGP           | 140     |
| <b>Natural Science (Math and Sciences Division)</b>                        |           |                                |                     |         |
| Natural Science AS Degree  | 60        | OCC AS - Natural Science       | 1_AS_NS             | 141     |
| <b>Neurodiagnostic Technology (Consumer and Health Sciences Division)</b>  |           |                                |                     |         |
| Neurodiagnostic Technology AS Degree                                       | 71        | OCC AS - Neurodiagnostic Techn | 1_AS_NDT            | 141-142 |
| Neurodiagnostic Technology Upgrade Certificate of Specialization           | 6-8       | OCC Cert - Neurodiagnostic Upg | 1_CE_NDTU           | 142     |
| <b>Nutrition and Dietetics (Consumer and Health Sciences Division)</b>     |           |                                |                     |         |
| Nutrition and Dietetics Technician AS Degree                               | 69.5      | OCC AS - Dietetic Tech         | 1_AS_NADT           | 142-143 |
| Nutrition and Dietetics AS Degree for Transfer                             | 60        | OCC AST - Nutrition            | 1_AST_NUTR          | 143     |
| Nutrition Education Certificate of Achievement                             | 28.5-30.5 | OCC Cert - Nutrition Education | 1_CL_NCNE           | 144     |
| Nutrition Education AS Degree  | 60        | OCC AS - Nutrition Education   | 1_AS_NCNE           | 144     |
| Nutrition and Fitness Education Certificate of Achievement                 | 33.5-35.5 | OCC Cert - Nutrition & Fitness | 1_CT_NCFE           | 144     |
| <b>Philosophy (Social and Behavioral Sciences Division)</b>                |           |                                |                     |         |
| Philosophy AA Degree for Transfer  | 60        | OCC AAT - Philosophy           | 1_AAT_PHIL          | 145     |
| <b>Photography (Visual and Performing Arts Division)</b>                   |           |                                |                     |         |
| Photography — Still Certificate of Achievement                             | 41        | OCC Cert - Photography: Still  | 1_CT_PHST           | 145-146 |
| Photography — Still AS Degree  | 60        | OCC AS - Photography: Still    | 1_AS_PHST           | 145-146 |
| Digital Technician Certificate of Achievement                              | 18        | OCC Cert - Photo: Digital Tech | 1_CL_PHDT           | 146     |
| Digital SLR Photography & Videography Certificate of Achievement           | 25        | OCC Cert - Photo: Digital SLR  | 1_CL_DSLR           | 146     |
| <b>Physics (Math and Sciences Division)</b>                                |           |                                |                     |         |
| Physics AS Degree for Transfer   | 60        | OCC AST - Physics              | 1_AST_PHYS          | 147     |
| <b>Political Science (Social and Behavioral Sciences Division)</b>         |           |                                |                     |         |
| Political Science AA Degree for Transfer                                   | 60        | OCC AAT - Political Science    | 1_AAT_PSCI          | 147-148 |
| <b>Polysomnographic Technology (Consumer and Health Sciences Division)</b> |           |                                |                     |         |
| Polysomnographic Technology AS Degree                                      | 64.5      | OCC AS - Polysomnography       | 1_AS_PSG            | 148     |

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| <b>Professional Mariner (Consumer and Health Sciences Division)</b>                |              |                                     |                            |               |
| Professional Mariner Certificate of Achievement                                    | 19-21        | OCC Cert - Professional Mariner     | 1_CL_MRPM                  | 149           |
| Professional Mariner AS Degree   | 60           | OCC AS - Professional Mariner       | 1_AS_MRPM                  | 149           |
| <b>Psychology (Social and Behavioral Sciences Division)</b>                        |              |                                     |                            |               |
| Psychology AA Degree for Transfer  | 60           | OCC AAT - Psychology                | 1_AAT_PSYC                 | 150           |
| <b>Public Health (Kinesiology and Athletics Division)</b>                          |              |                                     |                            |               |
| Public Health AA Degree  | 60           | OCC AA - Public Health              | 1_AA_PUBH                  | 150-151       |
| Public Health Science AS Degree for Transfer                                       | 60           | OCC AST - Public Health             | 1_AST_HLTH                 | 151           |
| <b>Radiologic Technology — Diagnostic (Consumer and Health Sciences Division)</b>  |              |                                     |                            |               |
| Radiologic Technology — Diagnostic AS Degree                                       | 88.5         | OCC AS - Radiological Tech: Diag    | 1_AS_RADT                  | 152           |
| <b>Real Estate (Business and Computing Division)</b>                               |              |                                     |                            |               |
| Real Estate Broker Certificate of Achievement                                      | 24-25        | OCC Cert - Real Estate Broker       | 1_CL_RE                    | 153           |
| Real Estate Broker AS Degree   | 60           | OCC AS - Real Estate Broker         | 1_AS_RE                    | 153           |
| Real Estate Salesperson Certificate of Specialization                              | 9            | OCC Cert - Real Estate Sales        | 1_CE_MKRS                  | 153           |
| <b>Religious Studies (Social and Behavioral Sciences Division)</b>                 |              |                                     |                            |               |
| Religious Studies Certificate of Specialization                                    | 15           | OCC Cert - Religious Studies        | 1_CE_RLST                  | 153           |
| Religious Studies AA Degree  | 60           | OCC AA - Religious Studies          | 1_AA_RLST                  | 154           |
| <b>Respiratory Care (Consumer and Health Sciences Division)</b>                    |              |                                     |                            |               |
| Respiratory Care AS Degree   | 82           | OCC AS - Respiratory Care           | 1_AS_RSPC                  | 154-155       |
| <b>Sociology (Social and Behavioral Sciences Division)</b>                         |              |                                     |                            |               |
| Sociology AA Degree for Transfer   | 60           | OCC AAT - Sociology                 | 1_AAT_SOC                  | 155-156       |
| <b>Speech-Language Pathology Assistant (Consumer and Health Sciences Division)</b> |              |                                     |                            |               |
| Speech Language Pathology Assistant AS Degree                                      | 67           | OCC AS - Speech Lang Pathology      | 1_AS_SLPA                  | 156           |
| <b>Theatre Arts (Visual and Performing Arts Division)</b>                          |              |                                     |                            |               |
| Theatre Arts AA Degree   | 60           | OCC AA - Theatre Arts               | 1_AA_THEA                  | 156-157       |
| Theatre Arts AA Degree for Transfer  | 60           | OCC AAT - Theatre Arts              | 1_AAT_THEA                 | 157           |
| <b>Welding Technology (Technology Division)</b>                                    |              |                                     |                            |               |
| Welding Technology Certificate of Achievement                                      | 27-30        | OCC Cert - Welding Technology       | 1_CL_WELD                  | 158           |
| Welding Technology AS Degree   | 60           | OCC AS - Welding Technology         | 1_AS_WELD                  | 158           |
| Basic Welding (SMAW) Skill Certificate of Specialization                           | 3.5-4.5      | OCC Cert - Welding: SMAW 1          | 1_CO_BSMW                  | 158           |
| Intermediate Welding (SMAW) Skill Certificate of Specialization                    | 4.5-6.5      | OCC Cert - Welding: SMAW 2          | 1_CO_SMAW                  | 159           |
| Advanced Welding (SMAW) Certificate of Specialization                              | 7.5-10.5     | OCC Cert - Welding: SMAW 3          | 1_CE_SMAW                  | 159           |
| Advanced I Welding (FCAW) Certificate of Specialization                            | 7.5-10.5     | OCC Cert - Welding: FCAW 1          | 1_CE_FCAWA                 | 159           |
| Advanced II Welding (FCAW) Certificate of Specialization                           | 7.5-10.5     | OCC Cert - Welding: FCAW 2          | 1_CE_FCAWB                 | 159           |
| Gas Metal Arc Welding (GMAW) Certificate of Specialization                         | 7.5-9.5      | OCC Cert - Welding: GMAW            | 1_CE_GMAW                  | 159-160       |
| Gas Tungsten Arc Welding (GTAW) Certificate of Specialization                      | 6.5-7.5      | OCC Cert - Welding: GTAW            | 1_CE_GTAW                  | 160           |
| Orbital Certificate of Specialization  | 15           | OCC Cert - Welding: Orbital         | 1_CE_ORBW                  | 160           |
| Pipe Certificate of Specialization   | 9.5-11       | OCC Cert - Welding: Pipe            | 1_CE_PIPE                  | 160           |

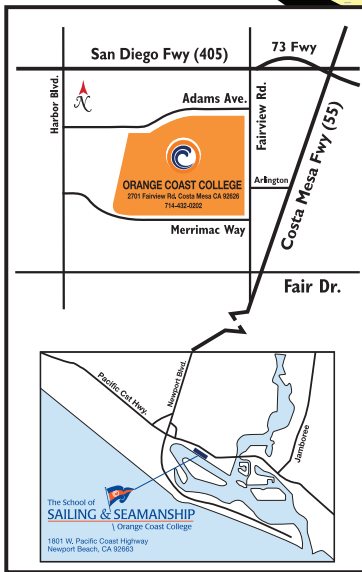


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| <b>Noncredit Certificates</b>  |              |  |                            |               |
| <b>Allied Health (Consumer and Health Sciences Division)</b>             |              |  |                            |               |
| Personal Care Aide Certificate of Completion                             |              | OCC NC Cert - Personal Care Aide             | 1_NCH_PCA                  | 161           |
| Skills Enhancement for Consumer and Health Sciences                      |              | OCC NC Cert - CHS Skills                     | 1_NCG_CHS                  | 161           |
| <b>Business (Business and Computing Division)</b>                        |              |  |                            |               |
| Not for Profit Management Certificate of Competency                      |              | OCC NC Cert - NFP Mgmt                       | 1_NCG_ENGL                 | 161           |
| <b>Chemistry (Math and Sciences Division)</b>                            |              |  |                            |               |
| Chemistry Skills Certificate of Completion                               |              | OCC NC Cert - Chem Skills                    | 1_NCH_CHEM                 | 161-162       |
| <b>Consumer Studies (Consumer and Health Sciences Division)</b>          |              |  |                            |               |
| Retail Employment Certificate of Completion                              |              | OCC NC Cert - Retail Employment              | 1_NCJ_RETL                 | 162           |
| <b>English (Literature and Languages Division)</b>                       |              |  |                            |               |
| Academic Preparation in English Certificate of Competency                |              | OCC NC Cert - English Prep                   | 1_NCG_ENGL                 | 162           |
| <b>English as a Second Language (Literature and Languages Division)</b>  |              |  |                            |               |
| ESL Support for Freshman Composition Certificate of Competency           |              | OCC NC Cert - ESL: Freshman Comp             | 1_NCH_ESL                  | 162           |
| <b>English Language Learning (Literature and Languages Division)</b>     |              |  |                            |               |
| English Language Learning for Parents Certificate of Competency          |              | OCC NC Cert - ELL: Paents                    | 1_NCH_ELLP                 | 163           |
| English Language Learning for U.S. Citizenship Certificate of Competency |              | OCC NC Cert - U.S. Citizenship               | 1_NCH_ELLC                 | 163           |
| Grammar Review Certificate of Competency                                 |              | OCC NC Cert - ELL: Grammar Review            | 1_NCJ_ELLG                 | 163           |
| Language Transition to College Certificate of Competency                 |              | OCC NC Cert - ELL: Language Transition       | 1_NCH_ELLL                 | 163           |
| Multi-skills English Certificate of Competency                           |              | OCC NC Cert - ELL: Multi-skills English      | 1_NCK_ELLM                 | 163           |
| Oral Communication Certificate of Competency                             |              | OCC NC Cert - ELL: Oral Communication        | 1_NCH_ELLO                 | 164           |
| Speaking about Reading Certificate of Competency                         |              | OCC NC Cert: ELL: Speak/Read                 | 1_NCH_ELLR                 | 164           |
| Workplace English Certificate of Competency                              |              | OCC NC Cert - ELL: Workplace English         | 1_NCH_ELLW                 | 164           |
| <b>Kinesiology (Kinesiology and Athletics Division)</b>                  |              |  |                            |               |
| Lifeguard Training, Professional Rescue Certificate of Completion        |              | OCC NC Cert - Lifeguard Training             | 1_NCH_LFGD                 | 164           |
| Yoga Instructor Training Certificate of Completion                       |              | OCC NC Cert - Yoga Instructor Training       | 1_NCJ_YOGA                 | 164           |
| <b>Mathematics (Math and Sciences Division)</b>                          |              |  |                            |               |
| Math Skills Development Certificate of Competency                        |              | OCC NC Cert -Math Skills Development         | 1_NCH_MATH                 | 165           |
| <b>Tutoring (Library and Learning Division)</b>                          |              |  |                            |               |
| Tutoring Skills and Strategies Certificate of Completion                 |              | OCC NC Cert - Tutoring Skills and Strategies | 1_NCG_TUTR                 | 165           |



# ORANGE COAST COLLEGE CAMPUS MAP

2701 Fairview Rd. Costa Mesa CA 92626 • 714-432-0202



- |  |  |  |   |
|--|--|--|---|
| Administration                           | (1) Dennis Kelly Aquarium                        | (42) Library                                 | (182) Starbucks                                 |
| Admissions, Counseling & Student Records | (87) Dick Tucker Field                           | (LeBard Stadium) Literature & Languages      | (70) Social & Behavioral Sciences               |
| Adult Education                          | (150) Disabled Students Center                   | (10) Literature & Languages Division         | (80 & 81) Social & Behavioral Sciences Division |
| Allied Health Sciences                   | (44) Drama Lab/Studio                            | (2) Mailroom                                 | (70) Social Science Lab                         |
| Arts Center                              | (158) Early Childhood Lab School                 | (146) Maintenance & Operations               | (73) Social Science Lab                         |
| Assessment Center                        | (87) Electric Café                               | (86) Marketing & Public Relations            | (155) Special Services                          |
| Associated Students of OCC (ASOCC)       | (86) Enrollment Center                           | (87) Math Lecture Halls 1 & 2                | (73) Sports Medicine                            |
| Astronomy House                          | (40) EOPS  | (87) Mathematic, Business & Computing Center | (41) Student Center                             |
| Athletics                                | (91) Exercise Science (Fitness Complex)          | (11) Mathematics & Sciences Division         | (74) Student Center Café                        |
| Aviation Technology                      | (46) Field House                                 | (110) Media Center (Library)                 | (42) Student Equity                             |
| Biological Sciences                      | (45) Financial Aid                               | (182) Student Health Center                  | (182) Student Health Center                     |
| Bookstore & Warehouse                    | (83 & 144) Fine Arts Lecture Halls               | (96) Men's Locker Room                       | (87) Student Records                            |
| Bursar's Office                          | (87) Frank M. Doyle Arts Pavilion                | (5) Mother's Room                            | (87) Student Services                           |
| Business Education                       | (147) Garrison Honors Center                     | (180) Multicultural Center                   | (14) Student Success Center                     |
| Cafeteria (Student Center Café)          | (86) Global Engagement Center                    | (86) Music                                   | (14) Study Abroad                               |
| CalWORKS                                 | (87) Gymnasium                                   | (81) Parking (Campus Public Safety)          | (47) Swap Meet Office                           |
| Campus Public Safety (Parking)           | (69) Handball Courts                             | (180) Photography Lab (Arts Center)          | (158) Technology Annex                          |
| Captain's Table Restaurant               | (152) Health Center (Student)                    | (13) Digital Photography Lab (Fine Arts)     | (5) Technology Division                         |
| Career Education                         | (73) Horticulture                                | (91) Pirates' Cove                           | (72) Technology Center                          |
| Chemistry                                | (7, 8, 9 & 150) Information Technology           | (14) Planetarium                             | (2) Theatre (Robert & Moore)                    |
| Children's Center                        | (73) International Admissions & Student Services | (97) Pools (Aquatics)                        | (91) Transfer Center                            |
| Clark Center                             | (74) Job Placement                               | (89) Recycling Center                        | (155) Veterans Resource Center (VRC)            |
| Classrooms & Labs                        | (116) Journalism                                 | (156) Re-Entry                               | (121) Veterans Services                         |
| Community Education                      | (43) Kinesiology & Athletics Division            | (14) Reprographics                           | (87) Visual & Performing Arts Division          |
| Computing Center                         | (43) Language Institute                          | (87) Ronnenberg Center                       | (73) Watson Hall                                |
| Construction Technology                  | (87) Learning Center (Special Services)          | (92) Science Hall                            | (12) Web Services Training                      |
| Consumer Sciences & Design               | (87) Legacy Hall                                 | (91) Skill Center                            | (40) Weight Room                                |
| Consumer & Health Sciences Division      | (87) Lewis Center for Applied Sciences           | (12) Snack Bars                              | (47 & 48) Welcome/Info Center                   |
| Counseling                               |  | (10) Coast Snack Shack                       | (47) Welding Technology                         |
| Counseling Division                      |  | (12) Game On                                 | (92) Women's Locker Room                        |
| Dance                                    |  | (42) Hot Dog Cart                            | (71) Writers Row                                |
|  |  |  | (71) Writing/Reading Center                     |
|  |  |  | (8) Writing/Reading Center                      |



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